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# PENNSYLVANIA BULLETIN

Volume 27  
Saturday, August 16, 1997 • Harrisburg, Pa.  
Number 33  
Pages 4079—4286

See Part II page 4181 for the  
Environmental Quality Board  
Administration of the Land Recycling  
Program (Act 2)

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Department of Conservation and Natural  
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Independent Regulatory Review Commission  
Insurance Department  
Legislative Reference Bureau  
Pennsylvania Public Utility Commission  
Port of Pittsburgh Commission  
Public School Employes' Retirement Board  
Turnpike Commission

**Detailed list of contents appears inside.**

**Latest Pennsylvania Code Reporter  
(Master Transmittal Sheet):**

**No. 273, August 1997**

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## **PENNSYLVANIA**

## **BULLETIN**

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# READER'S GUIDE TO THE PENNSYLVANIA BULLETIN AND PENNSYLVANIA CODE

## ***Pennsylvania Bulletin***

The *Pennsylvania Bulletin* is the official gazette of the Commonwealth of Pennsylvania. It is published every week and includes a table of contents. A cumulative subject matter index is published quarterly.

The *Pennsylvania Bulletin* serves several purposes. First, it is the temporary supplement to the *Pennsylvania Code*, which is the official codification of agency rules and regulations and other statutorily authorized documents. Changes in the codified text, whether by adoption, amendment, repeal or emergency action must be published in the *Pennsylvania Bulletin*. Further, agencies proposing changes to the codified text do so in the *Pennsylvania Bulletin*.

Second, the *Pennsylvania Bulletin* also publishes: Governor's Executive Orders; State Contract Notices; Summaries of Enacted Statutes; Statewide and Local Court Rules; Attorney General Opinions; Motor Carrier Applications before the Public Utility Commission; Applications and Actions before the Department of Environmental Protection; Orders of the Independent Regulatory Review Commission; and other documents authorized by law.

The text of certain documents published in the *Pennsylvania Bulletin* is the only valid and enforceable text. Courts are required to take judicial notice of the *Pennsylvania Bulletin*.

There are no restrictions on the republication of official documents appearing in the *Pennsylvania Bulletin*.

## **Adoption, Amendment or Repeal of Regulations**

Generally an agency wishing to adopt, amend or repeal regulations must first publish in the *Pennsylvania Bulletin* a Notice of Proposed Rulemaking. There are limited instances where the agency may omit the proposal step; they still must publish the adopted version.

The Notice of Proposed Rulemaking contains the full text of the change, the agency contact person, a fiscal note required by law and background for the action.

The agency then allows sufficient time for public comment before taking final action. An adopted

proposal must be published in the *Pennsylvania Bulletin* before it can take effect. If the agency wishes to adopt changes to the Notice of Proposed Rulemaking to enlarge the scope, they must re-propose.

## **Citation to the *Pennsylvania Bulletin***

Cite material in the *Pennsylvania Bulletin* by volume number and page number. Example: Volume 1, *Pennsylvania Bulletin*, page 801 (short form: 1 Pa.B. 801).

## ***Pennsylvania Code***

The *Pennsylvania Code* is the official codification of rules and regulations issued by Commonwealth agencies and other statutorily authorized documents. The *Pennsylvania Bulletin* is the temporary supplement to the *Pennsylvania Code*, printing changes as soon as they occur. These changes are then permanently codified by the *Pennsylvania Code Reporter*, a monthly, loose-leaf supplement.

The *Pennsylvania Code* is cited by title number and section number. Example: Title 10 *Pennsylvania Code*, § 1.1 (short form: 10 Pa.Code § 1.1).

Under the *Pennsylvania Code* codification system, each regulation is assigned a unique number by title and section. Titles roughly parallel the organization of Commonwealth government. Title 1 *Pennsylvania Code* lists every agency and its corresponding *Code* title location.

## **How to Find Documents**

Search for your area of interest in the *Pennsylvania Code*.

The *Pennsylvania Code* contains, as Finding Aids, subject indexes for the complete *Code* and for each individual title, a list of Statutes Used As Authority for Adopting Rules and a list of annotated cases. Source Notes give you the history of the documents. To see if there have been recent changes, not yet codified, check the List of *Pennsylvania Code* Chapters Affected in the most recent issue of the *Pennsylvania Bulletin*.

The *Pennsylvania Bulletin* also publishes a quarterly List of Pennsylvania Code Sections Affected which lists the regulations in numerical order, followed by the citation to the *Pennsylvania Bulletin* in which the change occurred.

**SUBSCRIPTION INFORMATION: (717) 766-0211**  
**GENERAL INFORMATION AND FINDING AIDS: (717) 783-1530**

#### Printing Format

Material proposed to be added to an existing rule or regulation is printed in **bold face** and material proposed to be deleted from such a rule or regulation is enclosed in brackets [ ] and printed in **bold face**. Asterisks indicate ellipsis of *Pennsylvania Code* text retained without change. Proposed new or additional regulations are printed in ordinary style face.

#### Fiscal Notes

Section 612 of The Administrative Code of 1929 (71 P. S. § 232) requires that the Office of Budget prepare a fiscal note for regulatory actions and administrative procedures of the administrative departments, boards, commissions or authorities receiving money from the State Treasury stating whether the proposed action or procedure causes a loss of revenue or an increase in the cost of programs for the Commonwealth or its political subdivisions; that the fiscal note be published in the *Pennsylvania Bulletin* at the same time as the proposed change is advertised; and that the fiscal note shall provide the following information: (1) the designation of the fund out of which the appropriation providing for expenditures under the action or procedure shall be made; (2) the probable cost for the fiscal year the program is implemented; (3) projected cost estimate of the program for each of the five succeeding fiscal years; (4) fiscal history of the program for which expenditures are to be made; (5) probable loss of revenue for the fiscal year of its implementation; (6) projected loss of revenue from the program for each of the five succeeding fiscal years; (7) line item, if any, of the General Appropriation Act or other appropriation act out of which expenditures or losses of Commonwealth funds shall occur as a result of the action or procedures; (8) recommendation, if any, of the Secretary of the Budget and the reasons therefor.

The required information is published in the foregoing order immediately following the proposed change to which it relates; the omission of an item indicates that the agency text of the fiscal note states that there is no information available with respect thereto. In items (3) and (6) information is set forth for the first through fifth fiscal years; in that order, following the year the program is implemented, which is stated. In item (4) information is set forth for the current and two immediately preceding years, in that order. In item (8) the recommendation, if any, made by the Secretary of Budget is published with the fiscal note. See 4 Pa. Code § 7.231 *et seq.* Where "no fiscal impact" is published, the statement means no additional cost or revenue loss to the Commonwealth or its local political subdivision is intended.

# List of Pa. Code Chapters Affected

The following numerical guide is a list of the chapters of each title of the *Pennsylvania Code* affected by documents published in the *Pennsylvania Bulletin* during 1997.

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# THE COURTS

## Title 204—JUDICIAL SYSTEM GENERAL PROVISIONS

### PART V. PROFESSIONAL ETHICS AND CONDUCT [204 PA. CODE CH. 81]

#### Adoption of Rule 1.17 of the Rules of Professional Conduct and Conforming Amendments Regarding the Sale of a Law Practice; Notice of Proposed Rulemaking

Notice is hereby given that The Disciplinary Board of the Supreme Court of Pennsylvania is considering recommending to the Supreme Court of Pennsylvania that it adopt a new Rule 1.17 of the Pennsylvania Rules of Professional Conduct and conforming amendments to read as set forth in Annex A.

Proposed Rule 1.17 was prepared by the Committee on Legal Ethics and Professional Responsibility of the Pennsylvania Bar Association following approval in principle of the concept underlying the Rule by the House of Delegates of the Pennsylvania Bar Association.

The purpose of proposed Rule 1.17, which is patterned after ABA Model Rule of Professional Conduct 1.17, is to place solo and small firm practitioners on an equal footing with lawyers in larger firms with respect to the sale of a practice and for estate planning purposes. The proposed Rule will also clarify the permissible manner in which a law practice may be sold in the event of retirement, death, relocation or divorce.

Interested persons are invited to submit written comments regarding the proposed new Rule 1.17 and the conforming amendments to the Office of the Secretary, The Disciplinary Board of the Supreme Court of Pennsylvania, First Floor, Two Lemoyne Drive, Lemoyne, PA 17043, on or before September 15, 1997.

*By The Disciplinary Board of the Supreme Court of Pennsylvania*

ELAINE BIXLER,  
*Secretary*

#### Annex A

### TITLE 204. JUDICIARY SYSTEM GENERAL PROVISIONS

#### PART V. PROFESSIONAL ETHICS AND CONDUCT

##### Subpart A. PROFESSIONAL RESPONSIBILITY

##### CHAPTER 81. RULES OF PROFESSIONAL CONDUCT

##### Subchapter A. RULES OF PROFESSIONAL CONDUCT

##### CLIENT-LAWYER RELATIONSHIP

#### RULE 1.6. Confidentiality of Information.

\* \* \* \* \*

(c) A lawyer may reveal such information to the extent that the lawyer reasonably believes necessary:

(1) to prevent the client from committing a criminal act that the lawyer believes is likely to result in death or substantial bodily harm or substantial injury to the financial interests or property of another;

(2) to prevent or to rectify the consequences of a client's criminal or fraudulent act in the commission of which the lawyer's services are being or had been used; [ or ]

(3) to establish a claim or defense on behalf of the lawyer in a controversy between the lawyer and the client, to establish a defense to a criminal charge or civil claim or disciplinary proceeding against the lawyer based upon conduct in which the client was involved, or to respond to allegations in any proceeding concerning the lawyer's representation of the client; or

**(4) to effectuate the sale of a law practice consistent with Rule 1.17.**

\* \* \* \* \*

**Comment:**

\* \* \* \* \*

*Disclosures Otherwise Required or Authorized*

\* \* \* \* \*

**It is recognized that the due diligence associated with the sale of a law practice authorized under Rule 1.17 may necessitate the limited disclosure of certain otherwise confidential information. However, as stated above, the lawyer must make every effort practicable to avoid unnecessary disclosure of information relating to a representation, to limit disclosure to those having a need to know it, and to obtain appropriate arrangements minimizing the risk of disclosure.**

*Former Client*

\* \* \* \* \*

**RULE 1.17. Sale of Law Practice.**

**A lawyer may sell or purchase a law practice, including good will, if the following conditions are satisfied:**

**(a) The seller sells the practice as an entirety to another lawyer. For purposes of this Rule, a practice is sold as an entirety if the purchasing lawyer assumes responsibility for all of the active files except those specified in paragraph (f) of this Rule.**

**(b) Actual written notice is given to each of the seller's clients, which notice must include at a minimum:**

**(1) notice of the proposed sale, including the identity and address of the purchasing lawyer;**

**(2) a statement that the client has the right to continue to retain the purchasing lawyer under the preexisting fee arrangements;**

**(3) a statement that the client has the right to retain other counsel or to take possession of the file; and**

**(4) a statement that the client's consent to the sale will be presumed if the client does not take any action or does not otherwise object within 60 days of receipt of the notice.**

If a client cannot be given notice, the representation of that client may be transferred to the purchaser only upon entry of an order authorizing the transfer by a court having jurisdiction. The seller may disclose to the court in camera information relating to the representation only to the extent necessary to obtain an order authorizing transfer of a file.

(c) The seller and purchaser may agree to restrictions on the practice of law by the seller, which shall be set forth in a written agreement.

(d) The fees charged clients shall not be increased by reason of the sale. Existing agreements between the seller and the client concerning fees and the scope of work must be honored by the purchaser, unless the client consents in writing after consultation.

(e) The agreement of sale shall include a clear statement of the respective responsibilities of the parties to maintain and preserve the records and files of the seller's practice, including client files.

(f) The sale shall not be effective as to:

(1) any client to whom notice cannot be given as required;

(2) any client for whom litigation is pending and the court refuses to substitute counsel or terminate the representation; and

(3) any client for whom the proposed sale would create a conflict of interest for the purchaser or who cannot be represented by the purchaser because of other requirements of the Pennsylvania Rules of Professional Conduct or rules of the Pennsylvania Supreme Court governing the practice of law in Pennsylvania, unless such conflict, requirement or rule can be waived by the client and is in fact waived by the client in writing.

(g) For purposes of this Rule, the term "lawyer" means an individual lawyer or a law firm that buys or sells a law practice. The estate of a deceased lawyer may be a seller. Admission to or withdrawal from a partnership or professional corporation, retirement plans and similar arrangements or a sale limited to the tangible assets of a law practice is not a sale or purchase for purposes of this Rule 1.17.

#### Comment:

The practice of law is a profession, not merely a business. Clients are not commodities that can be purchased and sold at will. Pursuant to this Rule, when a lawyer or an entire firm ceases to practice and another lawyer or firm takes over the representation, the selling lawyer or firm may obtain compensation for the reasonable value of the practice as may withdrawing partners of law firms. See Rules 5.4 and 5.6.

#### Sale of Entire Practice

The requirement that all of the private practice be sold is satisfied if the seller in good faith makes the entire practice available for sale to the purchaser. The fact that a number of the seller's clients

decide not to be represented by the purchaser but take their matters elsewhere, therefore, does not result in a violation of this Rule.

#### Single Purchaser

This Rule requires a single purchaser. The prohibition against piecemeal sale of a practice protects those clients whose matters are less lucrative and who might find it difficult to secure other counsel if a sale could be limited to substantial fee generating matters. The purchaser is required to undertake all client matters in the practice, subject to client consent. If, however, the purchaser is unable to undertake all client matters because of nonwaivable conflicts of interest, other requirements of these Rules or rules of the Supreme Court governing the practice of law in Pennsylvania, the requirement that there be a single purchaser is nevertheless satisfied.

#### Client Confidences, Consent and Notice

Negotiations between seller and prospective purchaser prior to disclosure of information relating to a specific representation of an identifiable client no more violate the confidentiality provisions of Rule 1.6 than do preliminary discussions concerning the possible association of another lawyer or mergers between firms with respect to which client consent is not required. Providing the purchaser access to the client-specific information relating to the representation and to the file, however, requires client consent. The Rule provides that before such information can be disclosed by the seller to the purchaser the client must be given actual written notice of the contemplated sale and file transfer including the identity of the purchaser and any proposed change in the terms of future representation, and must be told that the decision to consent or make other arrangements must be made within 60 days. If actual notice is given, and the client makes no response within the 60 day period, client consent to the sale will be presumed. If actual notice cannot be given with regard to a client, paragraph (f)(1) makes clear that the sale is not effective with regard to that client.

A lawyer or law firm ceasing to practice cannot be required to remain in practice because some clients cannot be given actual notice of the proposed purchase. Since these clients cannot themselves consent to the purchase or direct any disposition of their files, the Rule requires an Order from a court having jurisdiction authorizing their transfer. The court can be expected to determine whether reasonable efforts to locate the client have been exhausted, and whether the absent client's legitimate interests will be served by authorizing the transfer of the file so that the purchaser may continue representation. Preservation of client confidences requires that the petition for a court order be considered in camera. It may be necessary for courts having such jurisdiction to provide for appropriate procedures to effectuate such disposition where the existing procedures are not adequate to cover such petitions.

The Rule provides the minimum notice to the seller's clients necessary to make the sale effective under the Rules of Professional Conduct. The per-

son responsible for notice is encouraged to give sufficient information concerning the purchasing law firm or lawyer(s) who will handle the matter so as to provide the client adequate information to make an informed decision concerning ongoing representation by the purchaser. Such information may include without limitation the buyer's background, education, experience with similar matters, length of practice, and whether the lawyer(s) are currently licensed in Pennsylvania.

No single method is provided for the giving of actual written notice to the client under paragraph (b). It is up to the person undertaking to give notice to determine the most effective and efficient means for doing so. For many clients, certified mail with return receipt requested will be adequate. However, with regard to other clients, this method may not be the best method. It is up to the person responsible for giving notice to make this decision. The interests of the client are protected by the provision in paragraph (f)(1) that the sale is not effective as to that matter if notice cannot be given.

The party responsible for giving notice is likewise not identified in the Rule. It is anticipated that in most cases the selling lawyer will undertake to give notice, if he or she is available to do so. It is often more appropriate for the selling lawyer, with whom the client already has a relationship, to initiate the client notification. However, in situations where the selling lawyer is not available, or it is otherwise to be preferred, the Rule permits the purchasing lawyer(s) or law firm to fulfill the notice requirement.

All of the elements of client autonomy, including the client's absolute right to discharge a lawyer and transfer the representation to another, survive the sale of the practice.

**Fee Arrangements Between Client and Purchaser**

The sale may not be financed by increases in fees charged to the clients of the practice. This protection is underscored by both paragraph (b)(2) and paragraph (d). Existing agreements between the seller and the client as to the fees and the scope of the work must be honored by the purchaser, unless the client consents after consultation.

**Other Applicable Ethical Standards**

Lawyers participating in the sale of a law practice are subject to ethical standards applicable to involving another lawyer in the representation of a client. These include, for example, the obligation to avoid disqualifying conflicts, and to secure client consultation for those conflicts which can be agreed to by the client (see Rule 1.7); and the obligation to protect information relating to the representation (See Rules 1.6 and 1.9).

If approval of the substitution of the purchasing attorney for the selling attorney is required by the Rules of any tribunal in which a matter is pending, such approval must be obtained before the matter can be included in the sale. (See Rule 1.16.)

**Applicability of the Rule**

This Rule applies to the sale of a law practice by representatives of a deceased, disabled or disappeared lawyer. Thus, the seller may be represented by a nonlawyer representative not subject to these Rules. Since, however, the purchasing lawyer may be participating in the sale of a law practice that does not conform to the requirements of this Rule, the representatives of the seller as well as the purchasing lawyer can be expected to see to it that those requirements are met.

This Rule does not apply to transfers of legal representation between lawyers when such transfers are unrelated to the sale of a practice.

**LAW FIRMS AND ASSOCIATIONS**

**RULE 5.4. Professional Independence of a Lawyer.**

(a) A lawyer or law firm shall not share legal fees with a nonlawyer, except that:

(1) an agreement by a lawyer with the lawyer's firm, partner, or associate may provide for the payment of money, over a reasonable period of time after the lawyer's death, to the lawyer's estate or to one or more specified persons;

(2) a lawyer who undertakes to complete unfinished legal business of a deceased lawyer may pay to the estate of the deceased lawyer that proportion of the total compensation which fairly represents the services rendered by the deceased lawyer; [ and ]

(3) a lawyer or law firm may include nonlawyer employees in a compensation or retirement plan, even though the plan is based in whole or in part on a profit-sharing arrangement; and

(4) a lawyer or law firm may purchase the practice of another lawyer or law firm from an estate or other eligible entity consistent with Rule 1.17.

\* \* \* \* \*

**RULE 5.6. Restrictions on Right to Practice.**

A lawyer shall not participate in offering or making:

(a) a partnership, shareholders, operating, employment or other similar type of agreement that restricts the rights of a lawyer to practice after termination of the relationship, except an agreement concerning benefits upon retirement or an agreement for the sale of a law practice consistent with Rule 1.17; or

(b) an agreement in which a restriction on the lawyer's right to practice is part of the settlement of a controversy between private parties.

**INFORMATION ABOUT LEGAL SERVICES**

**RULE 7.2. Advertising.**

\* \* \* \* \*

(c) A lawyer shall not give anything of value to a person for recommending the lawyer's services, except that a lawyer may pay:

(1) the reasonable cost of advertising or written communication permitted by this rule [ and may pay ];

(2) the usual charges of a not-for-profit lawyer referral service or other legal service organization; and

(3) for a law practice in accordance with Rule 1.17.

\* \* \* \* \*

Comment

\* \* \* \* \*

*Paying Others to Recommend a Lawyer*

Subject to the limitations set forth under paragraph (j), a lawyer is allowed to pay for advertising permitted by this Rule **and for the purchase of a law practice in accordance with the provisions of Rule 1.17**, but otherwise is not permitted to pay another person for channeling professional work. This restriction does not prevent an organization or person other than the lawyer from advertising or recommending the lawyer's services. Thus, a legal aid agency or prepaid legal services plan may pay to advertise legal services provided under its auspices. Likewise, a lawyer may participate in not-for-profit lawyer referral programs and pay the usual fees charged by such programs. Paragraph (c) does not prohibit paying regular compensation to an assistant, such as a secretary, to prepare communications permitted by this Rule.

\* \* \* \* \*

[Pa.B. Doc. No. 97-1295. Filed for public inspection August 15, 1997, 9:00 a.m.]

**PART V. PROFESSIONAL ETHICS AND CONDUCT  
[204 PA. CODE CH. 83]**

**Amendment to the Pennsylvania Rules of Disciplinary Enforcement Relating to the Continued Practice of Law by Formerly Admitted Attorneys; Notice of Proposed Rulemaking**

Notice is hereby given that The Disciplinary Board of the Supreme Court of Pennsylvania is considering recommending to the Supreme Court of Pennsylvania that it amend the Pennsylvania Rules of Disciplinary Enforcement, to read as set forth in Annex A, to provide a procedure under which a formerly admitted attorney who continues to practice law may be held in contempt.

The Rules of Disciplinary Enforcement provide that Disciplinary Counsel may bring an action in any court of competent jurisdiction for an injunction or other relief whenever Disciplinary Counsel has probable cause to believe that a formerly admitted attorney is continuing to practice law or has failed to comply with the provisions of the Rules designed to protect clients when an attorney ceases to practice. Pa.R.D.E. 218(j). The Rules do not provide any details, however, on the procedure to be followed when Disciplinary Counsel seeks such relief. The Board is considering recommending an abbreviated procedure in those cases patterned after the procedures for seeking temporary suspensions in Pa.R.D.E. 208(f) and 214(d).

Interested persons are invited to submit written comments regarding the proposed amendment to the Office of the Secretary, The Disciplinary Board of the Supreme Court of Pennsylvania, First Floor, Two Lemoyne Drive, Lemoyne, PA 17043, on or before September 15, 1997.

*By The Disciplinary Board of the Supreme Court of Pennsylvania*

ELAINE BIXLER,  
*Secretary*

Annex A

**TITLE 204. JUDICIAL SYSTEM GENERAL PROVISIONS**

**PART V. PROFESSIONAL ETHICS AND CONDUCT**

**Subpart B. DISCIPLINARY ENFORCEMENT**

**CHAPTER 83. PENNSYLVANIA RULES OF DISCIPLINARY ENFORCEMENT**

**Subchapter B. MISCONDUCT**

**Rule 217. Formerly admitted attorneys.**

\* \* \* \* \*

**(j) Disciplinary Counsel may bring an action in any court of competent jurisdiction for such injunctive and other relief as may be appropriate, including without limitation filing a petition for contempt with the Supreme Court under subdivision (k), if Disciplinary Counsel has probable cause to believe that a formerly admitted attorney:**

- (1) has failed to comply with this rule or Rule 218(a) (relating to reinstatement), or,**
- (2) is otherwise continuing to practice law.**

**(k) The procedure for filing a petition for contempt with the Supreme Court shall be as follows:**

**(1) Disciplinary Counsel shall file the petition with the Supreme Court and shall personally serve a copy of the petition upon the formerly admitted attorney.**

**(2) The Court, or any justice thereof, may enter a rule directing the formerly admitted attorney to show cause why the formerly admitted attorney should not be found in contempt, which rule shall be returnable within ten days.**

**(3) If a rule to show cause has been issued under paragraph (2), and the period for response has passed without a response having been filed, or after consideration of any response, the Court may enter an order holding the formerly admitted attorney in contempt or directing that a hearing be held before a panel of at least three members of the Board.**

**(4) Any required hearing before a panel of the Board shall be held within ten days. Following the hearing, the panel shall within five days submit a transcript of the hearing and a recommendation to the Court. Upon receipt of the recommendation and the record relating thereto, the Court shall enter an appropriate order.**

**(5) There shall be no right to oral argument before the Court under this subdivision (k).**

**Rule 218. Reinstatement**

\* \* \* \* \*

**[(j) If Disciplinary Counsel shall have probable cause to believe that any formerly admitted attorney:**

- (1) has failed to comply with this rule or Rule 217 (relating to formerly admitted attorneys), or,**

**(2) is otherwise continuing to practice law, Disciplinary Counsel may bring an action in any court of competent jurisdiction for such injunctive and other relief as may be appropriate. ]**

[Pa.B. Doc. No. 97-1296. Filed for public inspection August 15, 1997, 9:00 a.m.]

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## **Title 231—RULES OF CIVIL PROCEDURE**

**Partial Suspension of Section 5506(b)(1) of Title 68 of the Consolidated Statutes; No. 283; Doc. No. 5**

### **Order**

*Per Curiam:*

*And Now*, this 31st day of July, 1997, in accordance with Article V, Section 10(c) of the Constitution of 1968, Section 5506(b)(1) of Title 68 of the Pennsylvania Consolidated Statutes is suspended to the extent that the section provides that Chapter 55, insofar as it provides for methods of service and bond, shall not be deemed to be

suspended or affected by the Pennsylvania Rules of Civil Procedure governing the action in equity.

This Order shall be processed in accordance with Pa.R.J.A. 103(b) and shall be effective immediately.

[Pa.B. Doc. No. 97-1297. Filed for public inspection August 15, 1997, 9:00 a.m.]

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## **SUPERIOR COURT**

### **Notice to the Bar**

After the publication of Volume 456, the Superior Court will no longer publish the *Superior Court Reports*. The *Atlantic Reporter* will thereafter be the official reporter of the Pennsylvania Superior Court. When publication of the *Superior Court Reports* has ceased, citations to the Superior Court should be only to the *Atlantic Reporter*, for example, *Jones v. Smith*, 692 A.2d XXX (Pa. Super. 1997).

JOSEPH J. MITTLEMAN,  
*Executive Administrator*  
*Superior Court of Pennsylvania*

[Pa.B. Doc. No. 97-1298. Filed for public inspection August 15, 1997, 9:00 a.m.]

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# PROPOSED RULEMAKING

## ENVIRONMENTAL QUALITY BOARD

[25 PA. CODE CH. 93]

### Stream Redesignations; Hay Creek et al.

The Environmental Quality Board (Board) proposes to amend §§ 93.9f, 93.9q, 93.9t and 93.9v to read as set forth in Annex A.

This order was adopted by the Board at its meeting of June 17, 1997.

#### A. *Effective Date*

These amendments are effective upon publication in the *Pennsylvania Bulletin* as final rulemaking.

#### B. *Contact Persons*

For further information, contact Edward R. Brezina, Chief, Division of Water Quality Assessment and Standards, Bureau of Watershed Conservation, 10th Floor, Rachel Carson State Office Building, P.O. Box 8555, 400 Market Street, Harrisburg, PA 17105-8555, (717) 787-9637 or William J. Gerlach, Assistant Counsel, Bureau of Regulatory Counsel, 9th Floor, Rachel Carson State Office Building, P.O. Box 8464, Harrisburg, PA 17105-8464, (717) 787-7060. Persons with a disability may use the AT&T Relay Service by calling (800) 654-5984 (TDD users) or (800) 654-5988 (voice users). This proposal is available electronically through the DEP Web site (<http://www.dep.state.pa.us>).

#### C. *Statutory and Regulatory Authority*

These proposed amendments are made under the authority of the following acts: sections 5(b)(1) and 402 of The Clean Streams Law (35 P.S. §§ 691.5(b)(1) and 691.402) and section 1920-A of The Administrative Code of 1929 (71 P.S. § 510-20), which grant to the Board the authority to develop and adopt rules and regulations to implement the provisions of The Clean Streams Law. In addition, the Federal regulation at 40 CFR 131.32 (relating to Pennsylvania) sets forth certain requirements for portions of the Commonwealth's antidegradation program.

#### D. *Background of the Amendments*

Pennsylvania's Water Quality Standards, which are set forth in part at Chapter 93 (relating to water quality standards), implement the provisions of sections 5 and 402 of The Clean Streams Law and section 303 of the Federal Clean Water Act (33 U.S.C.A. § 1313). Water quality standards are in-stream water quality goals which are implemented by imposing specific regulatory requirements (such as treatment requirements and effluent limits) on individual sources of pollution.

The Department of Environmental Protection (Department) considers candidates for Special Protection status or redesignation, or both, in its ongoing review of water quality standards. In general, Special Protection waters (High Quality (HQ) and Exceptional Value (EV) waters) must be maintained at their existing quality, and waste-

water treatment requirements must comply with § 95.1 (relating to general requirements). Candidates may be identified by the Department based on routine waterbody investigations. Requests for consideration may also be initiated by other agencies, such as the Fish and Boat Commission (FBC), and by the general public through a rulemaking petition to the Board.

The Department evaluated the following streams in response to requests from Department and FBC staff:

Sugarcamp Run, Hay Creek and South Fork Little Conemaugh River: Department of Environmental Protection

Pine Creek, Mill and Little Mill Creeks, Sandy Run and Bens Creek: FBC

The physical, chemical and biological characteristics and other information on these waterbodies were evaluated to determine the appropriateness of the current designations. Aquatic surveys of these streams were conducted by the Department's Bureau of Watershed Conservation. Based upon the data collected in these surveys and information gathered from Department records and other sources, the Board recommends the designations described in this Preamble.

None of the redesignations in this proposed rulemaking conform exactly to the designations requested by the proponents of the proposed redesignations. The major differences between the requested and proposed redesignations are summarized:

*Hay Creek*—The Department's Southcentral Regional Office requested that Hay Creek be reviewed for redesignation as HQ-CWF. As a result of the evaluation, EV is being proposed for much of the basin. In addition, the Migratory Fishes (MF) use designation is being added.

*Pine Creek*—An HQ-CWF designation was sought by the FBC. The proposed redesignation includes EV for much of the basin based on outstanding ecology, with HQ-CWF proposed for the remainder, based on excellent ecological attributes.

*Mill/Little Mill Creeks*—The FBC requested EV for these basins. The Department's EV recommendation includes the upper watershed, including Little Mill Creek, based on outstanding ecological attributes. The remainder retains the current HQ-CWF classification.

*Bens Creek*—The EV designation proposed covers one-half mile less than requested by the FBC. In addition, a portion of the basin is proposed for redesignation from HQ-CWF to CWF based on historical degradation due to acid mine drainage. This was not included in the FBC request.

*South Fork Little Conemaugh River*—The Southwest Regional Office requested that this waterbody be reviewed for EV status. A portion of the basin is proposed for designation as EV. Some of the basin will retain its HQ-CWF designation. A section is recommended to be redesignated from HQ-CWF to CWF due to acid mine drainage. This was not requested by the regional office.

*Sandy Run*—The FBC requested EV designation for the basin. The lower 2.2 miles of the basin were found to qualify for EV protection based on outstanding ecological attributes.

*Sugarcamp Run*—The Northwest Regional Office requested that the upper portion of Sugarcamp Run be reviewed for redesignation to CWF from HQ-CWF due to a lack of flow. The evaluation revealed the presence of a viable aquatic community, so the HQ-CWF designation will be retained.

Copies of the Department's aquatic survey evaluation reports are available from Edward Brezina whose address and telephone number are listed in Section B of this Preamble.

In reviewing whether waterbodies are subject to the Special Protection Waters Program, and meet the definitions of "High Quality Waters" or "Exceptional Value Waters" in § 93.3 (relating to definitions) and applicable Federal regulations, the Department is utilizing guidance titled "Special Protection Waters Selection Criteria." This guidance appears in the Department's "Special Protection Waters Implementation Handbook."

The following is a brief explanation of the recommendations which are based on the Department's evaluations considering applicable regulatory definitions, applicable Federal regulations and the Department's Special Protection Water Selection Criteria that are referenced in the explanations:

*Hay Creek*—Much of the Hay Creek basin is recommended for inclusion in the Special Protection Waters program based on Criterion IV-2—Outstanding Ecology. An Exceptional Value Waters designation is recommended for the basin from the source to the Birdsboro Borough boundary with the exception of Unnamed Tributary 63882 and Beaver Run. The tributary will retain its Cold Water Fishes (CWF) designation. Beaver Run is recommended for High Quality-Cold Water Fishes (HQ-CWF). In addition, Migratory Fishes (MF) should be added to recognize the presence of American eel in the basin.

*Pine Creek*—Much of the Pine Creek basin is recommended to be upgraded. The Pine Creek basin from the source to Caldwell Creek is recommended for designation as HQ-CWF based on Excellent Ecology (HQ Criterion 4). The West Branch Caldwell Creek basin is recommended for EV designation based on Outstanding Ecology (Criterion IV-2). The Caldwell Creek basin from the confluence of the West Branch to its confluence with Pine Creek, and the Pine Creek basin from Caldwell Creek to the mouth, are also recommended for EV based on Criterion IV-2.

*Mill and Little Mill Creeks*—The Mill Creek basin from the source to SR 271 (which includes Little Mill Creek) should be designated Exceptional Value Waters (EV) based on Outstanding Ecology (Criterion IV-2). The remainder of the basin should retain its current HQ-CWF designation.

*Bens Creek*—This evaluation resulted in recommendations for both an upgrade and a downgrade for portions of the basin. The Bens Creek basin from the source to unnamed tributary 46099 should be designated Exceptional Value Waters (EV) based on Outstanding Ecology (Criterion IV-2). The remainder of the basin (including UNT 46099) should be designated Cold Water Fishes (CWF) because of degradation due to abandoned mine drainage. This degradation occurred prior to November 28, 1975, the date established to define "existing uses" in both the State and Federal water quality standards regulations.

*South Fork Little Conemaugh River*—This evaluation also resulted in recommendations for a downgrade as well as upgrades (and some for no change). The South Fork Little Conemaugh River basin from the source to the Beaverdale Reservoir Dam should be redesignated EV based on its designation by the FBC as a Wilderness Trout Stream (Category II-3) and Outstanding Ecology (IV-2). The South Fork Little Conemaugh River main stem from the Beaverdale Reservoir Dam to unnamed tributary 45928 (locally Sunshine Creek) should be designated EV based on Outstanding Ecology (IV-2). Bottle Run and unnamed tributaries in this reach should retain the current HQ-CWF designation, as should the basin from UNT 45928 to the SR 869 bridge. The South Fork Little Conemaugh River basin from SR 869 to Beaverdam Run should be designated CWF based on damage from abandoned mine drainage prior to November 28, 1975.

*Sandy Run*—Lower reaches of the Sandy Run basin exhibit Outstanding Ecology (Criterion IV-2). The Sandy Run basin from Flugey Hollow to the mouth should be redesignated to Exceptional Value Waters (EV). The remainder of the basin should retain the current HQ-CWF designation.

*Sugarcamp Run*—The Department's Northwest Field Office requested an evaluation for the possible redesignation of upper Sugarcamp Run from High Quality - Cold Water Fishes (HQ-CWF) to Cold Water Fishes (CWF) based on low or nonexistent stream flow. The evaluation revealed healthy populations of benthic macroinvertebrates which could not be present if the stream regularly goes dry. In addition, three species of fish were present. Based on these findings, the HQ-CWF designation should be retained.

These changes allow wastewater treatment requirements for dischargers to these streams to be consistent with the water uses to be protected. These proposed regulatory amendments do not contain any standards or requirements which exceed requirements of the companion Federal regulations.

#### E. Benefits, Costs and Compliance

Executive Order 1996-1 requires a cost/benefit analysis of the proposed amendments.

1. *Benefits*—Overall, the citizens of this Commonwealth will benefit from these recommended changes because they will reflect the appropriate designated use and maintain the most appropriate degree of protection for each stream.

2. *Compliance Costs*—Generally, the changes should have no fiscal impact on, or create additional compliance costs for the Commonwealth or its political subdivisions. Except as noted, no costs will be imposed directly upon local government by this recommendation. However, indirect costs may result from revisions to Act 537 Sewage Facilities Plans due to consultant and other administrative fees. Political subdivisions which add a new sewage treatment plant or expand an existing plant in the basin may experience changes in cost as noted in the discussion of impacts on the private sector.

Persons proposing activities or projects which result in discharges to streams must comply with the regulatory requirements relating to current stream designations. These persons could be adversely affected by the recommended changes that increase the level of protection provided to a stream if they expand the discharge or add

a new discharge point since they may need to provide a higher level of treatment for the new or expanded discharge. These increased costs take the form of higher engineering, construction or operating costs for wastewater treatment facilities. Treatment costs are site-specific and may depend upon the size of the discharge in relation to the size of the stream and many other factors. It is therefore not possible to precisely predict the actual change in costs. In addition, nonpoint source controls necessary to protect High Quality and Exceptional Value Waters may add to the cost of planning and development for new or expanded nonpoint source discharges. Economic impacts would primarily involve the potential for higher treatment costs for new or expanded discharges to streams which are upgraded, and potentially lower treatment costs for discharges to streams which are downgraded.

3. *Compliance Assistance Plan*—The regulatory revisions have been developed as part of an established program that has been implemented by the Department since the early 1980's. The proposal is consistent with and based on existing Department programs and current policies. Therefore, no policy changes are anticipated. The proposal extends additional protection to selected waterbodies that exhibit exceptional water quality and is consistent with antidegradation requirements established by the Federal Clean Water Act and The Clean Streams Law (35 P. S. §§ 691.1—691.1001). All surface waters in this Commonwealth are afforded a minimum level of protection through compliance with the water quality standards which prevents pollution and protects existing water uses.

The proposed amendments will be implemented through the National Pollutant Discharge Elimination System (NPDES) permitting program since the stream use designation is a major basis for determining allowable stream discharge effluent limitations. These permit conditions are established to assure water quality criteria are achieved and designated uses are protected. New and expanded discharges with water quality based effluent limitations are required to provide effluent treatment according to the water quality criteria associated with the proposed revised designated water uses.

The Department has developed technical guidance to assist the potentially affected and regulated community in understanding the impacts and requirements of the Special Protection Stream Designation Process. *The Special Protection Waters Implementation Handbook* (1992) provides guidance on the regulatory designation process, protection of candidate streams and most importantly, general considerations for proposed new or expanded discharges to Special Protection Waters. This handbook also contains appendices which present management practices and technologies relevant for point and nonpoint source discharges to Special Protection Waters. The Department has conducted various workshops, seminars and public meetings on the Special Protection Waters program. Public meetings have been held for specific stream redesignation concerns. Permitted point source discharges are regularly evaluated through discharger self-monitoring reports (DMR's) and Department inspections, to assure they are complying with permit conditions. The *Handbook* sets forth recommended Best Management Practices (BMPs) for nonpoint sources.

4. *Paperwork Requirements*—The regulatory revisions should have no direct paperwork impact on the Commonwealth, local governments and political subdivisions or the private sector. These regulatory revisions are based on existing Department programs and policies. There may be some indirect paperwork requirements for new or expanding discharges to streams upgraded to Special Protection (HQ or EV). For example, NPDES general permits are not currently available for new or expanded discharges to Special Protection streams. Thus an individual permit, and its associated additional paperwork, would be required. Additionally, paperwork associated with demonstrating social and economic justification (SEJ), and the nonfeasibility of nondischarge alternatives, may be required for new or expanded discharges to certain Special Protection waters.

#### F. *Pollution Prevention*

The antidegradation program, which applies to streams designated as HQ and EV waters, is a major pollution prevention tool because its objective is to prevent degradation by maintaining and protecting existing water quality. Although new or expanded wastewater discharges are not prohibited by the antidegradation program, nondischarge alternatives are encouraged and required, when appropriate. Nondischarge alternatives, when implemented, remove impacts to surface water and reduce the overall level of pollution to the environment by remediation of the effluent through the soil.

#### G. *Sunset Review*

These proposed amendments will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulation effectively fulfills the goals for which it was intended.

#### H. *Regulatory Review*

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), on August 5, 1997, the Department submitted a copy of the proposed rulemaking to the Independent Regulatory Review Commission (IRRC) and to the Chairpersons of the Senate and House Environmental Resources and Energy Committees. In addition to submitting the proposed amendments, the Department has provided IRRC and the Committees with a copy of a detailed regulatory analysis form prepared by the Department. A copy of this material is available to the public upon request.

If IRRC has objections to any portion of the proposed amendments, it will notify the Department within 30 days of the close of the public comment period. The notification shall specify the regulatory review criteria which have not been met by that portion. The Regulatory Review Act specifies detailed procedures for review by the Department, the Governor and the General Assembly before publication of the regulation.

#### I. *Public Comments*

*Written Comments*—Interested persons are invited to submit comments, suggestions or objections regarding the proposed amendments to the Environmental Quality Board, P.O. Box 8477, Harrisburg, PA 17105-8477 (express mail: Rachel Carson State Office Building, 15th Floor, 400 Market Street, Harrisburg, PA 17101-2301). Comments submitted by facsimile will not be accepted. Comments, suggestions or objections must be received by the Board by September 30, 1997 (within 45 days of

publication in the *Pennsylvania Bulletin*). Interested persons may also submit a summary of their comments to the Board. The summary may not exceed one page in length and must also be received by September 30, 1997 (within 45 days following publication in the *Pennsylvania Bulletin*). The one-page summary will be provided to each member of the Board in the agenda packet distributed prior to the meeting at which the final-form regulations will be considered. If sufficient interest is generated as a result of this publication, a public hearing will be scheduled at an appropriate location to receive additional comments.

*Electronic Comments*—Comments may be submitted electronically to the Board at RegComments A1.dep.state.pa.us. A subject heading of the proposal and return

name and address must be included in each transmission. Comments submitted electronically must also be received by the Board by September 30, 1997.

JAMES M. SEIF,  
*Chairperson*

*(Editor's Note: Amendments to §§ 93.9f and 93.9q were adopted at 27 Pa.B. 3050 (June 28, 1997). A proposal to amend §§ 93.9f and 93.9q remains outstanding at 27 Pa.B. 1449 (March 22, 1997) and a proposal to amend §§ 93.9f, 93.9q, 93.9t and 93.9v remains outstanding at 27 Pa.B. 1459 (March 22, 1997).)*

**Fiscal Note:** 7-324. No fiscal impact; (8) recommends adoption.

**Annex A**

**TITLE 25. ENVIRONMENTAL PROTECTION**

**PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION**

**Subpart C. PROTECTION OF NATURAL RESOURCES**

**ARTICLE II. WATER RESOURCES**

**CHAPTER 93. WATER QUALITY STANDARDS**

**§ 93.9f. Drainage List F.**

**Delaware River Basin in Pennsylvania**

*Schuylkill River*

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
3—Hay Creek	* * * * * Basin, <b>Source to Unnamed tributary (UNT) 63882 at River Mile 8.1</b>	Berks	[ CWF ] EV	None
4—Unnamed Tributary (63882) to Hay Creek	Basin	Berks	CWF, MF	None
3—Hay Creek	Basin, UNT 63882 to Beaver Run	Berks	EV	None
4—Beaver Run	Basin	Berks	HQ-CWF, MF	None
3—Hay Creek	Basin, Beaver Run to Birdsboro Boundary	Berks	EV	None
3—Hay Creek	Basin, Birdsboro Boundary to Mouth * * * * *	Berks	CWF, MF	None

**§ 93.9q. Drainage List Q.**

**Ohio River Basin in Pennsylvania**

*Allegheny River*

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
4—Pine Creek	* * * * * [ Main Stem ] Basin, source to Caldwell Creek	Crawford	[ CWF ] HQ-CWF	Add TON
[ 5—Unnamed Tributaries to Pine Creek ]	[ Basins ]	[ Warren-Crawford ]	[ CWF ]	[ Add TON ]

PROPOSED RULEMAKING

			Water Uses	Exceptions To Specific
[ 5—Campbell Creek ]	[ Basin ]	[ Warren ]	[ CWF ]	[ Add TON ]
[ 5—Dunham Run ]	[ Basin ]	[ Warren ]	[ CWF ]	[ Add TON ]
5—Caldwell Creek	Basin, Source to West Branch Caldwell Creek	[ Crawford ]	HQ-CWF	Add TON
6—West Branch Caldwell Creek	Basin	Warren	EV	Add TON
5—Caldwell Creek	Basin, West Branch Caldwell Creek to Mouth	Crawford	EV	Add TON
[ 5—Henderson Run ]	[ Basin ]	[ Crawford ]	[ CWF ]	[ Add TON ]
4—Pine Creek	Basin, Caldwell Creek to Mouth	Crawford	EV	Add TON
	* * * * *			

§ 93.9t. Drainage List T.

Ohio River Basin in Pennsylvania

*Kiskimineatas River*

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
6—Bens Creek	Main Stem, Confluence of South and North Forks to Mouth	Cambria	CWF	None
7—Mill Creek	Basin, Source to SR 0271 Bridge	[ Somerset ]	[ HQ-CWF ]	None
7—Mill Creek	Basin, SR 0271 Bridge to Mouth	Somerset	EV HQ-CWF	None
5—Little Conemaugh River	Main Stem, Source to North Branch Little Conemaugh River	Cambria	CWF	None
6—Bens Creek	Basin, Source to Unnamed Tributary (UNT) 46099 at River Mile 0.74	Cambria	[ HQ-CWF ]	None
7—Unnamed Tributary (46099) to Bens Creek	Basin	Cambria	CWF	None
6—Bens Creek	Basin, UNT 46099 to Mouth	Cambria	CWF	None
6—South Fork Little Conemaugh River	Basin, Source to [ Beaverdam Run ] Beaverdale Reservoir Dam	Cambria	[ HQ-CWF ]	None
6—South Fork Little Conemaugh River	Main Stem, Beaverdale Reservoir Dam to Unnamed Tributary 45928	Cambria	EV	None
7—Unnamed Tributaries to South Fork Little Conemaugh River	Basins, Beaverdale Reservoir Dam to UNT 45928	Cambria	HQ-CWF	None
7—Bottle Run	Basin	Cambria	HQ-CWF	None
7—Unnamed Tributary (45928) to South Fork Little Conemaugh River	Basin	Cambria	HQ-CWF	None
6—South Fork Little Conemaugh River	Basin, UNT 45928 to SR 0869 Bridge	Cambria	HQ-CWF	None
6—South Fork Little Conemaugh River	Basin, SR 0869 Bridge to Beaverdam Run	Cambria	CWF	None
	* * * * *			

§ 93.9v. Drainage List V.

Ohio River Basin in Pennsylvania  
*Monongahela River*

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
5—Laurel Hill Creek	Basin, Fall Creek to [ Mouth ] Sandy Run	Somerset	HQ-CWF	None
6—Sandy Run	Basin, Source to “Flugey Hollow” (UNT 38620)	Somerset	HQ-CWF	None
7—Unnamed Tributary (38620) to Sandy Run	Basin	Somerset	HQ-CWF	None
6—Sandy Run	Basin, Flugey Hollow to Mouth	Somerset	EV	None
5—Laurel Hill Creek	Basin, Sandy Run to Mouth	Somerset	HQ-CWF	None

[Pa.B. Doc. No. 97-1299. Filed for public inspection August 15, 1997, 9:00 a.m.]

**PENNSYLVANIA PUBLIC UTILITY COMMISSION**

[52 Pa. CODE CH. 53]

[L-00940095]

**Telecommunications Utilities**

*Commissioners present:* John M. Quain, Chairperson; Robert K. Bloom, Vice Chairperson, concurring in result; John Hanger; David W. Rolka; Nora Mead Brownell

Public meeting held  
 July 31, 1997

**Second Advance Notice of Proposed Rulemaking Order**

*By the Commission:*

Subsequent to our *Policy Statement Re Settlement Guidelines and Procedures for Major Rate Cases* at Docket No. L-00930088, order entered August 9, 1994, we ordered that the existing filing requirement regulations for general rate increases in excess of \$1 million in § 53.53 (relating to information to be furnished with proposed general rate increase filings in excess of \$1 million) be updated and revised. As such, by order entered October 18, 1994, at the above-docketed number, we initiated a rulemaking proceeding for each utility industry at the above-docketed number and solicited comments concerning revising and streamlining § 53.53 of these regulations.

Since that time, staff has initiated technical conferences in all industry groups, including telephone. With regard to the telephone industry, these conferences have been designed to assist the Pennsylvania Public Utility Commission (Commission) in developing proposed regulations for general rate increases in excess of \$1 million that are filed by telecommunications utilities. The technical group, to date, has not issued a proposed rulemaking to the Commission for review.

At the same time, it has become clear in recent months that the advent of local exchange competition and the entry of Competitive Local Exchange Carriers (CLECs) in Pennsylvania’s market for local exchange telecommunications services has created the need for revisiting other portions of the Commission’s regulatory oversight mechanisms. Although CLEC tariff filings are typically addressed by this Commission in a routine fashion, certain problems periodically arise in evaluating such filings. In addition, certain CLEC tariff filings have become the subject of formal complaints by incumbent local exchange carriers (ILECs). See *Bell Atlantic-Pennsylvania, Inc. v. TCG Pennsylvania*, Docket No. C-00967719, order entered February 28, 1997; *Pa. P.U.C. v. Eastern TeleLogic Corporation*, Docket No. R-00973881, order entered March 27, 1997. These cases are time and resource consuming, despite use of our alternative dispute resolution (ADR) process, and may be avoided with clarified and streamlined regulations. The aim of these revisions and streamlining should be to make our regulatory oversight competitively neutral while permitting the ILECs and the CLECs the requisite flexibility to respond to the changes in the marketplace for their services. Therefore, at public meeting held June 12, 1997, we directed that the above-cited rulemaking be revised and expanded to examine the filing requirements applicable to all providers of local exchange service who seek to effectuate tariff changes under section 1308(a) and (b) of the Public Utility Code, 66 Pa.C.S. § 1308(a) and (b).<sup>1</sup> We believe it necessary to refocus the direction taken thus far at the above-docketed proceeding to encompass both the originally contemplated revisions of the filing requirements at § 53.53 for general rate increases in excess of \$1 million, as well as revisions to filing requirements in § 53.52 for all other rate changes that are proposed by providers of local exchange telecommunications services. Accordingly, we are supplementing the initial advance notice of proposed rulemaking document to attract comments from CLECs and other interested parties. In doing so, we are seeking regulatory parity: all providers should share the benefit and burdens of regulation equally.

<sup>1</sup> The Commission directed this rulemaking at *Pennsylvania Public Utility Commission, et al. v. MCI Metro Access Transmission Services, Inc.* Docket No. R-973866, et seq., public meeting of June 12, 1997.

The revised filing requirements should be consistent with the generic guidelines for the Chapter 30 streamlined regulation of local exchange telephone companies with less than 50,000 access lines. *In re Implementation of Chapter 30 of the Public Utility Code; Streamlined Form of Regulation*, Docket No. M-00930483, Order entered August 25, 1995. These Chapter 30 guidelines encourage participants to use pre-filing collaborative processes or the Commission's ADR procedures to minimize discovery and the time and expense customarily associated with evidentiary proceedings. In addition, we have previously directed implementation of streamlined procedures by local exchange carriers (LECs) regarding the filing of intraLATA toll service tariff filings when intraLATA "1+" presubscription becomes effective. *Investigation Into IntraLATA Interconnection Arrangements*, Docket No. I-00940034, Order entered December 14, 1995; *See also Petition of Commonwealth Telephone Company for an Alternative Regulation and Network Modernization Plan, et al.*, Docket Nos. P-00961024 & P-00961081, Order entered January 17, 1997; *In re Interexchange Carrier Regulation Under Chapter 30 of the Public Utility Code*, Docket Nos. L-00940099 & M-00930496, Final Rulemaking Order entered April 29, 1997.

In the Commission's judgment, this second advance notice of proposed rulemaking will provide an appropriate forum for all providers of local exchange telecommunications service—incumbents and new entrants—to address the issue of what filing requirements should govern section 1308(a) and (b) tariff changes, 66 Pa.C.S. § 1308(a) and (b). In particular, we request comments concerning the following:

1. *Tariff Filing Support Documentation.* Section 53.52 of our regulations requires all tariff filings to be accompanied by certain supporting documentation to assist in the timely evaluation and disposition of the associated filings by this Commission and its staff. Consider what changes, if any, should be implemented in order to reflect more appropriate supporting documentation requirements for particular types of tariff filings.

2. *Cost Support Documentation.* Tariff filings of ILECs that affect service rates are accompanied by appropriate cost support documentation that usually include both revenue analyses and cost justification of proposed rates for either existing or new services. Given the fact that CLECs are relatively new entrants in Pennsylvania's market for telecommunications services subject to this Commission's jurisdiction and regulation, discuss the accounting and administrative systems necessary to support documentation pursuant to our regulations. Discuss accounting systems available to the CLECs which may be comparable to the Federal Communications Commission's prescribed use of the Uniform System of Accounts.

3. *CLEC Services and Rates.* The rates for local exchange services that are provided by a CLEC are usually within the bounds of existing ILEC retail service rates and the interconnection and/or wholesale rates that a CLEC will pay to an ILEC(s), especially when CLECs resell ILEC retail services under the Federal Act. Consider the need for extensive cost support data for such CLEC service rates that are largely based on existing ILEC retail service rates.

4. *Local Exchange Carrier IntraLATA Toll Rates.* LECs have been accorded the flexibility to utilize filing procedures that are currently utilized only by interexchange carriers (IXCs) under the Commission's Chapter 30 guidelines. LECs will be able to avail themselves of such procedures for their intraLATA toll services and rates upon the effective implementation of intraLATA "1+" presubscription. Due to the abbreviated review period that will be accorded to such toll service tariff filings, it is imperative that uniform guidelines apply for the filing of associated support documentation that will be accompanying such tariff filings by various telecommunications carriers. Discuss uniform guidelines which will ensure the competitive neutrality of Commission oversight for LECs and IXCs in the intraLATA toll market.

5. *Tariff Filings for Service "Packages" and Supporting Documentation.* Members of the regulated telecommunications industry in Pennsylvania "package" various service for a single price. For example, CLECs meeting the conditions set out in the Section 271(e)(1) of the Federal Act can engage in the "joint marketing" of local exchange and toll services. *In re Implementation of the Telecommunications Act of 1996*, Docket No. M-00960799, order entered June 3, 1996. In *Petition of Bell Atlantic-Pennsylvania, Inc. for Expedited Modification of Consent Order and Waiver of Certain Chapter 64 Requirements*, Docket No. C-00881727, order entered June 12, 1997, we relaxed certain "joint marketing" restrictions for Bell Atlantic-Pennsylvania, Inc., though we directed that consumer protection safeguards for "service package" offerings of ILECs and CLECs be considered under the Commission's *Rulemaking to Rescind Obsolete Regulations, 52 Pa. Code Chapters 63 and 64*, at Docket No. L-00960113. Discuss documentary support issues for tariff filings of ILECs and CLECs that purport to implement "joint service package" offerings, should be addressed in the instant Docket.

6. *Promotional Offering Tariff Filings.* Promotional tariff filings by ILECs and CLECs should be discussed in terms of providing competitively neutral regulatory guidelines and supporting documentation which would apply equally to ILECs and CLECs. Discuss the type of supporting data to be filed for individual promotional offering tariff filings. Include comments concerning the design of promotional tariffs to protect the welfare interests of end-user consumers as well as to afford the Commission and its staff the opportunity to evaluate timely whether individual promotional offerings may have anticompetitive effects.

The above questions are not intended to be all inclusive. Any other comments concerning this rulemaking are welcome; *Therefore,*

*It is Ordered:*

1. That a second advance notice of proposed rulemaking is hereby issued concerning filing requirements for local exchange carriers as currently delineated in §§ 53.52 and 53.53 of our regulations.

2. That this second advance notice of proposed rulemaking order be published in the *Pennsylvania Bulletin*.

3. That interested parties shall have 45 days from the publication in the *Pennsylvania Bulletin* of this second advance notice of proposed rulemaking to file written comments or proposed language, or both.

4. That an original and 15 copies of comments, proposals and proposed language be served upon the Prothonotary, Pennsylvania Public Utility Commission, Post Office Box 3265, Harrisburg, PA 17105-3265. An additional copy should be sent to C. Barney Glunz, Supervisor, Bureau of Fixed Utility Services at the same address.

5. That the contact persons for this rulemaking are C. Barney Glunz, Supervisor, Bureau of Fixed Utility Services (717) 783-6163 (technical) and Susan T. Povilaitis, Assistant Counsel, Law Bureau (717) 787-2871 (legal).

6. That a copy of this order shall be served upon the Pennsylvania Telephone Association, all jurisdictional telecommunication utilities, all jurisdictional CLECs, the Office of Trial Staff, the Office of Consumer Advocate and the Small Business Advocate.

7. That, upon receipt of comments by interested parties, one or more informal technical conferences will be

convened by the Bureau of Fixed Utility Services for the purposes of discussing the issues raised by the rulemaking. Notice of the time, date and location of such conferences shall be forwarded to any person filing comments and shall be published in the *Pennsylvania Bulletin*. Persons wishing to make presentations at such conferences may be requested to submit written data underlying such presentations in advance of the conference date. The contact person for these conferences is C. Barney Glunz, Supervisor, Bureau of Fixed Utility Services (717) 783-6163.

JAMES J. MCNULTY  
*Acting Secretary*

[Pa.B. Doc. No. 97-1300. Filed for public inspection August 15, 1997, 9:00 a.m.]



# STATEMENTS OF POLICY

## Title 31—INSURANCE

### INSURANCE DEPARTMENT

#### [31 PA. CODE CH. 153]

#### Permissible Activity under the Liability Risk Retention Act of 1986 (15 U.S.C.A. §§ 3901—3906)—Statement of Policy

The Insurance Department (Department) hereby deletes a statement of policy in § 153.1 pertaining to permissible activity under the Federal Liability Risk Retention Act of 1986 (Federal act) (15 U.S.C.A. §§ 3901—3906), to read as set forth in Annex A. The statement of policy was announced August 26, 1988 (18 Pa.B. 3849) under the authority of sections 209, 605 and 606 of The Insurance Department Act of 1921 (40 P.S. §§ 47, 235 and 236); and section 3 of the act of January 24, 1966 (40 P.S. §§ 1006.1—1006.19) (now repealed) relating to unlicensed insurers. The statement of policy notified the insurance industry of the Department's interpretation of the Federal act with respect to the permissible activities of agents, brokers and insurers when dealing with risk retention groups and purchasing groups.

#### *Purpose*

The purpose of this notice is to delete § 153.1, to eliminate an obsolete statement of policy. The Federal act created risk retention groups (insurers owned and operated by insureds) and purchasing groups (groups of insureds seeking to purchase insurance) and allowed these groups to operate to a certain extent outside the scope of state insurance regulation. In October 1986, Congress responded to a commercial insurance crisis by passing amendments to the act which broadened the scope to include all commercial liability insurance (except worker's compensation).

The Federal act preempts state insurance laws with respect to risk retention groups and to a lesser extent with respect to purchasing groups. Each state may regulate these entities only to the extent permitted by the Federal law. The statement of policy delineated the conduct of agents and brokers regarding risk retention groups and the conduct of agents, brokers and insurers regarding purchasing groups that the Department considered to be outside the scope of the act and therefore subject to Pennsylvania's insurance statutes.

On December 18, 1992, Article XV was added to The Insurance Company Law of 1921, known as the Pennsylvania Risk Retention Act (40 P.S. §§ 991.1501—991.1516). The currently effective requirements with respect to the permissible activities of agents, brokers and insurers in this Commonwealth when dealing with risk retention groups and purchasing groups are found in the Pennsylvania Risk Retention Act. Specifically, sections 1510 and 1514 of that act (40 P.S. §§ 991.1510 and 991.1514) set forth the restrictions on insurance purchased by purchasing groups and the duty of an agent or broker to obtain a license. In addition, section 1509(a)(7) (40 P.S. § 991.1509(a)(7)) clarifies that insurers of purchasing groups are subject to the applicable provisions of

insurance laws, rules and regulations governing policy form and rate standards. Therefore, the statement of policy has been superseded by the Pennsylvania Risk Retention Act and is no longer needed.

#### *Affected Parties*

There are no parties affected by the deletion of this statement of policy because the statement of policy was made obsolete by the enactment of the Pennsylvania Risk Retention Act.

#### *Fiscal Impact*

The deletion of the statement of policy has no fiscal impact.

#### *Paperwork*

The deletion of the statement of policy has no impact on paperwork.

#### *Effectiveness/Sunset Date*

The deletion of the statement of policy will become effective upon final publication in the *Pennsylvania Bulletin*. No sunset date has been assigned because the Department is deleting an obsolete statement of policy.

#### *Contact Person*

The person to contact for information on the deletion of this statement of policy is Elaine M. Leitzel, Administrative Officer, Office of Regulation of Companies, 1345 Strawberry Square, Harrisburg, PA 17120, (717) 787-8840.

GREGORY S. MARTINO,  
*Acting Insurance Commissioner*

**Fiscal Note:** 11-168. No fiscal impact; (8) recommends adoption.

#### Annex A

#### TITLE 31. INSURANCE

#### PART VIII. MISCELLANEOUS PROVISIONS

#### CHAPTER 153. (Reserved)

#### § 153.1. (Reserved).

[Pa.B. Doc. No. 97-1301. Filed for public inspection August 15, 1997, 9:00 a.m.]

## Title 52—PUBLIC UTILITIES

### PENNSYLVANIA PUBLIC UTILITY COMMISSION

#### [52 PA. CODE CH. 69]

[M-00960838]

#### Affiliated Interest Issues of Natural Gas Marketers

The Pennsylvania Public Utility Commission (Commission) on June 5, 1997, adopted a final policy statement to provide guidance to local distribution companies (LDCs) providing natural gas service in this Commonwealth with regard to uniform standards for affiliated interests of the LDCs and for gas marketing divisions of LDCs. The contact person is Joseph K. Witmer, Assistant Counsel, Law Bureau, (717) 783-2818.

*Commissioners Present:* John M. Quain, Chairperson; Robert K. Bloom, Vice Chairperson; John Hanger, statement follows; David W. Rolka Dissenting—statement follows; Nora Mead Brownell

Public Meeting held  
June 5, 1997

*Policy Statement Addressing Affiliated Interests of Natural Gas Marketers; Doc. No. M-00960838*

### Final Order

*By the Commission:*

On October 3, 1996, the Commission adopted a proposed policy statement to provide guidance to LDCs providing natural gas service in this Commonwealth. A proposed policy statement was published in the *Pennsylvania Bulletin* on November 23, 1996. Comments were due within 30 days after publication. A public forum was held on March 7, 1997. We issued this proposed policy statement along with a statement on policies for marketer fitness at M-960839. Most comments submitted by the interested parties<sup>1</sup> jointly commented on both dockets.<sup>2</sup>

#### A. General

This Policy Statement addresses an LDC's relationship with its marketing subsidiary. That is necessary because an LDC's marketing subsidiary may be competing against other non-LDC marketers or brokers for deliveries of gas supplies to customers located on an LDC's distribution network under an LDC's transportation tariff. The parties have divergent views on handling an LDC's marketing subsidiary based on their interests.

#### B. Policy Statements Under Pennsylvania Law

Several comments requested that the Commission's Policy Statement be mandatory. Those comments objected to the use of the term "should" in the Policy Statement because the Commission's approach must be mandatory and regulatory.

We reject that suggestion because it is inconsistent with Pennsylvania law. In this Commonwealth, the language of a policy statement is generally precatory rather than mandatory. The Commission lacks statutory authority to implement mandatory policy statements, let alone enforce them unilaterally or immediately since that is the purpose of regulations under Pennsylvania law. The Commonwealth Court has commented, in relevant part, as follows:

... a statement of policy does not have the force of law, and is merely interpretive in nature and is not binding upon a reviewing court. The value of a policy statement is only persuasive, so long as it represents an accurate interpretation of the relevant statute or other authorities from which it is derived.

*Shenago Township Board of Supervisors v. PA PUC*, (No. 1387 C.D., filed December 20, 1996).

Our rejection is also based on the distinction under Pennsylvania law between a statement of general policy or guideline and a rule or regulation issued by a govern-

<sup>1</sup> Unless otherwise stated, the phrase "marketers" and/or "marketers or brokers" includes all LDC affiliates, subsidiaries, parents, divisions, and the like providing gas supply to a respective LDC's customer.

<sup>2</sup> The Commission received comments from the Office of Consumer Advocate (OCA); the Independent Oil and Gas Association of Pennsylvania (IOGA); the Pennsylvania Gas Association (PGA); and the Industrial Energy Consumers of Pennsylvania (IECPA); Eastern Energy Marketing; Enron Capital and Trade Resources; KCS, LG&E, MidCon and Natural Gas Clearing House (Clearinghouse); Open Flow Gas Supply Corporation, and T.W. Phillips; and UGI.

mental body. Where an agency's guidelines are intended to provide a general statement of policy, they are not treated as binding administrative rules or regulations. *Willman v. Children's Hospital of Pittsburgh*, 459 A.2d 855, 859 (1983) citing *Pennsylvania Human Relations Commission v. Norristown Area School District*, 473 Pa. 334, 374 A.2d 671 (1977). Consequently, we view this document as a policy statement or guideline and not a binding administrative regulation.

#### C. The Purpose of The Policy Statement and the Creation of a Level Playing Field

The LDCs and marketers or brokers have different opinions about the Policy Statement. The Pennsylvania Gas Association (PGA) and several LDCs disputed the claim that LDCs can leverage their local distribution system so as to impede the competitive presence of competing gas suppliers.

Equitable, in particular, objected to the Commission's attempt to create a new level playing field in this proceeding and suggested that the Commission await further legislation. Equitable and UGI both claimed that LDCs, unlike a marketer or broker, had a continuing obligation to less profitable or desirable customers. They further claimed that, if anything, these legal obligations placed an LDC at a competitive disadvantage vis-a-vis large competitors of gas suppliers who are not burdened with these duties.

Upon consideration, we reject the marketer or broker argument. We do so because they seek to use this Policy Statement to extend the Commission's statutory authority with regard to policy statements. We also reject their position because they would use this Policy Statement as a vehicle to restructure the entire industry. That is a legislative function which should not be accomplished by the guidance set forth in this Policy Statement.

By the same token, we also reject the LDC's argument. We do so because the LDCs would limit the Commission's jurisdictional authority to review or address potentially inappropriate dealings with affiliated interests. Neither approach is acceptable.

We will not use this Policy Statement as a means to restrict our jurisdiction nor as a forum to restructure the natural gas industry. Those are legislative functions. In addition, we recognize that an LDC's statutory obligations under the *Pennsylvania Code*, which obligations are not imposed on a marketer or broker of gas supplies, presents a challenge to an LDC which might benefit from the guidance provided by this Policy Statement.

We conclude that the guidance of a Policy Statement and not the mandate of a regulation is the best way to manage competition between an affiliate and a competing gas supplier. We believe that interested parties are far better at protecting their interests on a tariff-by-tariff basis, which are developed in light of the LDC's situation and the legal rights and obligations of an LDC and competing gas suppliers, than by regulatory mandate.

#### D. Definitions Under the Policy Statement

The parties disputed the terms used in the Policy Statement. One term that caused extensive debate was the meaning and scope of "affiliate" as it was used in the Policy Statement.

An affiliated interest, to the extent that an LDC's affiliated marketing division or subsidiary constitutes an affiliated interest, is defined at 66 Pa.C.S. § 2101. Section 2101 provides, in relevant part, as follows:

(6) Every corporation or person which the commission may determine as a matter of fact after investigation and hearing is actually exercising any substantial influence over the policies and actions of such public utility, even though such influence is not based upon stockholding, stockholders, directors, or officers to the extent specified in this section. As used in this part substantial influence means any corporation or person which or who stands in such relationship to the public utility that there is an absence of free and equal bargaining power between it or him and the public utility.

(7) Every person or corporation who or which the commission may determine as a matter of fact after investigation and hearing is actually exercising such substantial influence over the policies and actions of such public utility in conjunction with one or more other corporations or persons, or both, with which or whom they are related by ownership or blood relationship, or both, or by action in concert that together they are affiliated with such public utility within the meaning of this section even though no one of them alone is so affiliated.

Upon analysis of the facts and arguments in this case, we conclude that, for purposes of this Policy Statement only, the comments provided during this Policy Statement's investigation and the public forum hearings provided in conjunction therewith justify a determination that the term "affiliated interest" as used in section 2101 includes an affiliate as used in this Policy Statement. That is because the gas supply operations of an LDC typically intertwine with the transportation tariff services and the distribution system operations of an LDC.

We conclude that such an affiliated interest includes a legally or functionally distinct entity, or both, of an LDC engaged in competition against other marketers or brokers for the supply of gas regardless of whether other marketers or brokers are themselves an affiliate as defined in our Policy Statement.

#### E. *Specific Provisions*

##### 1. *Selective Enforcement of Transportation and Balancing, for example, § 69.192(b)*

Section 69.192(2) of the Proposed Policy Statement provided, in relevant part, as follows:

(2) The LDC shall likewise not apply a tariff provision in a manner that would give its affiliate or division an *unreasonable* preference over other marketers with regard to matters such as scheduling, *balancing, transportation, storage, curtailment, or nondelivery.*

*Pennsylvania Bulletin*, Vol 26, No. 47, November 23, 1996, p. 5721, emphasis added.

An issue arose concerning the equitable enforcement or application of these balancing and transportation regulations.

We note that 66 Pa.C.S. § 1502 prohibits unreasonable, and hence discriminatory, preferences by a public utility as regards its customers. While section 1502 does not apply directly to the relationship between the LDC and

the nonutility marketer or broker, it must be recognized that the failure to treat all gas suppliers on an equal basis impacts the end user's ability to obtain the service for which it has contracted. In addition, actions taken consistent with this Policy Statement would prevent the filing of Formal Complaints by an LDC's transportation service customer and thereby avoid the expenditure of time and resources in formal proceedings. Furthermore, under sections 501(a), 1501 and 1502, we find that end-users using transportation tariffs come within the purview of this Policy Statement with respect to the enforcement of our transportation regulations and protecting the public interest.

Finally, we conclude that this Policy Statement is not intended to prohibit any existing tariffs or tariff practices in existence before issuance of the guidance set forth in this Policy Statement. In particular, the Commission's Policy Statement is not intended to prohibit the use of bundled tariff offerings to the extent they constitute competitive responses to market circumstances so long as those practices do not contravene, *inter alia*, 66 Pa.C.S. § 1502 of the Public Utility Code or constitute an illicit tying arrangement in contravention of law.

##### 2. *Unreasonable "Preferences" Under § 69.192(b)*

The Office of Consumer Advocate (OCA) and other parties questioned the use of the adjective "unreasonable" in § 69.192(2). They consider the adjective dangerous because it suggests that some differentiation may be acceptable and legal.

Upon consideration, we conclude that elimination of that term is unnecessary. We do so because there may be a legitimate regulatory basis for providing a local affiliate with a different requirement given the difference in the legal rights and obligations existing with regard to an LDC and a marketer or broker. In addition, a customer unhappy with an LDC's actions can challenge those actions under 66 Pa.C.S. § 1502. Finally, the Commission needs to monitor such preferences under 66 Pa.C.S. § 1317(b) whereby integrated gas companies must furnish information regarding the purchase of gas supplies from nonaffiliated interests, purchases from affiliated interests, and gas supplies withheld. Likewise, § 1318 places limitations on gas supplies purchased from affiliates.

##### 3. *Recordkeeping and Reporting Under § 69.192(e)*

Section 69.192(5) of the Proposed Policy Statement provided, in relevant part, as follows:

(5) The LDC shall maintain a chronological log of tariff provisions for which it has granted waivers. Entries shall include the name of the party receiving the waiver, the date and time of the request, the specific tariff provision, the specific tariff provisions waived and the reason for the waiver.

*Pennsylvania Bulletin*, Vol 26, No. 47, November 23, 1996, p. 5721.

The marketers and brokers strongly urge the Commission to impose extensive reporting requirements on an affiliate.

Upon consideration, we do not believe that imposition of mandatory reporting requirements in a guidance document is necessary, appropriate, or legally sound. The concerns to be addressed by these reporting requirement suggestions are better managed through the Commission's Formal Complaint and regulatory review processes.

Those concerns can also be addressed and resolved on an individual basis as part of any transportation tariff proposed by an LDC. Consequently, we are unwilling to impose those suggested reporting requirements given that other avenues exist to address them.

4. *Restrictions on Disclosure and Exchange of Information Under § 69.192(h)*

Section 69.192(8) of the Proposed Policy Statement provided, in relevant part, as follows:

(8) The LDC should not disclose customer proprietary information to its marketing affiliates or division, and to the extent that it does disclose customer information, it shall do so to other similarly situated marketers in a similar fashion so as not to selectively disclose, delay disclosure, or give itself or its affiliate any undue advantage related to the disclosure.

*Pennsylvania Bulletin*, Vol 26, No. 47, November 23, 1996, p. 5721.

PGA claimed that a categorical ban on exchanges of information would unduly restrict legitimate utility management.

Upon consideration, we would simply point out that this provision simply means that information conveyed to an LDC's affiliate must be done via public dissemination and not private disclosure.

We believe that system reliability is enhanced by public dissemination as opposed to private disclosure. That is because all the parties engaged in a competitive gas supply market would be made aware of potential gas supply customers. This will enable all gas suppliers to react to such market changes and make the adjustments needed to enhance their transportation and gas supply operations. In addition, all parties would be informed about the enhanced gas supply sales arising from plant expansions.

We do not believe that an LDC must be allowed to privately disclose to its affiliate any gas supply marketing opportunities, gleaned from its role as system operator, in advance of public dissemination. We reach that conclusion because selective disclosure of such gas supply market potential could prejudice other marketers. Such action might also be to a customer's disadvantage because that customer might lock-in gas supplies from an affiliate before other marketers or brokers have an opportunity to provide competitive gas supply options.

Nevertheless, contrary to the understanding contained in some comments, we would point out that the guidance provided by this Policy Statement does not mean that all gas supply disseminations to an affiliate are prohibited. Our Policy Statement only expects that disclosures made to an LDC's affiliate with regard to gas supply changes must also be made simultaneously to other competitive gas supply participants.

6. *Structural Separation Under § 69.192(i)*

This provision was contested in several respects. Section 69.192(9) of the Proposed Policy Statement provided, in relevant part, as follows:

(9) An LDC shall fairly allocate to its marketing affiliate or division costs or expenses for general administration or support services so as to not give either the LDC or the affiliate an unfair advantage over competitors through an unfair allocation of these costs.

*Pennsylvania Bulletin*, Vol 26, No. 47, November 23, 1996, p. 5721.

a. *Structural and Employee Separation*

A number of comments addressed the issue of cost allocation between an LDC and its affiliate. Upon consideration, we conclude that physical separation should not be mandated in this Policy Statement. This does not mean, however, that a case cannot be made for such separations requirements depending on the size and sophistication of any given LDC. Such a matter, we believe, is best reserved for those proceedings in which we actively consider an LDC's transportation tariff. We do so in light of the fact, as the smaller LDCs have noted, that separation may be unwieldy and unnecessary for small operations but may be a practical and efficient alternative for larger operations. Such a determination can be made on an LDC-by-LDC basis. A blanket generic requirement on that issue is not a proper subject of this Policy Statement.

b. *Cost Allocation*

PGA claimed that § 69.192(9) posited two cost allocation standards, for example, "fairness" and "competitive advantage," which presumably called for an assessment of other considerations. PGA suggested that the Commission intended a distinction regarding cost allocation and, that if no distinction is intended, the standards were redundant. PGA further suggested that the fairness standard was really a "just and reasonable" standard whereas competitive advantage implied a new standard for assessing cost allocations and deployment of assets.

Upon consideration, we conclude that the language used may create confusion. The section will be altered so as to clearly state the purposes for which it is intended.

7. *Capacity and Supply Releases Under § 69.192(j)*

Section 69.192(10) of the Proposed Policy Statement provided, in relevant part, as follows:

(10) An LDC selling surplus gas supplies or upstream capacity on a short-term basis to its affiliate shall make supplies available to similarly situated marketers on a nondiscriminatory basis.

*Pennsylvania Bulletin*, Vol 26, No. 47, November 23, 1996, p. 5721.

PGA noted that the Federal Energy Regulatory Commission (FERC) excluded short-term releases of capacity from competitive bidding and has considered further elimination of competitive bidding for released capacity. PGA suggested that the proposed policy would be an impediment to short-term transactions and that there may be no means to make pipeline capacity available to all similarly situated customers.

OCA claimed that the Commission has provided no definition of "short-term" nor has it explained why the nondiscriminatory requirement is limited to short-term versus long-term upstream capacity. OCA recommended defining short-term as a transaction of 31 days or less and applying this standard to long-term surpluses as well.

Upon consideration, we conclude that the FERC approach for exempting short-term transactions, as defined and set forth at FERC, is appropriate here in light of our desire to avoid imposing more requirements on Pennsylvania LDC's. However, we believe that public dissemina-

tion of any availability is necessary, to enhance competition, and that a log showing such availability should be kept and remain open for inspection during normal business hours. We believe that this approach sets forth our expectations regarding competition and our desire to make sure that information concerning available gas and capacity is public. That ensures the safety and reliability of gas supplies or capacity.

8. *Enforcement and Complaints Under § 69.192(l)*

Section 69.192(13) of the Proposed Policy Statement provided, in relevant part, as follows:

(13) The LDC shall establish and file with the Commission a complaint procedure for dealing with alleged violations of this section.

*Pennsylvania Bulletin*, Vol 26, No. 47, November 23, 1996, p. 5721.

The marketers and brokers suggested that the burden should not be on them to discover and prove violations. They want that burden shifted to the LDC.

Upon consideration, we note that 66 Pa.C.S. § 332(a), of the Public Utility Code states that, except in regard a public utility's rates or alleged violations investigated by the Commission, the burden of proof is on the party bringing the complaint. The Commission lacks the statutory authority to alter that requirement.

As we noted in our discussion of an LDC in § 69.191(10) of this Policy Statement, we believe that such an internal complaint procedure is appropriate and should be developed by the parties on an LDC-by-LDC basis. Where a utility has an established arrangement for conflict resolution, resolution may prove far less expensive and time consuming than resort to the Commission's Formal Complaint processes. That, however, can be examined on a case-by-case basis in conjunction with review of any tariff filing. With regard to our authority to require such a process, this Commission has the authority to address the terms and conditions of service of a public utility under section 1501 of the Public Utility Code.

Consequently, we see no need to invoke that authority today. The fact is that competing gas suppliers and the LDCs have financial incentives for developing processes to manage any violation of the Public Utility Code that might be faster and less costly than resort to Commission processes.

*Conclusion*

The Commission is amending the proposed Policy Statement in several respects. The first paragraph of § 69.191(a) has been amended to clearly state that marketers or brokers come within the scope of the Policy Statement. The third paragraph of § 69.191(a) has been amended to clearly indicate the Commission's determination that a generic separations requirement is not expected as a result of this Policy Statement although separations may be expected if warranted by subsequent facts and circumstances.

Section 69.191(b) has been amended to indicate the Commission's determination that recordkeeping and conflict resolution will not be addressed on a generic basis in this Policy Statement. The Commission expects the parties in any tariff proceeding guided by this Policy Statement to resolve those concerns in joint consultation. The Commission reserves the option of addressing both recordkeeping and conflict resolution in any tariff determination guided by this Policy Statement if the parties are unable to do that or if warranted by subsequent facts or circumstances.

Section 69.192(5) has been amended to expect that the chronological log for waivers from any tariff provisions shall be open for inspection during normal business hours. Sections 69.192(5)—69.192(7), 69.192(10), and 69.192(14) have been amended to reflect the Commission's expectation that chronological logs will be kept and that such logs shall be open for public inspection during normal business hours.

Section 69.192(10) has been amended to reflect the Commission's expectation that any release of gas surplus and/or upstream capacity shall be publicly disseminated simultaneously in conjunction with any private disclosure to an LDC's affiliate. Section 69.192(13) has been amended to expect a permissive, as opposed to mandatory, conflict resolution procedure.

Accordingly, under our authority under sections 501, 508, 1301—1304, 1317, 1318, 1501, and 1502 of the Public Utility Code, 66 Pa. C.S. §§ 501, 508, 1301—1304, 1317, 1318, 1501 and 1502, as well as the act of July 31, 1968 (P. L. 769, No. 240) (45 P. S. § 1201 *et seq.*), the Commission has authority to promulgate this Final Policy Statement addressing the Affiliated Interests of a Local Distribution Company to read as set forth in Annex A; *Therefore, It Is Ordered That:*

1. The Final Policy Statement addressing the Affiliated Interests of Natural Gas Marketers of a Local Distribution Company, as set forth in Annex A, be and hereby is adopted.
2. The Secretary shall submit this order and Annex A to the Governor's Budget Office for review of fiscal impact.
3. The Secretary shall duly certify this order and Annex A and deposit them with the Legislative Reference Bureau for publication in the *Pennsylvania Bulletin*.
4. This policy statement shall become effective upon publication.
5. A copy of this Order and Annex A are to be served upon all jurisdictional gas utilities, the Office of Consumer Advocate, the Office of Small Business Advocate, and on any parties who filed comments in this proceeding.

JAMES J. MCNULTY,  
*Acting Secretary*

*(Editor's Note: The regulations of the Commission, 52 Pa. Code Chapter 69, are amended by adding a statement of policy at §§ 69.191 and 69.192 to read as set forth in Annex A).*

**Statement of Commissioner Hanger**

This Policy Statement provides guidelines for the parties to use in jointly developing amendments to transportation tariffs or in developing new transportation tariffs for the possible expansion of customer choice to all customers in the near future. The Policy Statement places natural gas market participants on notice that the Commission expects that the tariff amendments to be filed will not tolerate discrimination in the provision of unbundled monopoly elements, including scheduling, balancing transportation, storage, curtailment or nondelivery; that information an LDC gives to its subsidiary must also be publicly available; that transportation discounts provided to a marketing affiliate or the LDC's favored customers must be offered to the affiliate's competitors;

and that LDCs must maintain and make publicly available during normal business hours a chronological log of tariff provisions for which it has granted waivers. Finally, the affiliate interest rules ultimately have to be approved by the Commission. Any standard that is anticompetitive will not be approved by me.

There is one item that I would like to see considered by the LDC and the parties. That issue involves the physical separation of the LDC marketing function from the LDC monopoly business. For many LDCs in this Commonwealth, physical separation of the affiliate already is a reality. But there exists other LDCs that should consider the separation of monopoly and competitive functions as well. In fully competitive markets where unlimited cross subsidies from the competitive core business to the fledgling new enterprise could mean the demise of the core business, the commingling of subsidiary financial resources is not an issue because there is a competitive limit to the resources the parent firm will commit to the subsidiary.

By contrast, a regulated monopoly such as an LDC has a captive source of resources, both financial and informational, to fund the LDC affiliate's competitive ventures. This is why regulated monopoly industries are different from competitive retail firms. The playing field cannot be level, and competition cannot maximally flourish, unless, in addition to the Policy Statement items, there is a structural separation of staffing and locations. For these reasons, it is not surprising that physical separation of affiliates either in location or staffing has been required by the Wisconsin Public Service Commission, the New York Public Service Commission, New Jersey Board of Public Utilities, and the Maryland Public Service Commission.

#### **Statement of Commissioner David W. Rolka**

This Policy Statement is intended to provide guidance to, but not restructure, Pennsylvania's natural gas industry. The Policy Statement recognizes that the industry restructuring is an issue that is within the General Assembly's purview and not the Pennsylvania Public Utility Commission's. To the extent that the will of the General Assembly is known, this knowledge should be reflected in any Policy Statement issued by this agency.

An indication of the current thinking of the General Assembly regarding the structural separation of local distribution companies (LDCs) is set forth in the present version of House Bill 1968, Printer's Number 1193. This proposed bill is being considered actively, as demonstrated by the recent round of both House and Senate hearings on gas restructuring.

Section 2203(4) of House Bill 1068 would require LDCs to "separate physically, operationally and legally all natural gas supply facilities and functions from gas operations." Section 69.192 of the Commission's Policy Statement urges LDCs to apply their tariffs "in a nondiscriminatory manner." It contemplates a system of cost allocations and fire walls between LDCs and their marketing affiliates. Experience in the telecommunications industry demonstrates that fire walls based on cost allocations are actually more rather than less regulatory and are as difficult to maintain.

On an issue such as this, under active consideration by the Legislature, it is in my opinion more appropriately the subject of legislative testimony and consideration prior to our agency taking action. I, therefore, do not support the issuance of this Policy Statement at this time.

**Fiscal Note:** Fiscal Note 57-180 remains valid for the final adoption of the subject regulations.

#### **Annex A**

### **TITLE 52. PUBLIC UTILITIES**

#### **PART I. PUBLIC UTILITY COMMISSION**

#### **Subpart C. FIXED SERVICE UTILITIES**

### **CHAPTER 69. GENERAL ORDERS, POLICY STATEMENTS AND GUIDELINES ON FIXED UTILITIES**

#### **POLICY STATEMENT ADDRESSING AFFILIATED INTEREST ISSUES OF NATURAL GAS MARKETERS**

#### **§ 69.191. General.**

(a) Given the unbundling of monopoly distribution services in the natural gas industry and the development of customer access to commodity gas and transportation services, the Commission has developed policies for local distribution companies (LDCs), marketers and customers with regard to the affiliated and nonaffiliated interests of LDCs. Unless otherwise stated, the phrase "marketer" or "marketers or brokers" includes all LDC affiliates, subsidiaries, parents, divisions, and the like providing gas supply to a respective LDC's customer. This section and § 69.192 (relating to affiliated interest—statement of policy) are intended to clarify additional aspects of the Commission's authority in this area. The Commission has a strong policy against direct or indirect discrimination by LDCs in favor of their marketing affiliates or marketing divisions and against independent gas marketers. The discrimination impermissibly hinders the unbundling of services and the entry of new competitors into the marketplace. This discrimination also violates section 1502 of the code (relating to discrimination in service).

(b) Many Pennsylvania LDCs have affiliated marketing divisions. Some Pennsylvania LDCs may have divisions or marketing sections that are not separately organized as affiliates as defined in 66 Pa.C.S. (relating to Public Utility Code). This section and § 69.192 provide guidance to an LDC's affiliate, regardless of the format used to operate an LDC's affiliate, in order to be effective, to prevent discriminatory behavior, and insure compliance with section 1502 of the code (relating to discrimination in service). This section and § 69.192 will apply without regard to the structural relationship of the LDC's marketer to the LDC.

(c) This section and § 69.192 cover both the LDC's affiliates and gas marketing divisions or marketing sections, even those without any distinct organizational structure, that do not have affiliate status. This section and § 69.192 will not require any generic structural separation of an LDC's affiliate, notwithstanding actions taken to the contrary in other states, because the Commission does not believe this is necessary as long as the LDC fairly allocates costs to an LDC's affiliate and refrains from giving the LDC's affiliate any unfair advantage vis-a-vis a marketer or broker not affiliated with an LDC. The Commission may impose such a structural requirement if and when warranted by the facts and circumstances.

(d) The Commission's authority with respect to affiliates and marketing divisions derives from different portions of the code. Chapter 21 of the code (relating to relations with affiliated interests) directly governs affiliated interests. Section 1318(b) of the code (relating to just and reasonable natural gas rates), addresses gas pur-

chased from affiliates. Other provisions govern natural gas costs such as sections 1307, 1308, 1317, and 1318. The code requires adherence to tariffs under section 1303 (relating to adherence to tariffs) and thus prohibits a lack of uniformity or discrimination in the application of tariff provisions. Likewise under section 1304 (relating to discrimination in rates) it prohibits rate discrimination. Other provisions reenforce these policies: section 1501 (relating to character of service and facilities) requires utilities to furnish "adequate, efficient, safe and reasonable service," while section 1502 prohibits "any unreasonable preference or disadvantage" and forbids "any unreasonable prejudice or disadvantage." These provisions require equal treatment of similarly situated parties, in this case customers of an LDC's transportation tariff services, regardless of whether that customer chooses to use the gas supply services of an LDC or otherwise.

(e) Under sections 505 and 506 of the code (relating to duty to furnish information to the Commission; cooperation in valuing property; and inspection of facilities and records), the Commission has authority to require utilities to keep and furnish information in accordance with requirements set forth by the Commission. As part of this section and § 69.192 the Commission has set forth certain recordkeeping requirements to help ensure that parties are fairly treated. The Commission expects the LDC, in consultation with marketers or brokers to propose a process for reporting and managing marketer or broker complaints as part of any tariff proposed as a result of this section and § 69.192.. The Commission may expect additional recordkeeping or conflict resolution processes if the parties are unable to resolve this or if warranted by subsequent facts and circumstances.

**§ 69.192. Affiliated interest—statement of policy.**

The following policies should be applied by the local distribution companies (LDCs):

(1) The LDC should apply its tariffs in a nondiscriminatory manner to its affiliate, its own marketing division and any nonaffiliate.

(2) The LDC should likewise not apply a tariff provision in any manner that would give its affiliate or division an unreasonable preference over other marketers with regard to matters such as scheduling, balancing, transportation, storage, curtailment or nondelivery.

(3) If a tariff provision is mandatory, the LDC should not waive the provision for its affiliate or division absent prior approval of the Commission.

(4) If a tariff provision is not mandatory or provides for waivers, the LDC should grant the waivers without preference to affiliates and divisions or nonaffiliates.

(5) The LDC should maintain a chronological log of tariff provisions for which it has granted waivers. Entries should include the name of the party receiving the waiver, the date and time of the request, the specific tariff provision waived and the reason for the waiver. Any chronological log should be open for public inspection during normal business hours.

(6) The LDC should process requests for transportation promptly and in a nondiscriminatory fashion with respect to other requests received in the same or a similar period. The LDC should maintain a chronological log showing the processing of requests for transportation services. Any chronological log should be open for public inspection during normal business hours.

(7) Transportation discounts provided to the LDC's or its marketing affiliate's favored customers should be offered to other similarly situated customers and should not be tied to any unrelated service, incentive or offer on behalf of either the parent or affiliate. A chronological log should be maintained showing the date, party, time and rationale for the action. Any chronological log should be open for public inspection during normal business hours.

(8) The LDC should not disclose any customer proprietary information to its marketing affiliate or division, and to the extent that it does disclose customer information, it should do so to other similarly situated marketers in a similar fashion so as not to selectively disclose, delay disclosure, or give itself or its affiliate any undue advantage related to the disclosure. A chronological log should be maintained showing the date, time and rationale for the disclosure. Any chronological log should be open for public inspection during normal business hours.

(9) An LDC should justly and reasonably allocate to its marketing affiliate or division the costs or expenses for general administration or support services.

(10) An LDC selling surplus gas supplies and/or upstream capacity on a short-term basis (as defined by the Federal Energy Regulatory Commission's definition) to its affiliate should make supplies available to similarly situated marketers on a nondiscriminatory basis. An LDC should not make any gas supplies and/or upstream capacity available through private disclosure to an LDC's affiliate unless the availability is made simultaneously with public dissemination in a manner that fairly apprises interested parties of the availability of the gas supplies and/or upstream capacity. An LDC should maintain a chronological log of these public disseminations. Any chronological log should be open for public inspection during normal business hours.

(11) The LDC should not condition or tie agreements to release interstate pipeline capacity to any service in which the LDC or affiliate is involved.

(12) The LDC should not directly or by implication unfairly represent to any customer, supplier or third party that an advantage may accrue to any party through use of the LDC's affiliate or subsidiary.

(13) The LDC should establish and file with the Commission a complaint procedure for dealing with any alleged violations of any of the standards listed in paragraphs (1)—(12), this paragraph or paragraphs (14) and (15), excepting for paragraph (9), which should be exclusively under the purview of the Commission. These procedures should be developed in consultation with interested parties during consideration of any tariff guided by this section and §69.191 (relating to general). The Commission may expect establishment of a complaint procedure or other recordkeeping requirements if warranted by subsequent facts or circumstances.

(14) The LDC should keep a chronological log of any complaints, excepting paragraph (9), regarding discriminatory treatment of brokers. This chronological log should include the date and nature of the complaint and the LDC's resolution of it. Any chronological log should be open for public inspection during normal business hours.

(15) Parties alleging violations of these standards may pursue their allegations through the Commission's established complaint procedures. A complainant bears the burden of proof consistent with 66 Pa.C.S. (relating to Public Utility Code) in regard to the allegations.

[Pa.B. Doc. No. 97-1302. Filed for public inspection August 15, 1997, 9:00 a.m.]

**PENNSYLVANIA PUBLIC UTILITY COMMISSION**  
**[52 PA. CODE CH. 69]**

[M-960839]

**Fitness of Natural Gas Marketers**

The Pennsylvania Public Utility Commission (Commission) on May 22, 1997, adopted a final policy statement to provide guidance to local distribution companies (LDCs) providing natural gas service in this Commonwealth with regard to uniform standards for brokers and marketers. The contact person is Joseph K. Witmer, Assistant Counsel, Law Bureau (717) 783-3663.

*Commissioners present:* John M. Quain, Chairperson; Robert K. Bloom, Vice-Chairperson; John Hanger, Statement follows; David W. Rolka; Nora Mead Brownell

Public Meeting held  
May 22, 1997

**Final Order**

*By the Commission:*

On October 3, 1996, the Commission adopted a proposed policy statement to provide guidance to LDCs providing natural gas service in this Commonwealth simultaneously with a companion statement on policies for affiliated interests of LDCs at M-960838. A corrected proposed policy statement was published in the *Pennsylvania Bulletin* on November 23, 1996. Comments were due within 30 days after publication, with reply comments 60 days after publication.<sup>1</sup> A public forum was held on March 7, 1997.

The commentators raised a number of issues, including jurisdiction, enforcement, 66 Pa.C.S. § 1307(f), Gas Reserve requirements, LDC discretion and the role of the Federal Energy Regulatory Commission's (FERC) rules. With respect to jurisdiction, a number of commentators initially disagreed on the extent of the Commission's authority to impose fitness standards on a marketer or broker. In addition, where some degree of jurisdiction was conceded, they differed widely in their views of the scope and relevance of fitness standards and how those standards should be imposed.

**A. Jurisdiction**

The Office of Consumer Advocate (OCA) and the Pennsylvania Gas Association (PGA) concluded that the Commission had jurisdiction over a marketer or broker. The OCA claimed that 66 Pa.C.S. §§ 501(b) and 508 provided the Commission with the authority to impose require-

ments directly on a marketer or broker in order to ensure system reliability. The PGA also claimed that the Commission's authority to approve gas transportation tariffs allowed the Commission to impose requirements in order to avoid those higher costs that might result whenever an LDC was forced to perform its supplier-of-last-resort role when a marketer or broker failed to perform.

Other commentators questioned the Commission's authority to impose any requirements on a marketer or broker. Specifically, it was argued that the Commission lacked authority over a marketer or broker because these entities, with the exception of the LDC affiliate, were not public utilities as defined under 66 Pa.C.S. § 102 of the Public Utility Code (code).

It was also argued that the Commission should avoid extending regulatory concepts to businesses which are not monopolies and which offered services subject to the rigors of the competitive marketplace. Specifically, Enron noted that any attempt to exercise jurisdiction over unregulated third-party suppliers of natural gas through licensing, certification or otherwise would be unwarranted and unlawful—especially in light of the Commission's nonexercise of this authority over nonutility gas suppliers in the many years of LDC transportation for end users.

In addition, some commentators claimed that the Commission's fitness guidelines represented an attempt to regulate marketer or broker practices, contractual relationships and the like. Specifically, Natural Gas Clearinghouse (Clearinghouse) claimed that marketers or brokers are not regulated entities subject to Commission jurisdiction, given that they do not avail themselves of the rights (for example, franchise territories, cost of service/rate of return regulation) of public utility status. Clearinghouse claimed that attempts to exercise this authority would push qualified marketers or brokers out of this Commonwealth.

With respect to the arguments that marketers and brokers are public utilities within the meaning of section 102 of the Public Utility Code, 66 Pa.C.S. § 102, this Commission would not agree with this interpretation of the statute. As such, we do not have direct authority over the marketers or brokers except to the extent that they are affiliates or divisions of the LDC and are, therefore, certificated by this Commission to provide service within their designated service territories.

With respect to section 501(b) of the code, 66 Pa. C.S. § 501(b), which provides:

(b) Administrative authority and regulations.—The commission shall have general administrative power and authority to supervise and regulate all public utilities doing business within this Commonwealth. The commission may make such regulations, not inconsistent with law, as may be necessary or proper in the exercise of its powers or for the performance of its duties.

the Commission would point out that, under this provision, its authority extends to the regulation of public utilities. An attempt to impose any regulation on nonutility marketers or brokers would be inconsistent with the exercise of its powers. As for section 508 of the code which addresses the power of this Commission to vary, reform and revise contracts, the Commission would note again that this authority extends to contracts in which the utility is a contracting party. Section 508 provides, in pertinent part:

<sup>1</sup>The Commission received comments from the Office of Consumer Advocate (OCA); the Independent Oil and Gas Association of Pennsylvania (IOGA); the Pennsylvania Gas Association (PGA); and the Industrial Energy Consumers of Pennsylvania (IECPA); Eastern Energy Marketing (Eastern); Enron Capital and Trade Resources (Enron); KCS, LG&E, MidCon and Natural Gas Clearing House (Clearinghouse); Open Flow Gas Supply Corporation (Open Flow); T. W. Phillips (Phillips) and UGI. Comments at the March 7, 1997, Open Forum were provided by IOGA, Enron, T. W. Phillips and PGA. Enron and PGA filed reply comments.



The commission shall have the power and authority to vary, reform, or revise, upon a fair, reasonable, and equitable basis, any obligation, terms or conditions of any contract heretofore or hereafter entered into between any public utility and any person, corporation, or municipal corporation, which embrace or concern a public right, benefit, privilege, duty, or franchise, or the grant thereof, or are otherwise affected or concerned with the public interest and the general well-being of this Commonwealth.

66 Pa.C.S. § 508.

Since contracts for nonutility gas supply are between the marketer or broker and the end user, the Commission's authority is limited in this area.

However, while this Commission recognizes that there are limitations to our authority with respect to nonutility marketers and brokers, we would disagree with those commentators who maintain that the Commission is precluded from taking any substantive action to address issues involving marketers or brokers. In particular, this Commission would point to its authority under section 1501 of the code concerning the character of service and facilities which provides, in part:

Every public utility shall furnish and maintain adequate, efficient, safe, and reasonable service and facilities, and shall make all such repairs, changes, alterations, substitutions, extensions, and improvements in or to such service and facilities as shall be necessary or proper for the accommodation, convenience, and safety of its patrons, employees, and the public. Such service also shall be reasonably continuous and without unreasonable interruptions or delay. Such service shall be in conformity with the regulations and orders of the commission. Subject to the provisions of this part and the regulations or orders of the commission, every public utility may have reasonable rules and regulations governing the conditions under which it shall be required to render service.

66 Pa.C.S. § 1501.

In addition to the above, the Commission's authority to address matters raised in the subject policy statement arises out of the general powers provisions of section 501 of the code.

Accordingly, we conclude that the Commission has the authority to regulate the operations of participants in the market to the extent that this Commission is authorized to insure that gas service is safe, adequate and without unreasonable interruption or delay. While this authority is derived from the Commission's jurisdiction over public utilities and its authority to issue orders and regulations concerning these matters, the net effect of the exercise of this authority is the resolution of issues which will affect all participants in this Commonwealth's jurisdictional gas supply market.

That is especially the case when the actions of a marketer or broker, such as nonperformance or delivery in excess of one's nomination, causes harm to the system's reliability and operations. Otherwise, a marketer or broker would be free to cause harm to Commonwealth ratepayers without regulatory consequences. That, we believe, was not the intent of the General Assembly in establishing the Commission's authority in the code.

The Commission's challenge is to reconcile reliability and competition. Consequently, the action we take today is premised on our jurisdiction over public utilities, public

utility tariffs and public utility contracts to the extent they implicate the public interest in system reliability. The exercise of jurisdiction is necessary to meet our public interest obligation to ensure that an LDC's system operations are adequate.

#### B. Enforcement

A number of commentators raised the issue of who would be responsible for the enforcement of the provisions of the Policy Statement. The PGA submits that the LDCs should be allowed to make the initial cost-benefit assessment in tariffs given their expertise and reliability obligations. Enron Capital and Trade Resources (Enron), however, would leave enforcement largely to the market although Enron agrees with the PGA that nonperformance could be addressed with penalties set forth in a transportation tariff. The Independent Oil and Gas Association of Pennsylvania (IOGA) believes that tariffs are the appropriate vehicle for ensuring system reliability but believes that a marketer or broker serving only sophisticated industrial customers not be subjected to these provisions in an LDC's gas transportation tariff. One concern identified by T. W. Phillips (Phillips) is the matter of the ability of the smaller LDCs to implement this policy.

We are concerned about the perception of the commentators that the LDC will be the sole determiner of the financial and technical fitness of various gas suppliers. It has never been this Commission's intention to delegate its responsibilities to the LDC. It is anticipated that the LDC will develop specific criteria or standards as part of their transportation service which will provide a litmus test of the supplier's financial and technical abilities. These standards are subject to Commission review and approval.

We would expect, however, that the LDCs will develop such tariff provisions in conjunction with their customers and the marketers and brokers. We expect the development of generic tariff provisions on an LDC-by-LDC basis in light of each LDC's configuration and the desire of a marketer or broker to access customers behind an LDC's gate. In those discussions, we further expect the participants to address the scope and applicability of Chapter 56 regulations as part of any tariff filed in response to this Policy Statement.

With regard to IOGA's position that these requirements should apply only to small residential customers, we cannot agree. System reliability is dependent upon all participants meeting their obligations. The failure of a large industrial customer's supplier to meet its obligations can have serious effects on the operations of the gas system, including a substantial impact upon the LDC's obligation as supplier of last resort. Customers, large or small, who obtain gas from unreliable and financially unfit suppliers place the entire system at risk. It is incumbent upon this Commission, under sections 1501 and 501 of the code, to take the requisite actions to address this possibility.

For the above reasons, we will amend § 69.195(a) of our proposed Policy Statement to add a provision expecting the parties to address, and the LDC to propose, tariff provisions regarding the enforcement of any tariff filed in adherence to the Policy Statement. Again, we would emphasize that we expect such provisions to be generic in nature and to be developed in consultation with the customers and the interested marketer or broker communities.

C. 66 Pa.C.S. § 1307(f)

In our proposed Policy Statement at § 69.195(a) and (b), we proposed that firms delivering gas must demonstrate the financial and technical fitness necessary to meet their *contractual obligations*. (Emphasis added). This has been a hotly contested matter. That is because the matter goes to the extent to which contractual information of a competitor must be given to an LDC with the attendant risk it could be transmitted to an LDC's affiliated merchant. Some commentators were concerned that this directly subjects a marketer or broker to 66 Pa.C.S. § 1307(f).

The PGA claims that a marketer or broker must be subjected to the full panoply of section 1307(f) of the code because an examination of, and information about, their supply contracts is critical to ensuring system reliability and gauging an LDC's supplier-of-last-resort obligations. The PGA also claims that, because a combination of market forces and contract rights are insufficient to guarantee delivery of tangible gas supplies in periods of tight demand, the Commission may need to examine the supply contracts of a marketer or broker just like an LDC.

In the alternative, the PGA wants the Commission to reevaluate its approach to LDC supply contracts under section 1307(f) of the code if the Commission determines that a marketer or broker is not subject to section 1307(f).

The IOGA, Enron and Clearinghouse oppose any Commission examination of a nonutility marketer or broker's supply contracts under section 1307(f). IOGA claims that section 1307(f) of the code was only intended to monitor a monopolist's purchase of gas supplies and that using section 1307(f) of the code to conduct an in-depth examination of marketer or broker supply contracts is misguided. In addition, IOGA urges the Commission to limit its fitness policy statement to residential (and possibly small commercial) customers through the ongoing regulation of an LDC's distribution operations.

Enron claims that the only vehicle for addressing fitness and reliability are LDC transportation tariffs, that any penalties for nonperformance must be clearly spelled out in LDC tariffs, and that the Commission cannot subject gas supply contracts to LDC disclosure or Commission review under section 1307(f) of the code. Clearinghouse claimed that system reliability and operational fitness cannot be guaranteed through a supply contract's examination because every contract would need to be examined and that the examination would not preclude an inability to perform due to causes outside the contract. Eastern Energy Marketing (Eastern) objects to using section 1307(f) to the extent it requires the disclosure of commercially sensitive information. They urge the Commission to establish guidelines in order to reduce LDC-marketer battles in individual LDC proceedings.

As noted in our previous discussion, marketer and brokers, unless they are part of the LDC, are not public utilities within the definition of section 102 of the code, 66 Pa.C.S. § 102. As such, they do not fall within the purview of section 1307(f) of the code and this Commission does not have the authority to review those gas supply contracts. Our authority does, however, extend to the assurance that customers will receive continuous and safe service. 66 Pa.C.S. § 1501.

While they dispute what that entails and whether those requirements can be leveraged to favor an LDC's affiliate, most commentators recognize the necessity of some minimum reliability standards for competitors.

We find that financial or technical fitness standards may be an efficient vehicle for dealing with a marketer or broker whose inability or unwillingness to meet their performance obligations directly threatens system reliability. Nevertheless, we recognize the marketers and brokers concern about an LDC's ability to leverage those standards into market impediments or bias in favor of its affiliate because of untempered discretion. We believe, however, that this concern is addressed by the fact that the Commission must approve any tariff proposal, those tariffs remain subject to challenge by disgruntled parties, and the fact that all actions taken under a tariff remain subject to the Commission's regulatory authority. We also believe that the participation of the customers and the marketers and brokers in the development of these tariff standards will help to alleviate some of their concerns.

We would also note that we believe that a marketer or broker need not be subjected to an in-depth examination and disclosure of every contract related to gas reserves to accomplish that end. Such a level of review is not necessary to provide an LDC with the information it needs to meet the system reliability and supplier-of-last resort obligations.

We expect marketers, brokers and the LDCs to develop, in consultation with each other, the generic information requirements needed for system reliability and supplier-of-last-resort obligations.

We will amend our Proposed Policy Statement at § 69.195(b)(1) and (2) to expect an LDC's transportation tariff, developed in consultation with other brokers and marketers, to secure sufficient generic information about a marketer or broker's gas operations, supplies, emergency contingencies, the ability to meet peak demand, and other information necessary for the safe and continuous operation of the gas supply and distribution system.

We believe this approach strikes a balance between an LDC's legitimate information needs, pertaining to those system operator and supplier of last resort obligations which a gas marketer or broker is not required to perform, and a marketer or broker's need to retain some confidential commercial information in order to effectively compete against an LDC's merchant operations.

D. Gas Reserves

The Commission has traditionally required LDCs to provide sufficient gas reserves, as part of their gas service, aimed at meeting peak demands. In our proposed Policy Statement at § 69.195(b)(2), we proposed extending that requirement to a marketer or broker by requiring a marketer or broker to demonstrate operational fitness with "gas reserves and the ability of the firm to meet the peak demand of contracted customers."

PGA's comments, that fitness standards should apply to all sectors covered by an LDC's supplier-of-last-resort obligation and that LDC's should be free to establish the requirements of a gas marketer or broker (including an LDC's affiliate) in order to maintain system reliability, suggest that a gas reserves requirement should be but one of many ways to maintain reliability in a competitive market. Open Flow Gas Supply Corporation (Open Flow) and Phillips challenge a gas reserve requirement, to the extent it would shift responsibility for determining fitness to the local utilities, because they consider it an additional burden that adds to the cost of service, requires expertise some LDCs lack, and opens the door to competitive abuses.

The IOGA, Enron, Clearinghouse, Eastern and the OCA also question the gas reserves requirement. The IOGA

would impose requirements only on an interim basis, limit them to a marketer or broker serving residential and small commercial customers, and avoid mandates since mandates cannot account for the dynamics of a competitive market. Enron believes that fitness should be limited to financial tests and that mandatory requirements such as gas reserves only limit the flexibility of a marketer or broker. Both Eastern and Clearinghouse oppose this requirement to the extent it requires a marketer or broker to demonstrate their upstream supply sources and transportation arrangements, as opposed to holding a marketer or broker financially responsible for any harm stemming from nonperformance, and result in disclosure of sensitive commercial information.

The OCA also opposes the gas reserves requirements. The OCA believes that the better approach is to require a showing that the alternative supplier has sufficient supply and capacity to meet maximum daily delivery obligations with sufficient emergency back-up supplies and that such provisions be enforced by penalties.

Upon consideration, we conclude that LDCs will need supply-related information in order to ensure reliability and provide transportation services for competitors consistent with our discussion above. While the need for assurances of financial soundness is essential, it must be recognized that an inability or failure to provide the gas supply required by the customer is the most immediate concern.

The OCA's suggestion is useful. It presents another way to ensure system reliability with due regard for the different market positions and legal obligations of gas marketers or brokers and LDCs in this Commonwealth. That difference includes, but is not limited to, the LDC's supplier of last resort obligation imposed by Pennsylvania law and practice.

This approach lets the parties make the initial determination on gas reserve requirements or the appropriateness of the OCA's alternative. It gives the parties the maximum flexibility they need to design an approach melding competition with system reliability.

This flexible approach is premised on an expectation that the marketers, brokers and an LDC, as opposed to the Commission, can best make the initial determination on what measures will guarantee that peak demand will be met with due regard for emergency situations and an LDC's system reliability and supplier-of-last-resort obligations. As always, the Commission's processes remain open to parties otherwise unable or unwilling to resolve these concerns through negotiations.

We will amend our Policy Statement and refrain from imposing any explicit gas reserves requirement. We leave that matter to resolution by the LDCs as part of the tariffs proposals an LDC submits after consultation with customers, marketers or brokers.

We further amend our Policy Statement to provide that any supply and reserve information requirements will be as generic as possible and not result in the disclosure of sensitive commercial information by a marketer or broker to an LDC. We agree with the OCA that a marketer or broker could meet this gas reserve requirement, contingent upon a determination by the participants, by a generic showing that it has sufficient supply and capacity to meet the maximum daily delivery obligations with sufficient emergency back-up supplies as agreed to by the LDC and the marketer or broker.

#### *E. FERC Requirements for Marketers*

The PGA and the LDC's claim that FERC's rules in regard to system reliability are insufficient because they are limited to the wholesale market whereas the Commission must address delivery at the retail level in this Commonwealth. The PGA asserts that IOGA's position that fitness standards should not apply to industrial customers is based on a premise that fitness standards would increase costs to industrial customers without any outstanding benefits. The PGA counters that industrial customers still have regulatory rights with respect to obtaining service from the supplier of last resort. However, the PGA points out that some customers might want to forego reliance on an LDC's supplier-of-last-resort obligation in order to maximize energy savings. In that case, a supplier serving a customer that releases an LDC from its supplier-of-last-resort obligation may not be expected to demonstrate any modicum of fitness as regards that particular customer.

Eastern, Enron and Clearinghouse collectively claim that FERC's rules, which require compliance with basic and commonly used creditworthiness standards and rely on the use of penalties and incentives to manage nonperformance, constitute the regulatory maximum necessary for ensuring system reliability.

The OCA recognizes that industrial users have extensive experience in dealing with a gas marketer or broker, however, it opines that, as with any creditor of the LDC, the financial and technical soundness of marketers and brokers needs to be assessed. The IOGA uses experience as an argument for a hands off policy on part of the Commission with respect to the larger customers and argues for standards limited to suppliers wishing to market to residential customers.

In our Proposed Policy Statement, we had suggested that fitness should be addressed consistent with the requirements for marketers or brokers at FERC. The issue has now become whether we should expect parties to show anything more than the minimum requirements addressed by FERC.

We agree with PGA that the Federal model may not be sufficient. The minimum FERC requirements are imposed on a wholesale market with large and sophisticated agents. We are not setting regulatory standards for such a market. We are charged with setting some advisory policy guidelines for managing the discrete and insular purchases of gas supplies by a myriad of, potentially, less sophisticated residential and smaller customers, as well as some large and sophisticated agents, for delivery at the retail level. As such, we remain convinced that this policy statement must set forth some minimum requirements of fitness for retail service by suppliers.

We also believe that they should not be limited to small residential and commercial customers because all customers, including large industrial and commercial customers, benefit from those standards to the extent they enhance system reliability and provide a supply of last resort. As the PGA notes, an LDC would be required to make up for delivery shortfalls to all customer classes, including the experienced and sophisticated, as the supplier of last resort.

With respect to the PGA's statement that a complete waiver and release from underlying system reliability and supplier-of-last-resort obligations would be a necessary prerequisite to foregoing the imposition of any financial or technical fitness standards on a marketer or broker serving a customer, we have serious reservations about the enforceability of such a waiver. The obligation of the

LDC to serve is statutorily mandated. Since this Commission does not have the authority to waive a statute, there is sufficient doubt as to the enforceability of such an agreement between the LDC and the customer to eliminate its consideration as a viable option at this time.

For purposes of this Policy Statement, this Commission will retain the provision pertaining to the requirement that any standards adopted by the LDC be consistent with FERC requirements. However, we would note that this is a policy statement which is applied on a case by case basis. Where a participant believes that a more substantial demonstration of fitness is necessary, the LDC, and any other party has the opportunity to present its arguments at the time the subject tariffs are submitted for review. In that situation, where there is a clear showing that the proposed standard is not sufficient or applicable, the Commission will consider other alternatives. We would note, however, that it is our expectation that the customers, marketers, brokers and LDC will be able to come to a resolution of these issues without resort to formal Commission proceedings.

#### *Conclusion*

Based upon the foregoing discussion, we have made some modifications in our language. In § 69.195(a), we have modified the phrase "marketer or broker" to include an LDC's affiliate for all purposes under this Policy Statement. We have also modified § 69.195(a) to require an LDC to develop enforcement provisions in any tariff proposed in light of this Policy Statement. We are also modifying § 69.195(a) to have the parties address the applicability of Chapter 56.

In addition, we are further modifying § 69.195(c). We deleted the phrase "subject to Commission approval" under subsection (c). That phrase was superfluous given the Commission's role in approving tariff proposals as well as the Commission's regulatory authority.

We also inserted the word "transportation" before tariff in the first sentence of § 69.195(c) to reflect the fact that transportation tariffs are an effective vehicle for tariffs proposals guided by this Policy Statement. We have also added language clarifying the intended scope and use of the information sought in tariffs proposed as a result of this Policy Statement.

Accordingly, under our authority under sections 501, 508, 1301, 1302, 1303, 1304, 1317, 1318 and 1501, 66 Pa.C.S. §§ 501, 508, 1301, 1302, 1303, 1304, 1317, 1318, 1501 and the act of July 31, 1968 (P. L. 769, No. 240) (45 P. S. § 1201 et seq.), the Commission has authority to promulgate this final policy statement addressing the fitness of a marketer or broker (including an LDC's affiliate) to read as set forth in Annex A.

*Therefore, It Is Ordered that:*

1. The Final Policy Statement regarding the Fitness of Natural Gas Marketers, 52 Pa. Code, is amended by adding § 65.195 to read as set forth in Annex A.

2. The Secretary shall submit this order and Annex A to the Governor's Budget Office for review of fiscal impact.

3. The Secretary shall duly certify this order and Annex A and deposit them with the Legislative Reference Bureau for publication in the *Pennsylvania Bulletin*.

4. This policy statement shall become effective upon publication.

5. A copy of this Order and Annex A are to be served upon all jurisdictional gas utilities, the Office of Con-

sumer Advocate, the Office of Small Business Advocate and on any parties who filed comments in this proceeding.

JAMES J. MCNULTY,  
*Acting Secretary*

**Fiscal Note:** Fiscal Note 57-181 remains valid for the final adoption of the subject regulations.

#### **Statement of Commissioner Hanger**

This Policy Statement provides the Commission with the ability to effectively regulate gas marketer and brokers in order to ensure system reliability. Specifically, the Policy Statement requires the local distribution company (LDC) to consult with marketers and brokers in their service territory to develop transportation tariff provisions regarding technical and financial fitness standards that will be used to govern the entry of a marketer and broker into the LDC's service territory.

Some marketers and brokers were concerned that this Policy Statement would effectively give an LDC veto power with regard to new supplier entry into an LDC service territory. This is untrue. The Policy Statement explicitly requires the technical and financial standards to be developed in consultation with the brokers and marketers serving the LDC's territory. The standards ultimately have to be approved by the Commission. Any standard that is anti-competitive or that does not allow for input from marketers will not be approved by me.

One area that needs to be addressed is the role of brokers and marketers in satisfying the needs of human needs customers. Any provider of gas supply to human needs customers who have contracted for firm gas must insure that they have adequate gas supply and pipeline capacity to meet the needs of these customers on peak usage days. I will be very critical of broker/marketer price arbitrage on those cold winter days if firm customers in the Commonwealth are at risk for nondelivery because certain suppliers have decided to divert gas supply for those firm customers to other areas of the country because of higher prices in those markets. This behavior, if it endangers reliable service to human needs customers, should be grounds for revocation of the suppliers right to do business in the Commonwealth. I expect the technical and financial fitness standards developed by the LDC and broker/marketer community to incorporate these concerns.

#### **Annex A**

#### **TITLE 52. PUBLIC UTILITIES**

#### **PART I. PUBLIC UTILITY COMMISSION**

#### **Subpart C. FIXED SERVICE UTILITIES**

#### **CHAPTER 69. GENERAL ORDERS, POLICY STATEMENTS AND GUIDELINES ON FIXED UTILITIES**

#### **UNIFORM STANDARDS FOR BROKERS AND MARKETERS**

#### **§ 69.195. Fitness of natural gas marketer or broker (including an LDC's affiliate).**

(a) *Fitness of brokers and marketers.*

(1) Unless otherwise stated, the phrase marketers or brokers, or both, includes all local distribution company (LDC) affiliates, subsidiaries, parents, divisions, and the like providing gas supply to the respective LDC's customers.

(2) To retain reliable service when the gas industry unbundles, the Commission seeks to insure that brokers and marketers operating in this Commonwealth possess the financial or technical, or both, fitness necessary to meet their obligations consistent with the public interest in system reliability and gas supplies. As assurance of the continuation of reliable service and secure supplies is a prerequisite for opening Pennsylvania's gas markets to full retail competition, both new and incumbent providers of gas should be fully capable of providing reliable service and supplies.

(3) The LDCs should address the issue of financial and technical fitness in their tariffs, in consultation with marketers or brokers, to assure the reliability of supplies to the end user and the public interest in system reliability. The LDCs should also address the matter of enforcement in any tariff, developed in consultation with customers, marketers or brokers, submitted in adherence to this section.

(b) *Demonstration of fitness to deliver gas.* Gas suppliers that wish to deliver gas to retail customers should demonstrate that they have the requisite financial and technical fitness to meet their obligations to customers consistent with the public interest in system reliability and LDC's underlying supplier-of-last-resort obligation. The financial and technical fitness is expected for any marketer or broker that wants to serve any or all retail commercial, industrial or retail classes. Financial and technical fitness is aimed at ensuring that a marketer or broker has the requisite ability to offer service to the public.

(c) *Nondiscriminatory transportation tariff rules.* The LDCs may offer nondiscriminatory transportation tariff rules, developed in consultation with marketers or brokers, governing the qualifications of marketers and brokers. The rules should be consistent with any registration requirements for marketers and brokers of the Federal Energy Regulatory Commission. The tariff rules should address the following:

(i) Financial fitness, including the ability to comply with any penalties stemming from nonperformance or in response to changed circumstances.

(ii) Operational fitness, including the ability of the firm to meet peak demand of contracted customers which could be met by a showing of sufficient gas reserves or sufficient supply and capacity to meet the maximum daily delivery obligations with sufficient emergency back up supplies.

(2) The information expected by this section should be as generic as possible and be limited to the information needed for system reliability and performance of an LDC's supplier-of-last-resort obligations. The information expected by this section should avoid information wanted solely or largely for an LDC's merchant function. The information expected by this section should avoid mandating the disclosure of specific and commercially sensitive information such as price, origin, destination, and the like. Information provided to an LDC as part of its system reliability and supplier-of-last-resort obligations may not be provided to an LDC's affiliate as part an LDC's merchant operations.

[Pa.B. Doc. No. 97-1303. Filed for public inspection August 15, 1997, 9:00 a.m.]

## Title 55—PUBLIC WELFARE

### DEPARTMENT OF PUBLIC WELFARE

[55 PA. CODE CH. 3040]

#### Waiver: Out-of-Home Care

The purpose of this statement of policy is to announce the expansion of the child day care provider options for families who receive a subsidy for child day care service.

#### *Discussion*

The regulation for the subsidized child day care program provides criteria which shall be met by a family to participate in the subsidized child day care program. Currently, § 3040.2(a) (relating to definition of service) limits child day care service to "out-of-home" care provided for part of the 24-hour day. The Child Care Works regulations which will be proposed by the Department of Public Welfare (Department) will permit the Department to provide subsidies for in-home care.

The Federal Child Care and Development Block Grant (CCDBG) (42 U.S.C.A. §§ 9859—9858q), requires the Department to provide subsidies to families for whom child day care service is provided in the child's home to continue to receive Federal funding. In response to this requirement, the Department will waive the "out-of-home" condition of § 3040.2(a) to allow the full range of parent choice envisioned by the CCDBG. The Department will provide subsidies for in-home care pending adoption of the Child Care Works regulations to give families receiving subsidies the same choices in child day care providers as families who are not receiving subsidies.

#### *Policy*

Providing a subsidy to families who choose in-home care is the Department's effort to meet Federal requirements and expand the child day care options available to families receiving a subsidy. The Department will waive the portion of § 3040.2(a) which requires that child day care service be "out-of-home" care, until the provision is amended by a change in regulation. A regulation package which addresses this change is currently undergoing the regulatory review process. The policy will allow the Department to participate in the funding of child day care cost if a caretaker chooses to have a child day care provider come into the child's home to care for the subsidy-eligible child.

#### *Contact Person*

Comments and questions regarding this statement of policy should be directed to: Bureau of Child Day Care Services, Jolene Gregor (717) 787-1550, 4th Floor Bertolino Building, 1401 North 7th Street, Harrisburg, PA 17105-2675.

#### *Effective Date*

This statement of policy will take effect September 2, 1997.

FEATHER O. HOUSTOUN,  
*Secretary*

*(Editor's Note:* The regulations of the Department, 55 Pa. Code Chapter 3040, are amended by adding § 3040.2a to read as set forth in Annex A.)

**Fiscal Note:** 14-BUL-052. No fiscal impact; (8) recommends adoption.

## Annex A

## TITLE 55. PUBLIC WELFARE

PART V. CHILDREN, YOUTH AND FAMILIES  
MANUAL

## Subpart B. ELIGIBILITY FOR SERVICES

CHAPTER 3040. SUBSIDIZED CHILD DAY CARE  
ELIGIBILITY

## INTRODUCTION

**§ 3040.2a. Definition of service—statement of policy.**

The Department will waive the requirement that child day care service is out-of-home care provided for part of the 24-hour day. The Department will participate in the funding of child day care cost when a caretaker chooses to have a child day care provider come into his home to care for the subsidy-eligible child.

[Pa.B. Doc. No. 97-1304. Filed for public inspection August 15, 1997, 9:00 a.m.]

**Title 61—REVENUE**

## DEPARTMENT OF REVENUE

## [61 PA. CODE CH. 9]

**Research and Development Tax Credit Implementation Issues**

The Department of Revenue (Department) has adopted a statement of policy under the authority contained in § 3.2 (relating to statements of policy). This statement of policy adds § 9.17 (relating to research and development tax credit implementation issues) and shall take effect immediately upon publication in the *Pennsylvania Bulletin*.

The Research and Development Tax Credit Law (72 P. S. §§ \_\_\_), added by section 24 of the act of May 7, 1997 (P. L. 85, No. 7) provides for a credit against a taxpayer's liabilities imposed under Article III, IV or VI of the Tax Reform Code of 1971 (72 P. S. §§ 7301—7361, 7401—7412 and 7601—7606). The credit is available to those businesses who incur expenses for qualified research and development activities performed within this Commonwealth. Section 9.17 provides an explanation of eligible taxpayers.

Specific questions relating to information provided in this statement of policy may be directed to the Department of Revenue, Office of Chief Counsel, Department 281061, Harrisburg, PA 17128-1061. In addition, the form to apply for the research and development tax credit is available via the Internet at: <http://www.revenue.state.pa.us>.

ROBERT A. JUDGE, Sr.,  
*Secretary*

(Editor's Note: The regulations of the Department, 61 Pa. Code, are amended by adding § 9.17 to read as set forth in Annex A.)

**Fiscal Note:** 15-391. No fiscal impact; (8) recommends adoption.

## Annex A

## TITLE 61. REVENUE

## PART I. DEPARTMENT OF REVENUE

## Subpart A. GENERAL PROVISIONS

## CHAPTER 9. REVENUE

## PRONOUNCEMENTS—STATEMENTS OF POLICY

**§ 9.17. Research and development tax credit implementation issues.**

(a) The Research and Development Tax Credit Law (72 P. S. §§ \_\_\_) provides for a credit against a taxpayer's liabilities imposed under Article III, IV or VI of the TRC (72 P. S. §§ 7301—7361, 7401—7412 and 7601—7606). The credit is available to those businesses who incur expenses for qualified research and development activities performed within this Commonwealth. This statement of policy provides an explanation of eligible taxpayers.

(b) The Research and Development Tax Credit Law's definition of Pennsylvania base amount requires that a taxpayer have at least 1 taxable year preceding the taxable year in which the Pennsylvania qualified research and development expenses are incurred. A taxpayer may not apply for a research and development credit until the calendar year beginning after the close of the taxpayer's second taxable year in which Pennsylvania research and development expenses are incurred which are effectively connected with the conduct of a trade or business within this Commonwealth.

(c) A taxpayer with Pennsylvania qualified research and development expenses which are effectively connected with the conduct of a trade or business within this Commonwealth in at least 2 preceding taxable years, the second which ended on or before December 31, 1996, may apply for a research and development tax credit by September 15, 1997. The credit will be for those research and development expenses incurred in the taxpayer's taxable year that ended in 1996. A taxpayer shall apply for the credit on the form prescribed by the Department. The form is available by contacting the Bureau of Corporation Taxes, Taxing Division—R & D Unit, Department 280703, Harrisburg, Pennsylvania, 17128-0703.

(d) Section 306 of the TRC (72 P. S. § 7306) explains that a partnership is not subject to Personal Income Tax, but the income of a member of a partnership is subject to the tax on his share of the income received by the partnership. As the partner is the entity subject to tax under Article III of the TRC, and not the partnership, each partner is entitled to a research and development tax credit. The research and development credit applicable to a partnership may be claimed by each partner on a pass through basis with each partner (taxpayer) computing the credit on a pro rata basis.

[Pa.B. Doc. No. 97-1305. Filed for public inspection August 15, 1997, 9:00 a.m.]

## DEPARTMENT OF REVENUE

## [61 PA. CODE CH. 94]

**Disclaimers of Nonprobate Taxable Assets**

Under the authority contained in § 3.2 (relating to statements of policy), the Department of Revenue (Department) hereby adopts the statement of policy regarding disclaimers of nonprobate taxable assets which appears in Annex A. This statement of policy sets forth the

Department's interpretation of Commonwealth Court's decision in *In Re Estate of Bernecker*, 654 A.2d 246 (Pa. Cmwlth. 1995).

The statement of policy adds § 94.1 (relating to disclaimers of nonprobate taxable assets) and shall take effect upon publication in the *Pennsylvania Bulletin*.

Based on the decision and order received from the Commonwealth Court in *In Re Estate of Bernecker*, the Department is revising its policy on the effectiveness of disclaimers of nonprobate taxable assets for Pennsylvania Inheritance Tax purposes.

Subsection (b) of § 94.1 sets forth specific conditions which the Department will utilize in determining whether a disclaimer executed in regard to nonprobate taxable assets and nontrust assets of resident decedents is valid for Pennsylvania Inheritance Tax purposes when made either by the disclaiming party or the personal representative of the deceased individual or the guardian or attorney-in-fact of the incapacitated person or minor to whom the interest, absent the disclaimer, would have devolved.

Specific questions relating to information provided in this statement of policy may be directed to the Department of Revenue, Office of Chief Counsel, Dept. 281061, Harrisburg, PA 17128-1061.

(*Editor's Note:* The regulations of the Department, 61 Pa. Code, are amended by adding a statement of policy at § 94.1 to read as set forth in Annex A.)

ROBERT A. JUDGE, SR.,  
Secretary

**Fiscal Note:** 15-383. (1) General Fund;

(2) Implementing Year 1996-97 is minor revenue losses;

(3) 1st Succeeding Year 1997-98 is \$; 2nd Succeeding Year 1998-99 is \$; 3rd Succeeding Year 1999-00 is \$; 4th Succeeding Year 2000-01 is \$; 5th Succeeding Year 2001-02 is \$;

(4) Fiscal Year 1995-96 \$ not applicable; Fiscal year 1994-95 \$; Fiscal year 1993-94 \$;

(8) recommends adoption. This statement of policy is in response to a Commonwealth Court decision that makes disclaimers of nonprobate taxable assets valid in certain instances. Properly executed disclaimers could result in refunds of the Pennsylvania Inheritance Tax. The revenue loss from these refunds is not expected to be significant.

**Annex A**

**TITLE 61. REVENUE**

**PART I. DEPARTMENT OF REVENUE**

**Subpart B. GENERAL FUND REVENUES**

**ARTICLE IV. COUNTY COLLECTIONS**

**CHAPTER 94. INHERITANCE TAX  
PRONOUNCEMENTS—STATEMENTS OF POLICY**

**§ 94.1. Disclaimers of nonprobate taxable assets.**

(a) *General.* The Department is revising its policy on the validity of disclaimers of nonprobate taxable assets for Pennsylvania inheritance tax purposes to reflect the decision and order received from Commonwealth Court in *In Re Estate of Bernecker*, 654 A.2d 246 (Pa. Cmwlth. 1995).

(b) *Scope.*

(1) Disclaimers executed with regard to nonprobate taxable assets of resident decedents, including rights of

survivorship interests in multiple-party accounts, titled tangible personal property or real estate, beneficial interests in third-party beneficiary contracts (that is, retirement benefit plans, annuity contracts, individual retirement accounts, Keogh plan proceeds, matured endowment insurance policies and certain out-of-State government lottery contracts) and intervivos gifts are valid for Pennsylvania Inheritance Tax purposes if the following conditions are met:

(i) They are made either by the disclaiming party or the personal representative of the deceased individual or the guardian or attorney-in-fact of the incapacitated person or minor to whom the interest, absent the disclaimer, would have devolved.

(ii) The applicable conditions in paragraphs (3)—(7) have been met.

(2) The same rule applies to nonresident decedents with nonprobate taxable assets subject to Pennsylvania Inheritance Tax.

(3) The disclaimer shall be in writing and shall satisfy the requirements of 20 Pa.C.S. Chapter 62 (relating to disclaimers) in effect at the time the disclaimer is made.

(4) The disclaimer shall be signed and dated within 9 months of the date of death of the decedent whose interest is being disclaimed. (*See In Re Pomerantz' Estate*, 28 D. & C.3d 521 (Montg. 1983)).

(5) The disclaimer shall be signed and dated by the individual, the individual's personal representative if the individual seeking to disclaim has died or the guardian or attorney-in-fact of an incapacitated individual or minor.

(6) If the disclaimer is made by the personal representative, the guardian of an incapacitated or minor person, or the attorney-in-fact of the person whose interest is being disclaimed, the petition required by 20 Pa.C.S. § 6202 (relating to disclaimers by fiduciaries or attorneys-in-fact) shall be filed with the applicable county orphans' court within 9 months of the date of death of the decedent whose interest, absent the disclaimer, would have devolved. (*See, McGrady Estate*, 42 D. & C.2d 519, 17 Fiduc. Rep. 408 (O.C. Phila. 1967) and in *In Re Pomerantz' Estate*, 28 D. & C.3d 521 (O.C. Montg. 1983)).

(7) A personal representative may make a disclaimer on behalf of a decedent without court authorization if the following conditions are met:

(i) The will of the decedent authorizes the personal representative to do so (*See* 20 Pa.C.S. § 6202).

(ii) A copy of the probated last will and testament is attached to the inheritance tax return filed with the Department.

(iii) The disclaimer is signed and dated within 9 months of the date of death of the decedent as provided in section 2116(c) of the TRC (72 P.S. § 9116(c)) and paragraph (4).

(8) Notice of the filing of an estate's first and final account and of its call for audit or confirmation shall include notice of the disclaimer of the decedent's devolved interest, including the written disclaimer of any nonprobate taxable assets of the decedent, under section 2116(c) of the TRC. The notice shall be given to: Office of Chief Counsel, Department of Revenue, Department 281061, Harrisburg, Pennsylvania 17128-1061.

[Pa.B. Doc. No. 97-1306. Filed for public inspection August 15, 1997, 9:00 a.m.]

# NOTICES

## DEPARTMENT OF BANKING

### Action on Applications

The Department of Banking of the Commonwealth of Pennsylvania, under the authority contained in the act of November 30, 1965 (P. L. 847, No. 356), known as the Banking Code of 1965; the act of December 14, 1967 (P. L. 746, No. 345), known as the Savings Association Code of 1967; the act of May 15, 1933 (P. L. 565, No. 111), known as the Department of Banking Code; and the act of December 19, 1990 (P. L. 834, No. 198), known as the Credit Union Code, has taken the following action on applications received for the week ending August 5, 1997.

#### BANKING INSTITUTIONS

##### New Charters

<i>Date</i>	<i>Name of Bank</i>	<i>Location</i>	<i>Action</i>
8-1-97	Premier Interim Bank Doylestown Bucks County	Doylestown	Filed
Subject institution will be utilized to merge with Premier Bank, Doylestown, and the surviving institution will be acquired by Premier Bancorp, Inc., a bank holding company in organization.			

##### Consolidations, Mergers and Absorptions

<i>Date</i>	<i>Name of Bank</i>	<i>Location</i>	<i>Action</i>
7-31-97	Founders' Bank, Bryn Mawr, and Susquehanna Interim Bank, Bryn Mawr Surviving Institution—Founders' Bank, Bryn Mawr	Bryn Mawr	Effective
Merger is being effected solely to facilitate the acquisition of Founders' Bank, Bryn Mawr, by Susquehanna Bancshares, Inc., Lititz, a bank holding company.			

##### Branch Applications

<i>Date</i>	<i>Name of Bank</i>	<i>Location</i>	<i>Action</i>
7-30-97	Union Bank and Trust Company Pottsville Schuylkill County	Weis Supermarket Route 61 and St. Clair Ave. Pottsville Schuylkill County	Opened
7-31-97	Prime Bank Philadelphia Philadelphia County	661 W. Germantown Pike Plymouth Meeting Montgomery County	Approved
7-31-97	The Madison Bank Blue Bell Montgomery County	100 Main Street Lansdale Montgomery County	Approved
8-4-97	Keystone Savings Bank Bethlehem Northampton County	3933 Freemansburg Rd. Bethlehem Northampton County	Filed
8-5-97	Farmers First Bank Lititz Lancaster County	Weis Market 5360 Lincoln Highway Gap Salisbury Township Lancaster County	Approved

##### Branch Relocations/Consolidations

<i>Date</i>	<i>Name of Bank</i>	<i>Location</i>	<i>Action</i>
7-31-97	Summit Bank Bethlehem Northampton County	<i>To:</i> Laneco Store Stefko Boulevard Shopping Center 1880 Stefko Boulevard Bethlehem Northampton County	Filed



## NOTICES

<i>Date</i>	<i>Name of Bank</i>	<i>Location</i>	<i>Action</i>
		<i>From:</i> Stefko Boulevard Shopping Center 1816 Stefko Boulevard Bethlehem Northampton County	
8-1-97	Financial Trust Company Carlisle Cumberland County	<i>To:</i> 100 South Spring Garden Street Carlisle Cumberland County	Effective
		<i>From:</i> Carlisle Plaza Mall East High Street Carlisle Cumberland County	

**Branch Discontinuances**

<i>Date</i>	<i>Name of Bank</i>	<i>Location</i>	<i>Action</i>
6-27-97	Summit Bank Bethlehem Northampton County	640 Hamilton Mall Allentown Lehigh County	Effective
6-27-97	Summit Bank Bethlehem Northampton County	Valmont Plaza 270 Susquehanna Blvd. West Hazleton Luzerne County	Effective
7-11-97	Summit Bank Bethlehem Northampton County	One Neshaminy Drive Treose Bucks County	Effective
8-4-97	Summit Bank Bethlehem Northampton County	3900 Hamilton Blvd. Allentown Lehigh County	Filed

**SAVINGS ASSOCIATIONS**

No activity.

**CREDIT UNIONS****Conversions**

<i>Date</i>	<i>Name of Credit Union</i>	<i>Location</i>	<i>Action</i>
8-1-97	Norristown Bell Federal Credit Union Blue Bell Montgomery County	1407 Erbs Mill Rd. Blue Bell Montgomery County	Effective

*To:*Norristown Bell Credit Union  
Blue Bell  
Montgomery County

Represents conversion from a Federally-chartered credit union to a State-chartered credit union.

<i>Date</i>	<i>Name of Credit Union</i>	<i>Location</i>	<i>Action</i>
8-1-97	White Rose Postal Employees Federal Credit Union York York County	3498 Industrial Dr. York York County	Effective

*To:*White Rose Credit Union  
York  
York County

Represents conversion from a Federally-chartered credit union to a State-chartered credit union.

RICHARD C. RISHEL,  
*Secretary*

# DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

## Keystone Recreation, Park and Conservation Fund; Land Trust Grant Program

The Department of Conservation and Natural Resources (DCNR) has announced an open application period for a fourth round of funding for land trust projects from the Keystone Recreation, Park and Conservation (Keystone) Fund. The Keystone Land Trust Grant Program is administered by DCNR's Bureau of Recreation and Conservation.

DCNR has mailed an announcement of this open application period, program manual and application forms to the following 49 organizations which are prequalified as eligible land trust applicants. The deadline for receipt of completed grant applications by DCNR is 5 p.m. on October 10, 1997. No applications will be accepted via FAX.

American Farmland Trust (Washington, D. C.)  
 Armstrong County Conservancy (Kittanning, PA)  
 Berks County Conservancy (Wyomissing, PA)  
 Brandywine Conservancy (Chadds Ford, PA)  
 Brandywine Valley Association (West Chester, PA)  
 Buck Hill Conservation Foundation (Buck Hill Falls, PA)  
 Central Pennsylvania Conservancy (Harrisburg, PA)  
 ClearWater Conservancy (State College, PA)  
 Conneaut Lake—French Creek Valley Conservancy (Conneaut Lake, PA)  
 Conservation Fund (Philadelphia, PA)  
 Ecologically Concerned of Zelenople (Butler, PA)  
 Edward L. Rose Conservancy (Brackney, PA)  
 Farm and Natural Lands Trust (York, PA)  
 Fox Chapel Land Conservation Trust (Pittsburgh, PA)  
 French & Pickering Creeks Conservation Trust (Pottstown, PA)  
 Friends of Pennypack Park (Philadelphia, PA)  
 Friends of the Wissahickon (Philadelphia, PA)  
 Hawk Mountain Sanctuary Association (Kempton, PA)  
 Headwaters Charitable Trust (Clearfield, PA)  
 Heritage Conservancy (Doylestown, PA)  
 Hollow Oak Land Trust (Moon Township, PA)  
 Lacawac Sanctuary Foundation (Lake Ariel, PA)  
 Lackawanna River Corridor Association (Mayfield, PA)  
 Lancaster County Conservancy (Lancaster, PA)  
 Loyalhanna Watershed Association (Ligonier, PA)  
 Merrill W. Linn Land & Water Conservancy (Lewisburg, PA)

Moraine Preservation Fund (Zelenople, PA)  
 Natural Lands Trust (Media, PA)  
 Nature Conservancy (Philadelphia, PA)  
 Neighborhood Gardens Association (Philadelphia, PA)  
 Northcentral Pennsylvania Conservancy (Williamsport, PA)  
 Northern Allegheny Conservation Association (Warren, PA)  
 Open Land Conservancy of Chester County (Paoli, PA)  
 Penn Soil Conservancy Charitable Trust (Clarion, PA)  
 Pennsylvania Environment Council (Philadelphia, PA)  
 Pennypack Ecological Restoration Trust (Huntingdon Valley, PA)  
 Perkiomen Valley Watershed Association (Schwenksville, PA)  
 Pine Creek Valley Watershed Association (Oley, PA)  
 Rails-to-Trails Conservancy (Harrisburg, PA)  
 Red Clay Valley Association (West Chester, PA)  
 Roaring Run Watershed Association (Spring Church, PA)  
 Schuylkill River Greenway Association (Wyomissing, PA)  
 Scott Conservancy (Pittsburgh, PA)  
 Southern Alleghenies Conservancy (Bedford, PA)  
 Trust for Public Land (Washington, D. C.)  
 Western Pennsylvania Conservancy (Pittsburgh, PA)  
 White Clay Watershed Association (Landenberg, PA)  
 Wildlands Conservancy (Emmaus, PA)  
 Wissahickon Valley Watershed Association (Ambler, PA)

The Keystone Fund was established by passage of the Keystone Recreation, Park and Conservation Fund Act (Act 1993-50) signed on July 2, 1993. On November 2, 1993, the voters of the Commonwealth overwhelmingly approved a public referendum incurring bond indebtedness by the Commonwealth in the amount of \$50 million to provide for the funding of nature preserves and wildlife habitats, and for improvements to and expansion of State parks, community parks and recreation facilities, historic sites, zoos and public libraries. The Keystone Fund is currently supported by a 15% allocation from the State Realty Transfer Tax revenues. DCNR will receive 10% of the State Realty Transfer Tax allocation for matching grants to assist land trusts with planning and acquisition projects involving natural areas and open space. Approximately \$3 million will be available in this fourth round of funding for land trust projects.

A land trust is defined in Act 1993-50 as a nonprofit conservation or preservation organization, conservancy or land trust whose primary purpose is the conservation and preservation of open space, park lands or natural areas for public benefit. To qualify for Keystone funding, a land trust must be tax exempt under section 501(c)(3) of the Internal Revenue Code of 1986; registered with the Bureau of Charitable Organizations, PA Department of State; and in existence for at least 5 consecutive years.

Land trusts must prequalify as eligible applicants in accordance with procedures announced at 24 Pa.B. 4216 (August 20, 1994). Land trust organizations that are not prequalified for this third round of funding may do so prior to announcement of the next open application period. A prequalification form and instructions may be obtained from the Department of Conservation and Natural Resources, Bureau of Recreation and Conservation, 555 Forum Building, Harrisburg, PA 17120, (717) 783-2656.

Persons with a disability who wish to submit a land trust prequalification form or grant application and require assistance should contact Darrel J. Siesholtz at (717) 783-2661 to discuss how the Department may best accommodate their needs.

JOHN C. OLIVER,  
Secretary

[Pa.B. Doc. No. 97-1308. Filed for public inspection August 15, 1997, 9:00 a.m.]

## DEPARTMENT OF ENVIRONMENTAL PROTECTION

### Applications, Actions and Special Notices

#### APPLICATIONS

#### APPLICATIONS RECEIVED UNDER THE PENNSYLVANIA CLEAN STREAMS LAW AND THE FEDERAL CLEAN WATER ACT

#### [National Pollution Discharge Elimination System Program (NPDES)]

#### DISCHARGE OF CONTROLLED INDUSTRIAL WASTE AND SEWERAGE WASTEWATER

#### (Part I Permits)

The following parties have applied for an NPDES permit to discharge controlled wastewaters into the surface waters of this Commonwealth. Unless otherwise indicated on the basis of preliminary review and application of lawful standards and regulations the Department of Environmental Protection (Department) proposes to issue a permit to discharge, subject to certain effluent limitations and special conditions. These proposed determinations are tentative.

Where indicated, the EPA, Region III, Regional Administrator has waived his right to review or object to this proposed permit action under the waiver provision 40 CFR 123.6E.

Persons wishing to comment on the proposed permit are invited to submit a statement to the Field Office indicated as the office responsible, within 30 days from the date of this public notice. Comments received within this 30-day period will be considered in the formulation of the final determinations regarding this application. Responses should include the name, address and telephone number of the writer and a concise statement to inform the Field Office of the exact basis of a comment and the relevant facts upon which it is based. A public hearing may be held if the Field Office considers the public response significant.

Following the 30-day comment period, the Water Management Program Managers will make a final determination regarding the proposed permit. Notice of this determination will be published in the *Pennsylvania Bulletin* at which time this determination may be appealed to the Environmental Hearing Board.

The application and related documents, proposed effluent limitations and special conditions, comments received and other information are on file and may be inspected and arrangements made for copying at the Field Office indicated above the application.

Persons with a disability who wish to attend the hearing and require an auxiliary aid, service or other accommodation to participate in the proceeding should contact the Secretary to the Board at (717) 787-3483. TDD users may contact the Department through the Pennsylvania AT&T Relay Service at (800) 654-5984.

#### Application for National Pollutant Discharge Elimination System (NPDES) Permit to discharge to State waters.

*Southcentral Regional Office: Regional Water Management Program Manager, One Ararat Boulevard, Harrisburg, PA 17110, (717) 657-4590.*

**PA 0023744.** SIC: 4952, Sewage, **Northeastern York County Sewer Authority (WWTP)**, P. O. Box 516, Mount Wolf, PA 17347-0516.

This application is for renewal of an NPDES permit for an existing discharge of treated sewage to Susquehanna River, in East Manchester Township, **York County**.

The receiving stream is classified for warm water fishes, recreation, water supply and aquatic life. For the purpose of evaluating effluent requirements for TDS, NO<sub>2</sub>-NO<sub>3</sub>, fluoride and phenolics, the existing downstream potable water supply intake considered during the evaluation was the Wrightsville Water Supply Company located on the Susquehanna River. The discharge is not expected to impact any potable water supply.

The proposed effluent limits for Outfall 001 for a design flow of 1.7 mgd are:

Parameter	Average Monthly (mg/l)	Average Weekly (mg/l)	Maximum Daily (mg/l)	Instantaneous Maximum (mg/l)
CBOD <sub>5</sub>	25.0	40.0		50.0
Total Suspended Solids	30.0	45.0		60.0
Total Phosphorus	2.0			4.0

<i>Parameter</i>	<i>Average Monthly (mg/l)</i>	<i>Average Weekly (mg/l)</i>	<i>Maximum Daily (mg/l)</i>	<i>Instantaneous Maximum (mg/l)</i>
Interim Total Residual Chlorine	monitor and report			
Final Total Residual Chlorine	0.4			1.3
Dissolved Oxygen		minimum of 5.0 at all times		
pH		from 6.0—9.0 inclusive		
Fecal Coliforms (5-1 to 9-30)	200/100 ml as a geometric average			
(10-1 to 4-30)	10,000/100 ml as a geometric average			

The EPA waiver is not in effect.

**PA 0026972.** SIC: 4952, Sewage, **Exeter Township Berks County Authority**, 400 Hanover Street, Birdsboro, PA 19508-9181.

This application is for renewal of an NPDES permit for an existing discharge of treated sewage to the Schuylkill River, in Exeter Township, **Berks County**.

The receiving stream is classified for warm water fishes, recreation, water supply and aquatic life. For the purpose of evaluating effluent requirements for TDS, NO<sub>2</sub>-NO<sub>3</sub>, fluoride and phenolics, the existing downstream potable water supply intake considered during the evaluation was Pottstown Borough Water Supply located on the Schuylkill River. The discharge is not expected to impact any potable water supply.

The proposed effluent limits for Outfall 001 for a design flow of 1.2 mgd are:

<i>Parameter</i>	<i>Average Monthly (mg/l)</i>	<i>Average Weekly (mg/l)</i>	<i>Instantaneous Maximum (mg/l)</i>
CBOD <sub>5</sub>	25	40	50
Total Suspended Solids	30	45	60
NH <sub>3</sub> -N	monitor and report		
Total Residual Chlorine	0.3		1.0
Dissolved Oxygen		minimum of 5.0 at all times	
pH		from 6.0—9.0 inclusive	
Fecal Coliforms (5-1 to 9-30)	200/100 ml as a geometric average		
(10-1 to 4-30)	10,000/100 ml as a geometric average		

The proposed effluent limits for Outfall 002 for a design flow of 5.9 mgd are:

<i>Parameter</i>	<i>Average Monthly (mg/l)</i>	<i>Average Weekly (mg/l)</i>	<i>Instantaneous Maximum (mg/l)</i>
CBOD <sub>5</sub>	25	40	50
Total Suspended Solids	30	45	60
Total Residual Chlorine	0.3		1.0
Dissolved Oxygen		minimum of 5.0 at all times	
pH		from 6.0—9.0 inclusive	
Fecal Coliforms (5-1 to 9-30)	200/100 ml as a geometric average		
(10-1 to 4-30)	10,000/100 ml as a geometric average		

The EPA waiver is not in effect.

**PA 0028746.** SIC: 495, Sewage, **Hampden Township**, 230 South Sporting Hill Road, Mechanicsburg, PA 17055.

This application is for amendment of an NPDES permit for an existing discharge of treated sewage to Conodoguinet Creek, in Hampden Township, **Cumberland County**.

The receiving stream is classified for warm water fishes, recreation, water supply and aquatic life. For the purpose of evaluating effluent requirements for TDS, NO<sub>2</sub>-NO<sub>3</sub>, fluoride and phenolics, the existing downstream potable water supply intake considered during the evaluation was Steelton Municipal Waterworks located in Steelton. The discharge is not expected to impact any potable water supply.

The proposed amended effluent limit for Outfall 001 for a design flow of 1.76 mgd is:

<i>Parameter</i>	<i>Average Monthly (mg/l)</i>	<i>Instantaneous Maximum (mg/l)</i>
Total Residual Chlorine	0.50	1.63

The EPA waiver is not in effect.

**PA 0043486.** SIC: 4953, Industrial waste, **Lancaster County Solid Waste Management Authority**, 1299 Harrisburg Pike, P. O. Box 4425, Lancaster, PA 17604.

This application is for renewal of an NPDES permit for an existing discharge of treated industrial waste to Manns Run, in Manor Township, **Lancaster County**.

The receiving stream is classified for warm water fishery, recreation, water supply and aquatic life. For the purpose of evaluating effluent requirements for TDS, NO<sub>2</sub>-NO<sub>3</sub>, fluoride and phenolics, the existing downstream potable water supply intake considered during the evaluation was Safe Harbor Power Plant located in Manor Township, Lancaster County. The discharge is not expected to impact any potable water supply.

The proposed effluent limits for Outfall 001 for a design flow of 0.288 mgd are:

<i>Parameter</i>	<i>Average Monthly (mg/l)</i>	<i>Maximum Daily (mg/l)</i>	<i>Instantaneous Maximum (mg/l)</i>
CBOD <sub>5</sub>	25	50	62.5
Total Suspended Solids	100	200	250
NH <sub>3</sub> -N			
(5-1 to 10-31)	1.5	3.0	3.75
(11-1 to 4-30)	4.5	9.0	11.25
Phosphorus as P	2	4	5
Dissolved Oxygen		5.0 mg/l minimum	
pH		6.0—9.0 SU	
Total Iron	1.8	3.6	4.5
Total Manganese	1.0	2.0	2.5
Methylene Chloride	0.015	0.03	0.038
Total Chlorine Residual	0.27		0.87

The EPA waiver is in effect.

**PA 0081957 (97-1).** SIC: 3534, Industrial waste, **Westinghouse Electric Corporation**, 11 Stanwix Street, Pittsburgh, PA 15219.

This application is for amendment of an NPDES permit for a new discharge of treated groundwater to an unnamed tributary of Rock Creek, in Cumberland Township, **Adams County**.

The receiving stream is classified for warm water fishes, recreation, water supply and aquatic life. For the purpose of evaluating effluent requirements for TDS, NO<sub>2</sub>-NO<sub>3</sub>, fluoride and phenolics, the existing downstream potable water supply intake considered during the evaluation was the City of Frederick located in Maryland on the Monocacy River. The discharge is not expected to impact any potable water supply.

The proposed effluent limits for Outfall 002 for a design flow of 0.0864 mgd are:

<i>Parameter</i>	<i>Maximum Daily (mg/l)</i>
Trichloroethene	2.6
1,2-Dichloroethane	0.38
Tetrachloroethylene	0.7
1,1,1-Trichloroethane	200.0
1,1-Dichloroethene	0.06
1,2-Dichloroethenes (Total)	100.0
1,1,2-Trichloroethane	0.6
pH	from 6.0—9.0 inclusive

Part C conditions set forth EPA reporting thresholds (Minimum Levels) for 1,2-Dichloroethane, Tetrachloroethylene, 1,1-Dichloroethene, and 1,1,2-Trichloroethane.

The EPA waiver is not in effect.

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*Southwest Regional Office: Water Management Program Manager, 400 Waterfront Drive, Pittsburgh, PA 15222-4745, (412) 442-4000.*

**PA 0096326.** Sewage, **Wencliff Eyrie Mobile Home Estates**, 130 Penn-Adamsburg Road, Jeannette, PA 15644.

This application is for renewal of an NPDES permit to discharge treated sewage from the Wencliff Eyrie Mobile Home Estates Sewage Treatment Plant in Hempfield Township, **Westmoreland County**.

The following effluent limitations are proposed for discharge to the receiving waters, known as an unnamed tributary of Brush Creek, which are classified as a trout stock fishery with existing and/or potential uses for aquatic life, water supply and recreation. The first downstream potable water supply intake from this facility is the Pennsylvania American Water Company, Becks Run Intake, on the Monongahela River.

*Outfall 001*: existing discharge, design flow of 0.03 mgd.

<i>Parameter</i>	<i>Concentration (mg/l)</i>			
	<i>Average Monthly</i>	<i>Average Weekly</i>	<i>Maximum Daily</i>	<i>Instantaneous Maximum</i>
CBOD <sub>5</sub>	25			50
Suspended Solids	30			60
Ammonia Nitrogen				
(5-1 to 10-31)	2.1			4.2
(11-1 to 4-30)	4.4			8.8
Fecal Coliform				
(5-1 to 9-30)	200/100 ml as a geometric mean			
(10-1 to 4-30)	2,000/100 ml as a geometric mean			
Total Residual Chlorine				
1st month—36th month	monitor and report			
37th month—expiration	0.05			0.1
Dissolved Oxygen	not less than 6.0 mg/l			
pH	not less than 6.0 nor greater than 9.0			

The EPA waiver is in effect.

**PA 0206024.** Sewage, **Gary Torre**, 1300 Oakridge Road, McDonald, PA 15057.

This application is for renewal of an NPDES permit to discharge treated sewage from the Gary Torre Single Residence Sewage Treatment Plant in South Fayette Township, **Allegheny County**.

The following effluent limitations are proposed for discharge to the receiving waters, known as an unnamed tributary of Millers Run, which are classified as a warm water fishery with existing and/or potential uses for aquatic life, water supply and recreation. The first downstream potable water supply intake from this facility is the West View Borough Municipal Water Authority located on the Ohio River.

*Outfall 001*: existing discharge, design flow of 0.0004 mgd.

<i>Parameter</i>	<i>Concentration (mg/l)</i>			
	<i>Average Monthly</i>	<i>Average Weekly</i>	<i>Maximum Daily</i>	<i>Instantaneous Maximum</i>
CBOD <sub>5</sub>	25			50
Suspended Solids	30			60
Fecal Coliform				
(5-1 to 9-30)	200/100 ml as a geometric mean			
(10-1 to 4-30)	2,000/100 ml as a geometric mean			
Total Residual Chlorine	monitor and report			
pH	not less than 6.0 nor greater than 9.0			

The EPA waiver is in effect.

**PA 0217662.** Sewage, **Angelo and Nancy B. Poli**, 93 Belmeade Terrace, Uniontown, PA 15401.

This application is for issuance of an NPDES permit to discharge treated sewage from the Bennington Place Subdivision Sewage Treatment Plant in North Union Township, **Fayette County**.

The following effluent limitations are proposed for discharge to the receiving waters, known as Bennington Spring Run, which are classified as a warm water fishery with existing and/or potential uses for aquatic life, water supply and recreation. The first downstream potable water supply intake from this facility is the Newell Municipal Authority on the Monongahela River.

*Outfall 001*: new discharge, design flow of 0.00525 mgd.

<i>Parameter</i>	<i>Concentration (mg/l)</i>			
	<i>Average Monthly</i>	<i>Average Weekly</i>	<i>Maximum Daily</i>	<i>Instantaneous Maximum</i>
CBOD <sub>5</sub>	25			50
Suspended Solids	30			60
Ammonia Nitrogen				
(5-1 to 10-31)	6.5			13
(11-1 to 4-30)	19.5			39
Fecal Coliform				
(5-1 to 9-30)	200/100 ml as a geometric mean			
(10-1 to 4-30)	5,000/100 ml as a geometric mean			
Total Residual Chlorine	0.6			1.4
pH	not less than 6.0 nor greater than 9.0			

*Other Conditions:*

The EPA waiver is in effect.

**PA 0217671.** Sewage, **Canterbury Coal Company**, R. D. 1, Box 119, Avonmore, PA 15618.

This application is for issuance of an NPDES permit to discharge treated sewage from DiAnne Deep Mine Shaft STP in Kiskiminetas Township, **Armstrong County**.

The following effluent limitations are proposed for discharge to the receiving waters, known as unnamed tributary of Carnahan Run, which are classified as a warm water fishery with existing and/or potential uses for aquatic life, water supply and recreation. The first downstream potable water supply intake from this facility is the Buffalo Township Municipal Authority, Freeport Plant, on the Allegheny River.

*Outfall 001:* new discharge, design flow of 0.0056 mgd.

<i>Parameter</i>	<i>Concentration (mg/l)</i>			
	<i>Average Monthly</i>	<i>Average Weekly</i>	<i>Maximum Daily</i>	<i>Instantaneous Maximum</i>
CBOD <sub>5</sub>	25			50
Suspended Solids	30			60
Ammonia Nitrogen				
(5-1 to 10-31)	4.5			9.0
(11-1 to 4-30)	13.5			27.0
Fecal Coliform				
(5-1 to 9-30)	200/100 ml as a geometric mean			
(10-1 to 4-30)	4,500/100 ml as a geometric mean			
Total Residual Chlorine	1.4			3.3
pH	not less than 6.0 nor greater than 9.0			

*Other Conditions:*

The EPA waiver is in effect.

*Northwest Regional Office: Acting Regional Manager; Environmental Cleanup, 230 Chestnut Street, Meadville, PA 16335, (814) 332-6648.*

**PA 0222356.** Industrial waste. **Former Teledyne—Penn Union Facility**, 350 Allwood Road, Clifton, NY 07015; Facility location in Edinboro, **Erie County**.

This application is for a new NPDES permit, to discharge industrial waste to Darrows Creek in Edinboro, Erie County. This is a new discharge.

The receiving water is classified for the following uses: warm water fishes, aquatic life, water supply and recreation.

The proposed discharge limits for Outfall 001, based on a design flow of .144 mgd, are:

<i>Parameter</i>	<i>Average Monthly (mg/l)</i>	<i>Maximum Daily (mg/l)</i>	<i>Instantaneous Maximum (mg/l)</i>
Flow		monitoring only	
Tetrachloroethylene	.007		.001
Trichloroethylene	.026		.040
Cis-1,2-Dichloroethylene		monitoring only	
Total Iron	1.8		2.8
pH	6.0—9.0 at all times		

The EPA waiver is in effect.

### Proposed NPDES Permit Renewal Actions for Minor Sewage Discharges

The following parties have applied to renew their current NPDES permits to allow the continued discharge of controlled wastewaters into the surface waters of this Commonwealth. The Department of Environmental Protection (Department) has made a tentative determination to renew these permits and proposes to issue them, subject to their current permit effluent limitations, and monitoring and reporting requirements, with appropriate and necessary updated requirements to reflect new or changed regulations and other requirements. The updates may include, but will not be limited to, applicable permit conditions and/or requirements addressing combined sewer overflows (CSOs), municipal sewage sludge management, and total residual chlorine control (TRC). Any major changes to or deviations from the terms of the existing permit will be documented and published with the final Department actions.

The EPA, Region III, Regional Administrator has waived the right to review or object to these proposed permit actions under the waiver provision 40 CFR 123.6E.

Persons wishing to comment on the proposed permits are invited to submit a statement to the Field Office indicated as the office responsible, within 30 days from the date of this public notice. Comments received within this 30-day period will be considered in the formulation of the final determinations regarding these applications and proposed permit actions. Comments should include the name, address and telephone number of the writer and a brief statement to inform the Field Office of the basis of the comment and the relevant facts upon which it is based. A public hearing may be held if the Field Office considers the public response significant.

Following the 30-day comment period, the Water Management Program Managers will make a final determination regarding the proposed permit action. Notice of this determination will be published in the *Pennsylvania Bulletin* at which time this determination may be appealed to the Environmental Hearing Board.

The permit renewal application and related documents, proposed effluent limitations and special conditions, comments received and other information are on the Department's file. The documents may be inspected at, or a copy requested from, the Field Office that has been indicated above the application notice.

*Northeast Regional Office: Water Management Program Manager, 2 Public Square, Wilkes-Barre, PA 18711-0790, (717) 826-2511.*

<i>NPDES No.</i>	<i>Facility Name and Address</i>	<i>County and Municipality</i>	<i>Tributary Stream</i>	<i>New Permit Requirements</i>
PA0061948	Lehighon Land Co. 1500 Rock Street Lehighon, PA 18235	Carbon Franklin Township	Pohopoco Creek	TRC

**DISCHARGE OF CONTROLLED INDUSTRIAL WASTE AND SEWERAGE WASTEWATER**

**Applications under the Pennsylvania Clean Streams Law**

**(Part II Permits)**

The following permit applications and requests for plan approval have been received by the Department of Environmental Protection (Department). Persons objecting on the grounds of public or private interest to the approval of an application or submitted plan may file a written protest with the Department at the address indicated above each permit application or plan. Each written protest should contain the following: name, address and telephone number; identification of the plan or application to which the protest is addressed and a concise statement in sufficient detail to inform the Department of the exact basis of the protest and the relevant facts upon which it is based. The Department may conduct a fact-finding hearing or an informal conference in response to any given protest. Each writer will be notified in writing of the time and place if a hearing or conference concerning the plan, action or application to which the protest relates is held. To insure consideration by the Department prior to final action on permit applications and proposed plans, initial protests and additions or amendments to protests already filed should be filed within 15 calendar days from the date of this issue of the *Pennsylvania Bulletin*. A copy of each permit application and proposed plan is on file in the office indicated and is open to public inspection.

Persons with a disability who wish to attend the hearing and require an auxiliary aid, service or other accommodation to participate in the proceedings, should contact the specified program. TDD users may contact the Department through the Pennsylvania AT&T Relay Service at (800) 654-5984.

**Applications received for industrial waste and sewage applications under The Clean Streams Law (35 P. S. §§ 691.1—691.1001).**

*Southcentral Regional Office: Water Management Program Manager, One Ararat Boulevard, Harrisburg, PA 17110, (717) 657-4590.*

**A. 2197407.** Sewage, submitted by **Upper Allen Township**, 100 Gettysburg Pike, Mechanicsburg, PA 17055 in Upper Allen Township, **Cumberland County** to construct the Upper Allen Business Park pumping station and sewer extension was received in the Southcentral Region on July 30, 1997.

*Northwest Regional Office: Regional Water Management Program Manager, 230 Chestnut Street, Meadville, PA 16335-3481, (814) 332-6942.*

**WQW Permit No. 1097407.** Sewage. **Breakneck Creek Regional Authority**, Oak Park Pump Station, 1166 Mars-Evans City Road, Mars, PA 16046. This project is for the construction of sanitary sewers and appurtenances to deliver sanitary sewage flow from the Oak Park Subdivision to interceptor sewers owned and operated by Breakneck Creek Regional Authority in Adams Township, **Butler County**.

**WQW Permit No. 3397404.** Sewage. **Borough of Corsica**, Municipal Building, Main Street, P. O. Box 176, Corsica, PA 15829-0176. This project is for the construction and operation of wastewater collection, conveyance and treatment facilities to serve Corsica Borough, **Jefferson County**.

**SAFE DRINKING WATER**

**Applications received under the Pennsylvania Safe Drinking Water Act (35 P. S. §§ 721.1—721.17).**

*Southeast Regional Office: Sanitarian Regional Manager, Lee Park, Suite 6010, 555 North Lane, Conshohocken, PA 19428-2233, (610) 832-6130.*



**A. 4697509.** Public water supply. **North Penn Water Authority**, Craig Forwood, 300 Forty Foot Road, Lansdale, PA 19446. This proposal involves the construction of a booster pump station at North Penn Water Authority's Worcester water supply system. The project includes one 5HP jockey pump 25 HP and suction pump and 3HP VSD end suction in Worcester Township, **Montgomery County**.

**Application issued for Construction Permits issued under the Pennsylvania Safe Drinking Water Act (35 P. S. §§ 721.1—721.17).**

*Regional Office: Northcentral Field Operations, Environmental Program Manager, 208 West Third Street, Suite 101, Williamsport, PA 17701.*

**A. 1897501.** The Department issued a construction permit to **South Renovo Borough** (569 Pennsylvania Avenue, South Renovo, PA 17764, Noyes Township, **Clinton County**) to construct Well No. 1 and install a flow metering device at the reservoir.

## HAZARDOUS SITES CLEAN-UP

Under the Act of October 18, 1988

**Prompt Interim Response  
Under the Hazardous Sites Cleanup Act**

**Covington Township  
Lackawanna County**

The Department of Environmental Protection (Department) under the authority of the Hazardous Sites Cleanup Act (35 P. S. §§ 6020.101—6020.1305) (HSCA) initiated a Prompt Interim Response (response) at the Winship Road Drum Site (Site). The Site is located along a private roadway off of Winship Road near Route 307, in Covington Township, Lackawanna County. It is located directly adjacent to a commercial property as well as several residences. A small stream runs along the eastern edge of the Site into a wetland approximately 200 feet south of the Site.

On February 26, 1995, Department personnel inspected the Site subsequent to a citizen reporting that several drums of unknown material were discovered during excavation of a drainage culvert. During the Department's inspection six exposed or partially exposed drums were noted. Upon further investigation of the area where the six drums were found, the Department discovered the probable presence of additional buried drums using metal detection instrumentation. The Department determined that the Site constituted a substantial threat to public health and safety and the environment, and therefore, initiated a response at the Site on February 28, 1996. The prompt interim response chosen by the Department (Prompt Interim Response #1) consisted of excavation of drums, repackaging, chemical analysis, temporary storage, and final disposal at an approved facility. A total of 56 drums, as well as 1 small container, were unearthed and subsequently disposed of. The Department provided public notice of Prompt Interim Response #1 in the March 23, 1996 editions of the *Pennsylvania Bulletin* and the *Scranton Times* newspaper.

On November 20, 1996, the Department conducted metal detector and ground penetrating radar surveys in additional areas of the Site. The surveys resulted in the delineation of additional areas of suspected drum burial. On April 27, 1997, the Department completed an investigation which resulted in the unearthing of 19 drums at the Site. The material in the drums was determined to be

a hazardous waste and contained the hazardous substances trichloroethylene and lead. On July 17, 1997, after determining that the Site constituted a substantial threat to public health and safety and the environment, the Department undertook a Prompt Interim Response (Prompt Interim Response #2) at the Site. The Prompt Interim Response involved the disposal, at an approved hazardous waste disposal facility, of the drums which were unearthed during the April 27, 1997 investigation. The Department also considered taking no action at the Site. This option was rejected due to the substantial threat to public health and safety and the environment.

The administrative record contains information which was used as the basis for the decision to conduct the response at the Site. The administrative record will be available for public inspection from 8 a.m. to 4 p.m., Monday through Friday, at the Department's Northeast Regional Office located at 2 Public Square, Wilkes-Barre, PA 18711.

Written comments concerning Prompt Interim Response #2 or information in the administrative record will be accepted in person, if delivered, or by mail, if postmarked, on or before November 14, 1997, at the attention of Leonard Zelinka, Project Officer—Hazardous Sites Cleanup Program, at the Northeast Regional Office address.

Additionally, the public will have an opportunity to present oral comments at a public hearing. The public hearing has been scheduled for October 1, 1997, at 7 p.m. at the Covington Township Municipal Building. Persons wishing to present oral comments must register on or before September 24, 1997, by calling Leonard Zelinka at (717) 826-5441. If no person registers to present oral comments by September 24, 1997, the hearing will not be held. Persons interested in finding out if anyone has registered, if the hearing will be held, or the location of the hearing should contact Leonard Zelinka.

The Department is providing this notice under section 506(b) of the HSCA. The date of publication of this notice in the *Pennsylvania Bulletin* initiates the minimum 90 day public comment period on the administrative record, as provided under that act. Questions concerning the Site may be directed to Leonard Zelinka at (717) 826-5441, or Michael Ferrence, Assistant Counsel, at (717) 826-2519.

Persons with a disability who wish to attend the public hearing referenced above and require an auxiliary aid, service or other accommodation to participate in the proceedings, should contact Leonard Zelinka directly or through the Pennsylvania AT&T Relay Service at (800) 654-5984 (TDD) to discuss how the Department may accommodate their needs.

## SOLID AND HAZARDOUS WASTE

**OPERATE WASTE PROCESSING OR DISPOSAL  
AREA OR SITE**

**Applications submitted under the Solid Waste Management Act (35 P. S. §§ 6018.101—6018.1003) and regulations to operate or close solid waste processing or disposal area or site.**

*Regional Office: Regional Solid Waste Manager, One Ararat Boulevard, Harrisburg, PA 17110.*

**A. 100345. Shenkel Road Expansion.** Delaware County Solid Waste Authority, Rose Tree Park—Hunt Club, 1521 North Providence Road, Media, PA 19063. Application for construction and expansion of the landfill

site in Earl Township, **Berks County**. Application determined to be administratively complete in the Regional Office July 22, 1997.

**Applications received under the Solid Waste Management Act (35 P. S. §§ 6018.101—6018.1003), the Municipal Waste Planning, Recycling and Waste Reduction Act (53 P. S. §§ 4000.101—4000.1904) and residual waste regulations for a general permit to operate residual waste processing facilities and the beneficial use of residual waste other than coal ash.**

*Central Office: Division of Municipal and Residual Waste, 14th Floor, Rachel Carson State Office Building, 400 Market Street, Harrisburg, PA 17101-2301.*

**General Permit A. WMGR054. Eastern Industries, Inc.**, 400 Camp Meeting Road, Suite 200, Center Valley, PA 18034-9454. An application for the beneficial use of zinc mining tailings for commercially available manufacturing, construction, aggregate and filler products.

**General Permit A. WMGR055. Eastern Industries, Inc.**, 400 Camp Meeting Road, Suite 200, Center Valley, PA 18034-9454. An application for the beneficial use of zinc mining tailings for commercially available soil supplements and acid neutralizing products.

Comments on the general permit application may be submitted to Ronald C. Hassinger, Chief, General Permits and Beneficial Use Section, Division of Municipal and Residual Waste, P. O. Box 8472, Harrisburg, PA 17105-8472. Persons interested in examining the application may make arrangements by calling the Division of Municipal and Residual Waste at (717) 787-7381. TDD users may contact the Department through the Pennsylvania Relay Service, (800) 654-5984. Arrangements can also be made for persons with disabilities who wish to inspect the application. Public comments must be submitted to the Department within 60 days of the date of this notice and may recommend revisions to, and approval or denial of the application.

**PREVIOUSLY UNPERMITTED CLASS OF SPECIAL HANDLING WASTE  
INFECTIOUS OR CHEMOTHERAPEUTIC WASTE**

**Applications received under the Solid Waste Management Act (35 P. S. §§ 6018.101—6018.1003), the Infectious and Chemotherapeutic Waste Law (35 P. S. §§ 6019.1—6019.6) and regulations for license to transport infectious and chemotherapeutic waste.**

*Bureau of Land Recycling and Waste Management, Division of Hazardous Waste Management, P. O. Box 8471, Harrisburg, PA 17105-8471.*

**Medwaste Management, Inc.** of New England, 46 River Street, New Haven, CT 06512-0019; Alan Tuchman, President; application received July 15, 1997.

**Renewal applications received under the Solid Waste Management Act (35 P. S. §§ 6018.101—6018.1003), the Infectious and Chemotherapeutic Waste Law (35 P. S. §§ 6019.1—6019.6) and regulations for license to transport infectious and chemotherapeutic waste.**

*Bureau of Land Recycling and Waste Management, Division of Hazardous Waste Management, P. O. Box 8471, Harrisburg, PA 17105-8471.*

**Browning-Ferris, Inc.**, 111 Domorah Drive, Montgomeryville, PA 18936; Kathy J. Curry, Environmental Safety and Health Manager; License No. **PA-HC 0093**; renewal application received on July 31, 1997.

**Medical Waste Systems, Inc., d/b/a Biosystems**, 380 Constance Drive, Warminster, PA 18974; Jane E. Rubinstein, Director; License No. **PA-HC 0073**; renewal application received on July 31, 1997.

**Med-Trac, Inc.**, 715 William Pitt Way, Pittsburgh, PA 15238; Kathi Lenart, President; License No. **PA-HC 0086**; renewal application received on July 21, 1997.

**Weavertown Transport Leasing, Inc.**, 206 Weavertown Road, Canonsburg, PA 15317; Donald E. Fuchs, President; License No. **PA-HC 0020**; renewal application received on July 28, 1997.

**AIR POLLUTION**

**OPERATING PERMITS**

**Construct, modify or activate air contaminant sources**

**25 Pa. Code § 129.1**

**Applications received for operating permits issued under the Air Pollution Control Act (35 P. S. §§ 4001—4015) and regulations to construct, modify or reactivate air contaminant sources.**

*Regional Office: Southeast Regional Office, Bureau of Air Quality, Lee Park, Suite 6010, 555 North Lane, Conshohocken, PA 19428.*

There is a 30-day comment period from this date of publication.

The Department intends to issue an Air Quality Operating Permit for the air contaminant sources and associated air cleaning devices described for the specified companies.

Permit: **15-399-045**  
Source: Cutting and Trimming  
Company: **NVF Company**  
Location: Kennett Square  
County: **Chester**

Permit: **23-312-054C**  
Source: Gasoline Storage Tanks No. 18 & No. 19  
Company: **Laurel Pipe Line, Co., L. P.**  
Location: Bethel  
County: **Delaware**

Permit: **46-308-017**  
Source: Scrap Aluminum Metal Smelter  
Company: **Recycle Metals Corporation**  
Location: Conshohocken  
County: **Montgomery**

*Regional Office: Northeast Regional Office, Bureau of Air Quality, 2 Public Square, Wilkes-Barre, PA 18711-0790.*

The Department intends to issue an Air Quality Operating Permit for the air contamination sources and associated air cleaning devices described for the specified companies.

Permit: **35-318-076A**  
Source: Crank Shaft Plating w/Scrubber  
Company: **Precision National Corporation**  
Location: Abington Township  
County: **Lackawanna**

Permit: **48-309-098**

Source: Finish Cement Silos w/3 Baghouses  
Company: **Keystone Portland Cement Company**  
Location: East Allen Township  
County: **Northampton**

Permit: **48-319-007**

Source: Scrap Grind/Mix System w/Baghouse  
Company: **G A F Premium Products Inc.**  
Location: Wind Gap Borough  
County: **Northampton**

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**Applications received for Minor Source Operating Permits issued under the Air Pollution Control Act (35 P. S. §§ 4001—4015).**

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*Regional Office: Southwest Regional Office, Bureau of Air Quality, 400 Waterfront Drive, Pittsburgh, PA 15222-4745.*

**OP-65-000630.** The Department received an Air Quality Operating Permit application from **Mine Safety Appliance Company** (P. O. Box 428, Pittsburgh, PA 15230) for a medical appliance and supply manufacturing process at its Murrysville Plant located in Murrysville, **Westmoreland County**.

**OP-04-00483.** The Department received an Air Quality Operating Permit application from **Interforest Corporation** (119 AID Drive, P. O. Box 444, Darlington, PA 16115) for a hardwood veneer and plywood manufacturing process at its Penn-Beaver Veneers Corporation located in Darlington Township, **Beaver County**.

**OP-03-00155.** The Department received an Air Quality Operating Permit application from **Armstrong School District** (410 Main Street, Administration Building, Ford City, PA 16226) for a public high school at its Armstrong Central Senior High School located in Kittanning Borough, **Armstrong County**.

**OP-04-00698.** The Department received an Air Quality Operating Permit application from **Davison Sand & Gravel Company** (400 Industrial Boulevard, New Kensington, PA 15068) for a sand and gravel dredge at its Thaddus Carr Dredge located in Industry Borough, **Beaver County**.

**OP-32-00281.** The Department received an Air Quality Operating Permit application from **Edward C. Griffith Quarrying, Inc.** (R. R. 1, Box 176, Rochester Mills, PA 15771) for a limestone handling operation at its Griffith Quarry located in North Mahoning Township, **Indiana County**.

**PA-65-788B.** The Department intends to issue an Air Quality Operating Permit to **Sony Electronics, Inc.** (1001 Technology Drive, Mt. Pleasant, PA 15666) for 4 Wave Solder Machines at its Pittsburgh Manufacturing Center located in Mt. Pleasant Township, **Westmoreland County**.

**65-305-052.** The Department intends to issue an Air Quality Operating Permit to **Amerikohl Mining, Inc.** (202 Sunset Drive, Butler, PA 16001) for a coal crushing plant at its Leon Strip located in Mt. Pleasant Township, **Westmoreland County**.

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**Notice of Intent to Issue**

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**Title V Operating Permit  
Permit No. 05-05004**

**Bedford County**

The Department of Environmental Protection (Department) intends to issue a Title V Operating Permit No. 05-05004 to the Seton Company located in Saxton Borough, Bedford County.

Seton Company is a major facility subject to the operating permit requirements of Title V of the Federal Clean Air Act and 25 Pa. Code, Chapter 127, Subchapters F (relating to operating permit requirements) and G (relating to Title V operating permit requirements). The facility's major sources include surface coaters which primarily emit Volatile Organic Compounds and Hazardous Air Pollutants.

Copies of the Title V application, proposed permit and other relevant information are available for public inspection at the Department's Southcentral Regional Office, One Ararat Boulevard, Harrisburg, PA 17110. An appointment to review the documents may be scheduled by contacting Mary DiSanto at (717) 540-5018 between 8 a.m. and 3:30 p.m., Monday through Friday, except holidays.

Interested persons may submit written comments, suggestions or objections to Kanubhai Patel, Chief, Title V Facilities Section, One Ararat Boulevard, Harrisburg, PA 17110 within 30 days of this notice. Written comments should include the name, address and telephone number of the person submitting the comments along with the reference number of the proposed permit.

The Department reserves the right to hold a public hearing on the proposed action based upon the information received during the comment period. The Department will give notice of any scheduled public hearing at least 30 days in advance of the hearing as per 25 Pa. Code § 127.521. The hearing notice will be published in the *Pennsylvania Bulletin* and a newspaper of general circulation where the facility is located.

**Title V Operating Permit  
Permit No. TV-05-05006**

**Bedford County**

The Department of Environmental Protection (Department) intends to issue a Title V Operating Permit to Columbia Gas Transmission Corporation for the Artemas Compressor Station located in Montgomery Township, Franklin County.

The Artemas Compressor Station is a major facility subject to the operating permit requirements of Title V of the Federal Clean Air Act and 25 Pa. Code, Chapter 127, Subchapters F (relating to operating permit requirements) and G (relating to Title V operating permit requirements). The facility's major sources include two internal combustion engines and three gas turbines, natural gas fired.

Copies of the Title V application, proposed permit and other relevant information are available for public inspection at the Department's Southcentral Regional Office, One Ararat Boulevard, Harrisburg, PA 17110. An appointment to review the documents may be scheduled by contacting Mary DiSanto at (717) 540-5018 between 8 a.m. and 3:30 p.m., Monday through Friday, except holidays.

Interested persons may submit written comments, suggestions or objections to Kanubhai Patel, Chief, Title V Facilities Section, One Ararat Boulevard, Harrisburg, PA 17110 within 30 days of this notice. Written comments should include the name, address and telephone number of the person submitting the comments along with the reference number of the proposed permit. The commentator should also include a concise statement of any objections to the permit issuance and the relevant facts upon which the objections are based.

The Department reserves the right to hold a public hearing on the proposed action based upon the information received during the comment period. The Department will give notice of any scheduled public hearing at least 30 days in advance of the hearing. The hearing notice will be published in the *Pennsylvania Bulletin* and a newspaper of general circulation where the facility is located.

**Title V Operating Permit No. 11-00052**  
**Cambria County**

Under 25 Pa. Code § 127.521 the Department of Environmental Protection (Department) intends to issue a Title V Operating Permit to The Pennsylvania Rehabilitation Center Hiram Andrews Facility, Upper Yoder Township, Cambria County. The Rehab Center's representative to contact regarding this application is Forrest Leventry, Utility Plant Supervisor, PA Rehabilitation Center, 727 Goucher St., Johnstown, PA 15905.

Hiram Andrews Center operates three coal fired boilers to provide heating and service steam at this location. As a result of the levels of nitrogen oxides emitted, the center is a major stationary source as defined in Title I, Part D of the Clean Air Act Amendments. The facility is therefore subject to the Title V permitting requirements adopted in 25 Pa. Code, Chapter 127, Subchapter G.

Copies of the application, the Department's analysis and other documents used in evaluation of the application are available for public inspection during normal business hours at the Department of Environmental Protection, 400 Waterfront Drive, Pittsburgh, PA 15222.

Persons wishing to provide the Department with additional information which should be considered prior to the issuance of this permit may submit the information to the Department at the address shown. A 30-day comment period, from the date of this publication, will exist for the submission of comments. Each written comment must contain the following:

- Name, address and telephone number of the person submitting the comments.
- Identification of the proposed permit (specify permit No. 11-00052).
- Concise statements regarding the relevancy of the information or objections to issuance of the permit. A public hearing may be held, if the Department, in its discretion, decides that such a hearing is warranted based on the information received. All persons submitting comments or requesting a hearing will be notified of the decision to hold a hearing by publication in this newspaper or the *Pennsylvania Bulletin*, or by telephone, where the Department determines the notification by telephone is sufficient. Written comments or requests for a public hearing should be directed to Joseph Pezze, Regional Air Quality Program Manager, Department of Environmental Protection, Southwest Region—Field Operations, 400 Waterfront Drive, Pittsburgh, PA 15222-4745, (412) 442-4000. For additional information contact Donald F.

Rinald, Air Pollution Control Engineer II, Air Quality Control, at the same address.

**Title V Operating Permit**  
**Permit No. 22-05022**

**Dauphin County**

The Department of Environmental Protection (Department) intends to issue a Title V Operating Permit No. 22-05022 to Harrisburg State Hospital located in the City of Harrisburg, Dauphin County.

Harrisburg State Hospital is a major facility subject to the operating permit requirements of Title V of the Federal Clean Air Act and 25 Pa. Code, Chapter 127, Subchapters F (relating to operating permit requirements) and G (relating to Title V operating permit requirements). The facility's major sources include surface coaters which primarily emit VOC emissions.

Copies of the Title V application, proposed permit and other relevant information are available for public inspection at the Department's Southcentral Regional Office, One Ararat Boulevard, Harrisburg, PA 17110. An appointment to review the documents may be scheduled by contacting Mary DiSanto at (717) 540-5018 between 8 a.m. and 3:30 p.m., Monday through Friday, except holidays.

Interested persons may submit written comments, suggestions or objections to Kanubhai Patel, Chief, Title V Facilities Section, One Ararat Boulevard, Harrisburg, PA 17110 within 30 days of this notice. Written comments should include the name, address and telephone number of the person submitting the comments along with the reference number of the proposed permit.

The Department reserves the right to hold a public hearing on the proposed action based upon the information received during the comment period. The Department will give notice of any scheduled public hearing at least 30 days in advance of the hearing as per 25 Pa. Code § 127.521. The hearing notice will be published in the *Pennsylvania Bulletin* and a newspaper of general circulation where the facility is located.

**Title V Operating Permit**  
**Permit No. 28-05005**

**Franklin County**

The Department of Environmental Protection (Department) intends to issue a Title V Operating Permit No. 28-05005 to Frick Company for the refrigeration equipment manufacturing facility located in Waynesboro, Franklin County.

The Frick Waynesboro plant is a major facility subject to the operating permit requirements of Title V of the Federal Clean Air Act and 25 Pa. Code, Chapter 127, Subchapters F (relating to operating permit requirements) and G (relating to Title V operating permit requirements).

Copies of the Title V application, proposed permit and other relevant information are available for public inspection at the Southcentral Regional Office, One Ararat Boulevard, Harrisburg, PA 17110. An appointment to review the documents may be scheduled by contacting Mary DiSanto at (717) 540-5018 between 8 a.m. and 3:30 p.m., Monday through Friday, except holidays.

Interested persons may submit written comments, suggestions or objections to Kanubhai Patel, Chief, Title V Facilities Section, One Ararat Boulevard, Harrisburg, PA 17110 within 30 days of this notice. Written comments should include the name, address and telephone number

of the person submitting the comments along with the reference number of the proposed permit.

The Department reserves the right to hold a public hearing on the proposed action based upon the information received during the comment period. The Department will provide notice of any scheduled public hearing at least 30 days in advance of the hearing. The hearing notice will be published in the *Pennsylvania Bulletin* and a newspaper of general circulation where the facility is located.

#### **Title V Operating Permit No. 32-00303**

##### **Indiana County**

Under 25 Pa. Code § 127.521, the Department of Environmental Protection (Department) intends to issue a Title V Operating Permit to The Consolidated Natural Gas Company for the Cherry Tree compressor station. Cherry Tree compressor station is located in Montgomery Township, Indiana County. The Consolidated Natural Gas Company representative to contact regarding this application is Sam Mathew, Engineer, RBSC—Environmental, CNG Transmission Corporation, 445 West Main Street, P. O. Box 2450, Clarksburg, WV 26302-2450.

The Cherry Tree compressor station is primarily used for the storage and distribution of natural gas. As a result of the levels of nitrogen oxides emitted, Cherry Tree is a major stationary source as defined in Title I, Part D of the Clean Air Act Amendments. The facility is therefore subject to the Title V permitting requirements adopted in 25 Pa. Code, Chapter 127, Subchapter G.

Copies of the application, the Department's analysis and other documents used in evaluation of the application are available for public inspection during normal business hours at the Department of Environmental Protection, 400 Waterfront Drive, Pittsburgh, PA 15222.

Persons wishing to provide the Department with additional information which should be considered prior to the issuance of this permit may submit the information to the Department at the address shown above. A 30-day comment period, from the date of this publication, will exist for the submission of comments. Each written comment must contain the following:

- Name, address and telephone number of the person submitting the comment.
- Identification of the proposed permit (specify permit No. 32-00303).
- Concise statements regarding the relevancy of the information or objections to issuance of the permit. A public hearing may be held, if the Department, in its discretion, decides that such a hearing is warranted based on the information received. All persons submitting comments or requesting a hearing will be notified of the decision to hold a hearing by publication in this newspaper or the *Pennsylvania Bulletin*, or by telephone, where the Department determines such notification by telephone is sufficient. Written comments or requests for a public hearing should be directed to Joseph Pezze, Regional Air Quality Program Manager, Department of Environmental Protection, Southwest Region—Field Operations, 400 Waterfront Drive, Pittsburgh, PA 15222-4745, (412) 442-4000.

For additional information contact Thomas J. Joseph, Air Pollution Control Engineer III, Air Quality Control, at the same address.

#### **Title V Operating Permits**

Under 25 Pa. Code § 127.521, the Department of Environmental Protection (Department) intends to issue a Title V Operating Permit to the following facilities. These facilities are major facilities subject to the operating permit requirements under Title V of the Federal Clean Air Act and 25 Pa. Code 127, Subchapters F (relating to operating permit requirements) and G (relating to Title V operating permit requirements).

Copies of the Title V application, proposed permit and other relevant information are available for public inspection, and additional information may be obtained by contacting the regional office noted below.

Interested persons may submit written comments, suggestions or objections concerning the proposed Title V permit to the regional office within 30 days of publication of this notice. Written comments, submitted to the Department during the 30-day public comment period shall include the name, address and telephone number of the person submitting the comments, along with the reference number of the proposed permit. The commentator should also include a concise statement of objections to the permit issuance and the relevant facts upon which the objections are based.

The Department reserves the right to hold a public hearing on the proposed action based upon the information received during the public comment period, and will provide notice of any scheduled public hearing at least 30 days in advance of the hearing. The hearing notice will be published in the *Pennsylvania Bulletin* and a newspaper of general circulation where the facility is located.

*Northeast Regional Office: Air Quality Program, 2 Public Square, Wilkes-Barre, PA 18711-0790. Attn: Michael S. Saffo.*

**54-00015. Sun Company, Inc.**, 1801 Market Street, 26/10 PC, Philadelphia, PA 19103-1699 for Tamaqua Terminal located in Rush Township, **Schuylkill County**. The facility's major source of emissions include storage tanks and truck loading racks, which primarily emit the following air contaminants: Volatile Organic Compound (VOC).

#### **State Only Operating Permit No. OP-56-00204**

Under 25 Pa. Code § 127.424, the Department of Environmental Protection (Department) intends to issue a facility-wide State Only Operating Permit to the Pennsylvania Department of Corrections for the State Correctional Institution at Somerset facility operating in Brothers Valley Township, Somerset County.

Permit conditions cover all equipment located at the facility, including six boilers. Maximum allowable annual emissions (after control) are established at less than 63 tons of NO<sub>x</sub>, 15.6 tons of CO, 22 tons of SO<sub>x</sub>, and 6.3 tons of PM<sub>10</sub>.

Copies of the application, the Department's analysis and other documents used in evaluation of the application are available for public inspection during normal business hours at the Department of Environmental Protection, 400 Waterfront Drive, Pittsburgh, PA 15222.

Persons wishing to provide the Department with additional information which should be considered prior to the issuance of this permit may submit the information to the Department at the address shown. A 30-day comment period, from the date of this publication, will exist for the submission of comments. Each written comment must contain the following:

- Name, address and telephone number of the person submitting the comment.
- Identification of the proposed permit (specify permit #OP-56-00204).
- Concise statements regarding the relevancy of the information or objections to issuance of the permit.

A public hearing may be held, if the Department, in its discretion, decides that such a hearing is warranted based on the information received. All persons submitting comments or requesting a hearing will be notified of the decision to hold a hearing by publication in this newspaper or the *Pennsylvania Bulletin*, or by telephone, where the Department of Environmental Protection determines such notification by telephone is sufficient. Written comments or requests for a public hearing should be directed to Joseph Pezze, Regional Air Quality Program Manager, Department of Environmental Protection, Southwest Region—Field Operations, 400 Waterfront Drive, Pittsburgh, PA 15222-4745, (412) 442-4000. For additional information contact Donald F. Rinald, Air Quality Control Engineer II, Air Quality Control, at the same address.

### **Title V Operating Permit**

**Permit No. 67-05007**

#### **York County**

The Department of Environmental Protection (Department) intends to issue a Title V Operating Permit No. 67-05007 to the Adhesives Research, Incorporated located in Springfield Township, York County.

Adhesives Research, Inc. is a major facility subject to the operating permit requirements of Title V of the Federal Clean Air Act and 25 Pa. Code, Chapter 127, Subchapters F (relating to operating permit requirements) and G (relating to Title V operating permit requirements). The facility's major sources include surface coaters which primarily emit VOC emissions.

Copies of the Title V application, proposed permit and other relevant information are available for public inspection at the Department's Southcentral Regional Office, One Ararat Boulevard, Harrisburg, PA 17110. An appointment to review the documents may be scheduled by contacting Mary DiSanto at (717) 540-5018 between 8 a.m. and 3:30 p.m., Monday through Friday, except holidays.

Interested persons may submit written comments, suggestions or objections to Kanubhai Patel, Chief, Title V Facilities Section, One Ararat Boulevard, Harrisburg, PA 17110 within 30 days of this notice. Written comments should include the name, address and telephone number of the person submitting the comments along with the reference number of the proposed permit.

The Department reserves the right to hold a public hearing on the proposed action based upon the information received during the comment period. The Department will give notice of any scheduled public hearing at least 30 days in advance of the hearing as per 25 Pa. Code § 127.521. The hearing notice will be published in the *Pennsylvania Bulletin* and a newspaper of general circulation where the facility is located.

### **Title V Operating Permit No. 67-05043**

#### **York County**

The Department of Environmental Protection (Department) intends to issue a Title V Operating Permit No. 67-05043 to the Crown Cork & Seal Company, Inc. located in Penn Township, York County.

Crown Cork & Seal Company, Inc. is a major facility subject to the operating permit requirements of Title V of the Federal Clean Air Act and 25 Pa. Code, Chapter 127, Subchapters F (relating to operating permit requirements) and G (relating to Title V operating permit requirements). The facility's major sources include surface coaters which primarily emit Volatile Organic Compounds and Hazardous Air Pollutants.

Copies of the Title V application, proposed permit and other relevant information are available for public inspection at the Department's Southcentral Regional Office, One Ararat Boulevard, Harrisburg, PA 17110. An appointment to review the documents may be scheduled by contacting Mary DiSanto at (717) 540-5018 between 8 a.m. and 3:30 p.m., Monday through Friday, except holidays.

Interested persons may submit written comments, suggestions or objections to Kanubhai Patel, Chief, Title V Facilities Section, One Ararat Boulevard, Harrisburg, PA 17110 within 30 days of this notice. Written comments should include the name, address and telephone number of the person submitting the comments along with the reference number of the proposed permit.

The Department reserves the right to hold a public hearing on the proposed action based upon the information received during the comment period. The Department will give notice of any scheduled public hearing at least 30 days in advance of the hearing as per 25 Pa. Code § 127.521. The hearing notice will be published in the *Pennsylvania Bulletin* and a newspaper of general circulation where the facility is located.

### **Philadelphia Air Management Services Notice of Intent to Approve**

#### **Construction and Operation of Soabar Products' Nine Station Flexographic Printing Press**

*Applicant:* Soabar Products

*Plant Location:* 7722 Dungan Road, Philadelphia, PA 19111

*Source Description:* Non heat-set web flexographic printing press

Soabar Products has requested an Air Management Services (AMS) Permit to construct and operate a nine station flexographic printing press. AMS is intending to approve, with conditions, the construction and operation of this press. Process allowable air emissions are included in facility wide limitations of less than 25 tons per 12 month rolling period for volatile organic compounds and less than 10 tons per 12 month rolling period for hazardous air pollutants (HAPs).

Copies of all documents and information concerning this permit are available for review in the offices of AMS, Room 218, 321 University Ave., Philadelphia, PA 19104-4543, during normal business hours. Persons wishing to review these documents or to submit written comments should contact Brenda Bonner (215) 685-7572 at the above address. Written comments must be received by August 20, 1997. Comments received by facsimile will not be considered.

### **PLAN APPROVALS**

Plan approval applications received under the Air Pollution Control Act (35 P. S. §§ 4001—4015) and regulations to construct, modify or reactivate air contamination sources and associated air cleaning devices.

*Regional Office: Northeast Regional Office, Bureau of Air Quality, 2 Public Square, Wilkes-Barre, PA 18711-0790.*

An application for Plan Approval has been received by this office for the construction, modification or reactivation of the air contamination sources and associated air cleaning devices described below for the specified companies.

Permit: **40-309-036A**

Source: PLG Glass Prod w/Scrub and Baghouse

Received: July 28, 1997

Company: **Schott Glass Technologies Inc.**

Location: Duryea Borough

County: **Luzerne**

Permit: **48-309-027E**

Source: Kiln/Mill/Cooler w/ESP and 2 Baghouses

Received: July 28, 1997

Company: **Essroc Cement Corporation**

Location: Nazareth Borough

County: **Northampton**

Permit: **48-309-040D**

Source: Cement Kiln 1 w/Electrostatic Pre

Received: July 23, 1997

Company: **Keystone Portland Cement Company**

Location: East Allen Township

County: **Northampton**

Permit: **48-309-041D**

Source: Cement Kiln 2 w/Electrostatic Pre

Received: July 23, 1997

Company: **Keystone Portland Cement Company**

Location: East Allen Township

County: **Northampton**

Permit: **48-313-080**

Source: Paint Mix & Kettles w/3 Baghouses

Received: July 24, 1997

Company: **Binney & Smith Incorporated**

Location: Forks Township

County: **Northampton**

Permit: **48-322-001B**

Source: Landfill Expansion /2 Gas Flairs

Received: July 22, 1997

Company: **Grand Central Sanitary Landfill**

Location: Plainfield Township

County: **Northampton**

Permit: **13-302-021G**

Source: Gordon Platt Boiler (#2 Oil/Pro)

Received: July 22, 1997

Company: **Champion Aviation Products**

Location: Weatherly Borough

County: **Carbon**

Permit: **13-302-022G**

Source: Eclipse Boiler (#2 Oil)

Received: July 22, 1997

Company: **Champion Aviation Products**

Location: Weatherly Borough

County: **Carbon**

Permit: **35-308-010B**

Source: 4 Battery Assembly w/4 Baghouses

Received: July 17, 1997

Company: **G N B Batteries Incorporated**

Location: Dunmore Borough

County: **Lackawanna**

Permit: **35-308-013A**

Source: 2 Paste Mix Systems w/2 Baghouses

Received: July 17, 1997

Company: **G N B Batteries Incorporated**

Location: Dunmore Borough

County: **Lackawanna**

Permit: **35-308-016B**

Source: 4 Lead Oxide Reactors/5 Baghouses

Received: July 17, 1997

Company: **G N B Batteries Incorporated**

Location: Dunmore Borough

County: **Lackawanna**

Permit: **39-313-027D**

Source: 8 ETO Sterilizers/Scrubber/Cat Ox

Received: July 29, 1997

Company: **Burron Medical Corporation**

Location: Hanover Township

County: **Lehigh**

Permit: **48-399-041**

Source: Building Vents w/6 Carbon Filters

Received: July 23, 1997

Company: **Bethlehem Apparatus Company Inc.**

Location: Hellertown Borough

County: **Northampton**

Permit: **54-302-032A**

Source: Cleaver Brooks Boiler DL60 #6 Oil

Received: July 16, 1997

Company: **Northeast Bleach & Dye Company**

Location: North Manheim Township

County: **Schuylkill**

*Regional Office: Southcentral Regional Office, Air Quality Program, One Ararat Boulevard, Harrisburg, PA 17110.*

**67-318-100C.** Modification of can coating lines No. 2 and No. 3 and associated interior can coating operations by **Crown, Cork & Seal Company** (1650 Broadway, Hanover, PA 17331) in Penn Township, **York County**.

*Regional Office: Southwest Regional Office, Bureau of Air Quality Control, 400 Waterfront Drive, Pittsburgh, PA 15222-4745.*

**PA-63-096B. Union Electric Steel Corporation** (P. O. Box 465, Carnegie, PA 15106) for an electric arc furnace at its Harmon Creek Plant located in Smith Township, **Washington County**.

**PA-63-096A. Union Electric Steel Corporation** (P. O. Box 465, Carnegie, PA 15106) for one forging and two annealing furnaces at its Harmon Creek Plant located in Smith Township, **Washington County**.

**PA-65-093B. Hyde Park Foundry** (P. O. Box 187, Railroad Street, Hyde Park, PA 15641) for an electric induction furnace at its Hyde Park Facility located in Hyde Park Borough, **Westmoreland County**.

**PA-65-173A. Teledyne Rodney Metals** (P. O. Box 302, Scottdale, PA 15683) for a replacement degreaser tank at its Stainless Steel Division facility located in Scottdale Borough, **Westmoreland County**.

**PA-11-421A. Conemaugh & Black Lick Railroad** (825 Iron Street, Johnstown, PA 15906) for a B & B Wheel Grinder at its Locomotive Repair Shop located in West Taylor Township, **Cambria County**.

**PA-65-788E. Sony Electronics, Inc.** (1001 Technology Drive, Mt. Pleasant, PA 15666) for a Direct View CRT manufacturing process at its Pittsburgh Manufacturing Center located in Mt. Pleasant Township, **Westmoreland County**.

**PA-32-297A. Creps United Publications** (1163 Water Street, P. O. Box 746, Indiana, PA 15701) for a printing press with Tec Dryers at its facility located in White Township, **Indiana County**.

**PA-26-486A. St. Jude Educational & Rehabilitation Services, Ltd.** (5340 National Pike, Markleysburg, PA 15459) for a human crematory at its facility located in Henry Clay Township, **Fayette County**.

**REASONABLY AVAILABLE CONTROL TECHNOLOGY**

**(RACT)**

**Applications received for Operating Permits under the Air Pollution Control Act (35 P. S. §§ 4001—4015) and regulations for an Operating Permit to comply with 25 Pa. Code § 129.91 for Reasonable Available Control Technology.**

*Regional Office: Southeast Regional Office, Bureau of Air Quality, Lee Park, Suite 6010, 555 North Lane, Conshohocken, PA 19428.*

There is a 30-day comment period from this date of publication.

The Department intends to issue an Air Quality Operating Permit for the air contaminant sources and associated air cleaning devices described for:

Permit: **OP-46-0122**

Source: Synthetic Minor NO<sub>x</sub> and VOC Facility

Company: **Unisys Corporation**

*Source*

- three 143 million BTU per hour vibragrate stoker bituminous coal-fired boilers (WCSP #1, 2 and 8) and one 155 million BTU per hour vibragrate stoker bituminous coal-fired boiler (WCSP #6)
- one 67.5 million BTU per hour natural gas/#2 fuel oil-fired boiler (WCSP #5)
- two 130 million BTU per hour natural gas/#2 fuel oil-fired boilers (ECSP #1 and 2)

One public hearing will be held for the purpose of receiving comments on the proposed operating permit and SIP revision. The hearing will be held on September 9, 1997 at 1 p.m. at the Department's Northcentral Regional Office, 208 West Third Street, Suite 101, Williamsport, PA. The public is invited to comment on the proposal. Persons interested in commenting are invited to appear at the public hearing.

Persons wishing to present testimony at the hearing should contact Daniel Spadoni at (717) 327-3659 at least 1 week in advance of the hearing to reserve a time to present testimony. Oral testimony will be limited to a maximum of 10 minutes per individual and two written copies of the oral testimony are requested. Each organization is requested to designate one witness to present testimony on its behalf.

Persons with a disability who wish to comment and require an auxiliary aid, service or other accommodations to do so should contact Daniel Spadoni at (717) 327-3659 or the Pennsylvania AT&T relay service at (800) 654-5984 (TDD) to discuss how the Department may accommodate their needs.

Location: Whitpain  
County: **Montgomery**

**Proposed Revision to the State Implementation Plan for Oxides of Nitrogen and Volatile Organic Compounds and Notice of Public Hearing**

**Centre County**

The Department of Environmental Protection (Department) has made a preliminary determination to approve a Reasonably Available Control Technology (RACT) plan and an amendment to the State Implementation Plan (SIP) for The Pennsylvania State University in College Township, Centre County.

The proposed SIP revision does not adopt any new regulations. It incorporates the provisions and requirements contained in the RACT approval for the facility to comply with current regulations.

The preliminary RACT determination, if finally approved, will be incorporated into an operating permit for the facility and will be submitted to the United States Environmental Protection Agency (EPA) as a revision to Pennsylvania's State Implementation Plan.

The following is a summary of the preliminary RACT determination for this facility:

*RACT Requirement/Limitation*

The nitrogen oxides emissions from these four boilers shall not, in aggregate, exceed a rate of .55 pounds per million BTU of heat input. Additionally, the University shall perform annual tuneups on each of the 4 boilers.

The nitrogen oxides emissions shall not exceed a rate of .15 pounds per million BTU of heat input. Additionally, the University shall perform annual tuneups on the boiler.

The nitrogen oxides emissions from each of these two boilers shall not exceed a rate of .20 pounds per million BTU of heat input nor shall the nitrogen oxides emissions from each of these boilers exceed a rate of 107.5 tons in any 12 consecutive month period. Additionally, the University shall perform annual tuneups on each of the two boilers.

Those unable to attend the hearing, but wishing to comment, should provide written comments to David W. Aldenderfer, Air Quality Environmental Program Manager, Department of Environmental Protection, 208 West Third Street, Suite 101, Williamsport, PA 17701-6448. Comments should be submitted by September 24, 1997.

All pertinent documents are available for review from 8 a.m. to 4 p.m. in the Northcentral Regional Office, 208 West Third Street, Suite 101, Williamsport, PA 17701. Appointments for scheduling a review must be made by calling (717) 327-3693.

**Grumman Olson, Division of Grumman Allied Industries**

The Department of Environmental Protection has made a preliminary determination to approve a Reasonably Available Control Technology (RACT) plan and an amendment to the State Implementation Plan (SIP) for a truck and van manufacturing facility owned and operated by Grumman Olson, Division of Grumman Allied Industries.

The proposed SIP revision does not adopt any new regulations. It incorporates the provisions and requirements contained in the RACT approval for the facility to comply with current regulations.



The preliminary RACT determination, if finally approved, will be incorporated into an operating permit for the facility and will be submitted to the United States Environmental Protection Agency (EPA) as a revision to Pennsylvania's State Implementation Plan.

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*Source*

- truck and van assembly operations (does not include surface coating or cleaning activities).
- organic solvent-using cleaning activities (other than surface coating equipment cleanup).
- surface coating equipment cleanup activities
- pallet reefer manufacturing operation

One public hearing will be held for the purpose of receiving comments on the proposed operating permit and SIP revision. The hearing will be held on September 9, 1997 at 1 p.m. at the Northcentral Regional Office, 208 West Third Street, Suite 101, Williamsport, PA. The public is invited to comment on the proposal. Persons interested in commenting are invited to appear at the public hearing.

Persons wishing to present testimony at the hearing should contact Daniel Spadoni at (717) 327-3659 at least 1 week in advance of the hearing to reserve a time to present testimony. Oral testimony will be limited to a maximum of 10 minutes per individual and two written copies of the oral testimony are requested. Each organization is requested to designate one witness to present testimony on its behalf.

Persons with a disability who wish to comment and require an auxiliary aid, service or other accommodations to do so should contact Daniel Spadoni at (717) 327-3659 or the Pennsylvania AT&T relay service at (800) 654-5984 (TDD) to discuss how the Department may accommodate their needs.

Those unable to attend the hearing, but wishing to comment, should provide written comments to David W. Aldenderfer, Air Quality Environmental Program Manager, Department of Environmental Protection, 208 West Third Street, Suite 101, Williamsport, PA 17701-6448. Comments should be submitted by September 24, 1997.

All pertinent documents are available for review from 8 a.m. to 4 p.m. in the Northcentral Regional Office, 208 West Third Street, Suite 101, Williamsport, PA 17701. Appointments for scheduling a review must be made by calling (717) 327-3693.

The following is a summary of the preliminary RACT determination for various volatile organic compound-emitting operations at this facility:

*RACT Requirement/Limitation*

volatile organic compound emissions shall not exceed 1.7 pounds per vehicle manufactured, on an average basis in any 12 consecutive month period, or a total of 8.5 tons in any 12 consecutive month period. Additionally, specific material management practices designed to reduce evaporative volatile organic compound loss must be employed.

volatile organic compound emissions shall not exceed 2.0 pounds per vehicle manufactured, on an average basis in any 12 consecutive month period, or a total of 10.0 tons in any 12 consecutive month period. Additionally, specific material management practices designed to reduce evaporative volatile organic compound loss must be employed.

volatile organic compound emissions shall not exceed 2.0 pounds per painted vehicle manufactured, on an average basis in any 12 consecutive month period, or a total of 10.0 tons in any 12 consecutive month period. Additionally, specific material management practices designed to reduce evaporative volatile organic compound loss must be employed.

volatile organic compound emissions shall not exceed 17.0 tons in any 12 consecutive month period. Additionally, specific material management practices designed to reduce evaporative volatile organic compound loss must be employed.

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**Northumberland County**

The Department of Environmental Protection has made a preliminary determination to approve a Reasonably Available Control Technology (RACT) plan and an amendment to the State Implementation Plan (SIP) for a pharmaceutical manufacturing facility (Cherokee Plant) owned and operated by Merck & Co., Inc. in Riverside Borough, Northumberland County.

The proposed SIP revision does not adopt any new regulations. It incorporates the provisions and requirements contained in the RACT approval for the facility to comply with current regulations.

The preliminary RACT determination, if finally approved, will be incorporated into an operating permit for the facility and will be submitted to the United States Environmental Protection Agency (EPA) as a revision to Pennsylvania's State Implementation Plan. The Department of Environmental Protection previously approved a RACT plan and issued (on May 22, 1996) a RACT operating permit but that plan and permit were restricted to the facility's four bituminous coal-fired boilers only. The plan and proposed permit now under consideration will address the remainder of the nitrogen oxides and volatile organic compound-emitting sources at the respective facility which are subject to the RACT requirements.

The following is a summary of the preliminary RACT determination for this facility:

- multiple hearth sludge incinerator—The nitrogen oxides emissions shall not exceed 26.5 tons in any 12 consecutive month period and the volatile organic compound emissions shall not exceed 5.6 tons in any 12 consecutive month period. Additionally, the burners associated with the incinerator shall be set to maintain an

exit gas temperature of at least 1400°F and routine maintenance and tuneups shall be performed.

- waste solvent incinerator—The nitrogen oxides emissions shall not exceed 8.0 tons in any 12 consecutive month period and the volatile organic compound emissions shall not exceed .1 tons in any 12 consecutive month period. Additionally, routine maintenance and tuneups shall be performed.

- trash incinerator—The nitrogen oxides emissions shall not exceed 2.2 tons in any 12 consecutive month period and the volatile organic compound emissions shall not exceed .7 tons in any 12 consecutive month period.

- wastewater treatment plant—The use of two wastewater cooling towers shall be eliminated and the remainder of the wastewater treatment plant equipment shall be operated so as to maximize the biodegradation of all dissolved volatile organic compounds contained in the wastewater. Additionally, the volatile organic compound emissions from the wastewater treatment plant shall not exceed 146.0 tons in any 12 consecutive month period.

- Xanthan gum process, Line #1—The company shall continue to operate the packed bed absorption scrubber associated with Xanthan gum process, Line #1. Additionally, the resultant volatile organic compound emissions shall not exceed 21.4 tons in any 12 consecutive month period.

- bulk storage tanks—Specific throughput limitations, volatile organic compound emission limitations and volatile organic compound control or minimization technology requirements (vapor balance, conservation vent or no control) are being established for 52 bulk storage tanks.

- fugitive emissions from Xanthan gum, Line #1—The fugitive volatile organic compound emissions shall be monitored at least once per calendar year and the sources of the fugitive emissions shall be repaired as needed.

One public hearing will be held for the purpose of receiving comments on the proposed operating permit and SIP revision. The hearing will be held on September 9, 1997 at 1 p.m. at the Northcentral Regional Office, 208 West Third Street, Suite 101, Williamsport, PA. The public is invited to comment on the proposal. Persons interested in commenting are invited to appear at the public hearing.

Persons wishing to present testimony at the hearing should contact Daniel Spadoni at (717) 327-3659 at least 1 week in advance of the hearing to reserve a time to present testimony. Oral testimony will be limited to a maximum of 10 minutes per individual and two written copies of the oral testimony are requested. Each organization is requested to designate one witness to present testimony on its behalf.

Persons with a disability who wish to comment and require an auxiliary aid, service or other accommodations to do so should contact Daniel Spadoni at (717) 327-3659 or the Pennsylvania AT&T relay service at (800) 654-5984 (TDD) to discuss how the Department may accommodate their needs.

Those unable to attend the hearing, but wishing to comment, should provide written comments to David W. Aldenderfer, Air Quality Environmental Program Manager, Department of Environmental Protection, 208 West Third Street, Suite 101, Williamsport, PA 17701-6448. Comments should be submitted by September 24, 1997.

All pertinent documents are available for review from 8 a.m. to 4 p.m. in the Northcentral Regional Office, 208 West Third Street, Suite 101, Williamsport, PA 17701. Appointments for scheduling a review must be made by calling (717) 327-3693.

## MINING

### APPLICATIONS TO CONDUCT COAL AND NONCOAL ACTIVITIES

#### MINING ACTIVITY APPLICATIONS

Applications under the Surface Mining Conservation and Reclamation Act (52 P. S. §§ 1396.1—1396.19a); the Noncoal Surface Mining Conservation and Reclamation Act (52 P. S. §§ 3301—3326); The Clean Streams Law (35 P. S. §§ 691.1—691.1001); the Coal Refuse Disposal Control Act (52 P. S. §§ 30.51—30.66); The Bituminous Mine Subsidence and Land Conservation Act (52 P. S. §§ 1406.1—1406.21). Mining activity permits issued in response to such applications will also address the applicable permitting requirements of the following statutes: the Air Pollution Control Act (35 P. S. §§ 4001—4015); the Dam Safety and Encroachments Act (32 P. S. §§ 693.1—693.27); and the Solid Waste Management Act (35 P. S. §§ 6018.101—6018.1003).

The following permit applications to conduct mining activities have been received by the Department of Environmental Protection (Department). A copy of the application is available for inspection at the District mining office indicated above each application. Where a 401 water quality certification is needed for any aspect of a particular proposed mining activity, the submittal of the permit application will serve as the request for such certification.

Written comments or objections, or requests for informal conferences on applications, may be submitted by any person or any officer or head of any Federal, State or local government agency or authority to the Department at the same address within 30 days of this publication, or within 30 days after the last publication of the applicant's newspaper advertisement, as provided by 25 Pa. Code §§ 77.121—77.123 and 86.31—86.34 (relating to public notices of filing of permit applications, opportunity for comment, and informal conferences).

Where any of the mining activities listed below will have discharges of wastewater to streams, the Department will incorporate NPDES permits into the mining activity permits issued in response to these applications. The NPDES permits will contain, at a minimum, technology-based effluent limitations (as described in the Department's regulations—25 Pa. Code §§ 77.522, 87.102, 88.92, 88.187, 88.242, 89.52 and 90.102) for iron, manganese, suspended solids, settleable solids, alkalinity and pH. In addition to the above, more restrictive effluent limitations, restrictions on discharge volume or restrictions on the extent of mining which may occur will be incorporated into a mining activity permit when necessary for compliance with water quality standards (in accordance with 25 Pa. Code Chapters 93 and 95). Persons or agencies which have requested review of the NPDES permit requirements for a particular mining activity within the above-mentioned public comment period will be provided with a 30-day period to review and submit comments on those requirements.

Written comments or objections should contain the name, address and telephone number of persons submitting comments or objections; application number; and a statement of sufficient detail to inform the Department

on the basis of comment or objection and relevant facts upon which it is based. Requests for an informal conference must contain the name, address and telephone number of requestor; application number; a brief summary of the issues to be raised by the requestor at the conference; and a statement whether the requestor desires to have the conference conducted in the locality of the proposed mining activities.

*Ebensburg District Office, 437 South Center Street, P. O. Box 625, Ebensburg, PA 15931-0625.*

*Coal Applications Received:*

**11970105. R.J.C. Kohl, Inc.** (P. O. Box 299, Nicktown, PA 15762), commencement, operation and restoration of bituminous strip mine in Susquehanna and West Carroll Townships, **Cambria County**, affecting 41 acres, receiving stream Fox Run and unnamed tributaries to Fox Run, application received July 23, 1997.

**56970103. Marquise Mining Corporation** (3889 Menoher Boulevard, Johnstown, PA 15905), commencement, operation and restoration of bituminous strip-auger mine in Shade Township, **Somerset County**, affecting 308.0 acres, receiving stream Fallen Timber Run to Stony Creek River, unnamed tributary to Stony Creek River and unnamed tributary to Fallen Timber Run, application received July 25, 1997.

**56920105.** Permit Renewal, **Sanner Energies, Inc.** (1179 Rockdale Road, Rockwood, PA 15557-6409), commencement, operation and restoration of bituminous strip mine in Southampton Township, **Somerset County**, affecting 100.2 acres, receiving stream discharges to unnamed tributaries to North Branch of Jennings Run, application received July 31, 1997.

**32860115.** Permit Renewal, **Paul F. Becker Coal Company** (1593 Old Route 22, Duncansville, PA 16635-9796), commencement, operation and restoration of bituminous strip mine in Banks Township, **Indiana County**, affecting 78.1 acres, receiving stream discharge to two unnamed tributaries to South Branch Bear Run and an unnamed tributary to Straight Run, application received July 31, 1997.

*Greensburg District Office, R. D. 2, Box 603-C, Greensburg, PA 15601.*

**65970105. M. B. Energy, Inc.** (P. O. Box 1319, Indiana, PA 15701-1319). Application received for commencement, operation and reclamation of a bituminous and limestone surface mine located in Derry Township, **Westmoreland County**, proposed to affect 146.0 acres. Receiving streams unnamed tributaries of Union Run to Union Run to Loyalhanna Creek to the Conemaugh River. Application received July 29, 1997.

**26920108R. T. L. Hill Coal Company** (R. D. 3, Box 690-A, Uniontown, PA 15401). Renewal application received for continued operation and reclamation of a bituminous surface mine located in Georges Township, **Fayette County**. Receiving streams York Run Watershed. Renewal application received August 4, 1997.

*McMurray District Office*

**11841604. RNS Services, Inc.** (P. O. Box 38, Blossburg, PA 16912), to renew the permit for the Lancashire #25 Prep Plant in Barr and West Carroll Townships, **Cambria County** to transfer from Lancashire Coal Co., no additional discharges. Application received June 19, 1997.

*Pottsville District Office, 5 West Laurel Boulevard, Pottsville, PA 17901-2454.*

**35970201. Archbald Power Corporation** (170 Power Boulevard, Archbald, PA 18403), commencement, operation and restoration of a coal refuse reprocessing operation in the City of Scranton, **Lackawanna County** affecting 26.8 acres, receiving stream none. Application received July 9, 1997.

**40970101. Robachele, Inc.** (P. O. Box 13, Long Pond, PA 18334), commencement, operation and restoration of an anthracite surface mine operation in Hughestown Borough, **Luzerne County** affecting 7.24 acres, receiving stream Susquehanna River. Application received July 11, 1997.

*Pottsville District Office, 5 West Laurel Boulevard, Pottsville, PA 17901-2454.*

*Noncoal Permits Received*

**09890301C6. Naceville Materials** (1371 West Street Road, P. O. Box 161, Warminster, PA 18974-0612), correction to an existing quarry in West Rockhill Township, **Bucks County** affecting 81.37 acres, receiving stream unnamed tributary to Ridge Valley Creek. Application received July 11, 1997.

**50820303C3. Pennsy Supply, Inc.** (P. O. Box 3331, 1001 Paxton Street, Harrisburg, PA 17105), renewal of NPDES Permit #PA0613169 in Spring Township, **Perry County**, receiving stream Little Buffalo Creek. Application received July 14, 1997.

**7075SM1C2. Pennsy Supply, Inc.** (P. O. Box 3331, 1001 Paxton Street, Harrisburg, PA 17105), renewal of an NPDES Permit #PA0612120 in Spring Township, **Perry County**, receiving stream Shermans Creek. Application received July 14, 1997.

**5273SM2C. Milestone Materials, Inc.** (P. O. Box 231, Easton, PA 18044-0231), renewal of NPDES Permit #PA0594130 in Thornbury Township, **Delaware County**, receiving stream Chester Creek and unnamed tributary to Chester Creek. Application received July 14, 1997.

**7775SM8A3C3. John T. Dyer Quarry** (R. R. 3, Box 188, Rock Hollow Road, Birdsboro, PA 19508), correction to an existing quarry operation in Robeson Township, **Berks County** affecting 296.1 acres, receiving stream Indian Corn Creek and Seidel Creek. Application received July 15, 1997.

**APPLICATIONS RECEIVED UNDER SECTION 401:  
FEDERAL WATER POLLUTION CONTROL ACT**

**ENCROACHMENTS**

The following permit applications and requests for Environmental Assessment approval and requests for water quality certification have been received by the Department of Environmental Protection.

In addition to permit applications, the Bureau of Dams, Waterways and Wetlands (BDWW) and the Regional Office Soils and Waterways Sections have assumed primary responsibility for processing requests for certification under section 401 of the Federal Water Pollution Control Act (33 U.S.C.A. § 1341(a)), for projects requiring both a Dam Safety and Encroachments Permit, and a United States Army Corps of Engineers (ACOE) permit. Section 401(a) of the Federal Water Pollution Control Act requires the State to certify that the involved projects will not violate the applicable provisions of 33 U.S.C.A. §§ 1301—1303, 1306 and 1307, as well as relevant State requirements. Initial requests for 401 certification will be published concurrently with the BDWW permit application. Persons objecting to approval of a request for certification under Section 401 or to the issuance of a

Dam Safety or Encroachment Permit, or the approval of Environmental Assessments must submit any comments, suggestions or objections within 30 days of the date of this notice as well as any questions to the Bureau or Field Office indicated as the responsible office.

**Applications filed under the Dam Safety and Encroachments Act (32 P. S. §§ 693.1—693.27), section 302 of the Flood Plain Management Act (32 P. S. § 679.302) and requests for certification under section 401 of the Federal Water Pollution Control Act.**

*Southeast Regional Office: Program Manager, Water Management Program, Lee Park, Suite 6010, 555 North Lane, Conshohocken, PA 19428.*

**E15-547.** Encroachment. **Tredyffrin Township**, 1100 Duportail Road, Berwyn, PA 19312. To remove an existing 16.5-foot single span bridge along Richard Road over Trout Creek, (WWF) and to install and maintain a low flow stream crossing consisting of triple cell precast concrete box culverts having a 16.5-foot × 4-foot center and 12-foot by 2.7-foot side cells. Work includes channel improvement extending approximately 90 feet downstream and 50 feet upstream. This site is located approximately 800 feet southwest from the intersection of Gulph and Richards Roads (Valley Forge, PA Quadrangle N: 16.3 inches; W: 6.7 inches) in Tredyffrin Township, **Chester County**.

**E15-546.** Encroachment. **Uwchlan Township**, 715 N. Ship Road, Exton, PA 19341. To construct and maintain a bituminous pedestrian trail along and across Shamona Creek (HQ, TSE, MF) and unnamed tributaries of Shamona Creek, and in the adjacent 100 year floodway which include the following activities:

- 1) The construction of five pedestrian bridges with the dimensions:
  - a) 52 feet long × 6.5 feet wide
  - b) 60 feet long × 10 feet wide
  - c) 68 feet long × 6.5 feet wide
  - d) 44 feet long × 6.5 feet wide
  - e) 25 feet long × 6.5 feet wide
- 2) The construction of an approximately 2,100 foot long trail within the 100 year floodway of Shamona Creek.
- 3) The construction of 160 linear feet of retaining walls.
- 4) The extension of two existing culverts:
  - a) 10 L. F. of 24-inch CMP
  - b) 4 L. F. of 18-inch CMP
- 5) To place approximately 50 linear feet of 18-inch CMP in and along an existing mill race.
- 6) To place fill in wetland (PFO) near Shamona Creek.

The project proposes 8,000 feet of walking trail connecting Shamona Creek Park with the Struble Trail and is located along Dowlin Forge Road (T-581) and Penypacker Road (Downingtown, PA Quadrangle N: 7.5 inches; W: 10.75 inches) in Uwchlan Township, **Chester County**.

*Northeast Regional Office: Regional Soils and Waterways Section, 2 Public Square, Wilkes-Barre, PA 18711-0790, (717) 826-5485.*

**Permit No. E35-286.** Encroachment. **Lackawanna County**, 200 Adams Avenue, Scranton, PA 18502. To remove the existing structure and to construct and maintain a 17-foot × 18-foot concrete box culvert in Rush Brook (CWF). The project is located on Jefferson Avenue

approximately 0.2 mile west of the intersection of S. R. 0107 and S. R. 1023 (Carbondale, PA Quadrangle N: 5.9 inches; W: 6.5 inches) in Jermyn Borough, **Lackawanna County** (Baltimore District, Army Corps of Engineers).

**Permit No. E35-287.** Encroachment. **Pennsylvania Department of Transportation**, District 4-0, P. O. Box 111, Scranton, PA 18501. To remove the existing structure and to construct and maintain a 15-foot × 7.5-foot concrete box culvert on an 80 degree skew in Elm Brook (CWF). The project which is located on S. R. 1013 approximately 0.5 mile southwest of the intersection of S. R. 1013 and S. R. 0107 (Carbondale, PA Quadrangle N: 15.3 inches; W: 16.5 inches) in Scott Township, **Lackawanna County** (Baltimore District, Army Corps of Engineers).

**Permit No. E35-288.** Encroachment. **Roy and Helen Cherundolo**, 630 Clark Street, Old Forge, PA 18518. To construct and maintain approximately 1,967 linear feet of channel change with lurk consisting of the excavation and placement of fill in and along St. Johns Creek (CWF) to contain the 100-year frequency flood flow. The project which is for the proposed Royale Estates residential subdivision is located west of the intersection of Villa Drive (Mine Road) in S. R. 3011 (Milwaukee Avenue) (Pittston, PA Quadrangle N: 21.0 inches; W: 0.25 inch) in Old Forge Borough, **Lackawanna County** (Baltimore District, Army Corps of Engineers).

**Permit No. E54-238.** Encroachment. **Lake Hauto Club**, R. R. 1, Nesquehoning, PA 18240. To dredge and place sand to restore an existing area known as Crescent Beach having a work area of 300 feet by approximately 70 feet along the northwestern shoreline of Lake Hauto. This project is located off S. R. 0054 approximately 2.8 miles east of S. R. 0309 (Tamaqua, PA Quadrangle N: 15.7 inches; W: 7.4 inches) in Rush Township, **Schuylkill County** (Philadelphia District, Army Corps of Engineers).

*Northcentral Region, Water Management, Soils and Waterways Section, F. Alan Sever, Chief, 208 West Third Street, Suite 101, Williamsport, PA 17701.*

**E59-348.** Encroachment. **Mansfield University**, 110 Brook Maintenance Building, Mansfield, PA 16933. To remove the existing structure and to construct and maintain a 4-foot × 8-foot × 40-foot long concrete box culvert, widen and riprap approximately 425 feet of trapezoidal channel which varies in width between 7'—8' and height between 4'—5' and to riprap 266 feet of existing trapezoidal channel. The drainage channel is located in and unnamed tributary to the Tioga River adjacent to Clinton Ave. approximately 0.5 mile southeast of the intersection of SR 6 and 15 (Mansfield, PA Quadrangle N: 9.2 inches; W: 9.6 inches) in Mansfield Borough, **Tioga County**. Estimated stream disturbance is 700 feet of waterway with no wetland impacts; stream classification is Warm Water Fishery.

*Northwest Regional Office: Soils and Waterways Section, 230 Chestnut Street, Meadville, PA 16335-3481, (814) 332-6942.*

**E10-268.** Encroachment. **Chicora Borough Sewer Authority**, P. O. Box 46, Chicora, PA 16025. To construct and maintain an 18-inch corrugated plastic stormwater outfall with associated rip rap and a 12-inch treated effluent outfall, cement covered gabion basket aeration cascade, and stone rip rap from the Chicora Borough Wastewater Treatment Facility into Buffalo Creek (HQ-CWF, trout stocked). The project is located on the west side of Buffalo Creek approximately 1,400 feet southeast

of the intersection of Fenelton Road (S. R. 1019) and S. R. 1011 (Chicora, PA Quadrangle N: 12.35 inches; W: 15.3 inches) located in Donegal Township, **Butler County**.

**E16-099.** Encroachment, **Elk Township**, R. R. 2, Box 87, Knox, PA 16232. To construct and maintain an extension of Soap Fat Road (T-410) through wetland then remove a damaged bridge which crosses Deer Creek (CWF). The new road will bisect a 0.83 acre non-exceptional value palustrine, broad leaved deciduous, forested and shrubbed, saturated wetland with a 0.27-acre wetland impact. The existing bridge and abutments will be removed to 1 foot below the existing stream channel. The proposed wetland impact is located immediately south of Soap Fat Road (T-410) (Fryburg, PA Quadrangle N: 1.15 inches; W: 13.3 inches) and the bridge is located approximately 500 feet west of the intersection of Old 322 (T-418) and Soap Fat Road (T-410) (Fryburg, PA Quadrangle N: 1.3 inches; W: 13.65 inches), with both sites being in Elk Township, **Clarion County**. The applicant proposes to contribute to the fund in lieu of replacement.

**E33-183.** Encroachment, **Jefferson County Commissioners**, Jefferson Place, 155 Main Street, Brookville, PA 15825. To construct and maintain a pre-stressed concrete adjacent box beam bridge with a clear span of 85 feet with a minimum underclearance of 5.09 feet on T-365 across Cathers Run (HQ-CWF trout stocked). The project will include a de minimis wetland impact associated with bridge alignment relocation. The project is located on T-365 across Cathers Run approximately 1.3 miles southwest of the intersection of S. R. 0036 and T-365. This project will replace the former bridge which was washed out during the July 16, 1996 flood (Cooksburg, PA Quadrangle N: 9.3 inches; W: 11.4 inches) located in Barnett Township, **Jefferson County**.

**E37-114.** Encroachment, **Plain Grove Township**, R. D. 3, Slippery Rock, PA 16057. To remove the existing 13.5 feet wide by 7 feet high concrete brodge and to construct and maintain a 13.5 feet wide by 7 feet high steel box culvert on T-543 (Rodgers Road) across a tributary to Jamison Run (CWF). The project is located on T-543 (Rodgers Road) across a tributary to Jamison Run approximately 700 feet south of the intersection of S. R. 1020 and T-543 (Rodgers Road) (Harlansburg, PA Quadrangle N10.7 inches; W: 0.1 inch) located in Plain Grove Township, **Lawrence County**.

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## ACTIONS

### FINAL ACTIONS TAKEN UNDER THE PENNSYLVANIA CLEAN STREAMS LAW AND THE FEDERAL CLEAN WATER ACT

#### [National Pollution Discharge Elimination System Program (NPDES)]

#### DISCHARGE OF CONTROLLED INDUSTRIAL WASTE AND SEWERAGE WASTEWATER

##### (Part I Permits)

The Department of Environmental Protection has taken the following actions on previously received permit applications and requests for plan approval and has issued the following significant orders.

Any person aggrieved by this action may appeal, under section 4 of the Environmental Hearing Board Act (35 P. S. § 7514), and 2 Pa.C.S. §§ 501—508 and 701—704 (relating to the Administrative Agency Law), to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P. O.

Box 8457, Harrisburg, PA 17105-8457, (717) 787-3483. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in Braille or on audio tape from the Secretary to the Board at (717) 787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

Persons with a disability who wish to attend the hearing and require an auxiliary aid, service or other accommodation to participate in the proceedings, should contact the specified program. TDD users may contact the Department through the Pennsylvania AT&T Relay Service at (800) 654-5984.

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### Actions under The Clean Streams Law (35 P. S. §§ 691.1—691.1001).

#### *Permits Issued*

*Northeast Regional Office: Water Management Program  
Manager, 2 Public Square, Wilkes-Barre, PA 18711-0790,  
(717) 826-2511.*

**Permit No. 3997201.** Industrial waste. **Northampton Borough Municipal Authority**, 717 Main Street, P. O. Box 156, Northampton, PA 18067-0156. Permit to modify the existing wastewater holding basin at the Northampton Water Treatment Plant, located in Whitehall Township, **Lehigh County**.

**NPDES Permit No. PA-0035637.** Sewage. **PA Department of Transportation**, Bureau of Design, 555 Walnut Street, Harrisburg, PA 17110-1900 is authorized to discharge from a facility (PA D.O.T. Rest Area No. 55) located in Greenfield Township, **Lackawanna County** to an unnamed tributary to the South Branch of Tunkhannock Creek.

**NPDES Permit No. PA-0063665. Municipal Separate Storm Sewer Permit.** City of Allentown, 112 Union Street, Allentown, PA 18102-4910 is authorized to discharge stormwater from the City of Allentown, located in **Lehigh County** to the Lehigh River, Little Lehigh Creek, Trout Creek, Cedar Creek, Little Cedar Creek and Jordan Creek.

**NPDES Permit No. PA-0040614.** Industrial waste. **Bethlehem Steel Corporation**, 1170 Eighty Avenue, Bethlehem, PA 18016-7699 is authorized to discharge from a facility located in Bethlehem City, **Lehigh County** to Monocacy Creek.

**NPDES Permit No. PA-0062715.** Industrial waste. **Sun Company, Inc.**, 1801 Market Street, Philadelphia, PA 19103 is authorized to discharge from a facility (Kingston Terminal) located in Edwardsville Borough, **Luzerne County** to an unnamed tributary of Toby Creek.

**NPDES Permit No. PA-0030619.** Sewerage. **Commonwealth of Pennsylvania, Fairview State Hospital**, P. O. Box 128, Waymart, PA 18472 is authorized to discharge from a facility located in Canaan Township, **Wayne County** to an unnamed tributary to Middle Creek.

*Northwest Regional Office: Regional Water Management  
Program Manager, 230 Chestnut Street, Meadville, PA  
16335, (814) 332-6942.*

**NPDES Permit No. PA 0014427.** Industrial waste. **Allegheny National Fish Hatchery**, R. D. 1, Box 1050, Warren, PA 16365 is authorized to discharge from a facility located in Glade Township, **Warren County** to the Allegheny River.

**NPDES Permit No. PA 0210072.** Sewage. **YMCA Camp Sherwin**, 8600 West Lake Road, Lake City, PA 16423 is authorized to discharge from a facility located in Girard Township, **Erie County**, to an unnamed tributary to Lake Erie.

**NPDES Permit No. PA 0209805.** Industrial waste. **Crawford Furniture Manufacturing Corporation**, P. O. Box 156, New Bethlehem, PA 16242 is authorized to discharge from a facility located in Redbank Township, **Clarion County** to Town Run.

**WQM Permit No. 4397409.** Sewerage. **Mark A. Stanek**, SRSTP, 6760 Seneca Road, Sharpsville, PA 16150. Construction of Mark A. Stanek SRSTP located in Pymatuning Township, **Mercer County**.

**WQM Permit No. 2597201.** Industrial waste. **Albion Borough Municipal Authority**, 15 Smock Avenue, Albion, PA 16401. This project is for the construction and operation of your proposed settling tank located in Conneaut Township, **Erie County**.

## INDIVIDUAL PERMITS

### (PAS)

The following approvals for coverage under NPDES Individual Permit for Discharge of Stormwater from Construction Activities have been issued.

These actions of the Department of Environmental Protection (Department) may be appealed to the Environmental Hearing Board (Board), Second Floor, Rachel Carson State Office Building, 400 Market Street, P. O. Box 8457, Harrisburg, PA 17105-8457, (717) 787-3483, by any aggrieved person under the Environmental Hearing Board Act (35 P. S. § 7514) and 2 Pa.C.S. §§ 501—508 and 701—704 (relating to the Administrative Agency Law). Appeals must be filed with the Board within 30 days from the date of this issue of the *Pennsylvania Bulletin* unless the appropriate statute provides a different time period. Copies of the appeal form and the Department's regulations governing practice and procedure before the Board may be obtained from the Board.

*Southeast Regional Office: Regional Water Management Program Manager, Lee Park, Suite 6010, 555 North Lane, Conshohocken, PA 19428-2233, (610) 832-6130.*

<i>NPDES Permit No.</i>	<i>Applicant Name and Address</i>	<i>County and Municipality</i>	<i>Receiving Stream</i>
PAS10-G264	Liberty Property Limited Partnership 65 Valley Stream Parkway Malvern, PA 19355	East Whiteland Twp. Chester County	Valley Creek
PAS10-G265	East Brandywine Twp. 1214 Horseshoe Pike Downingtown, PA 19355	East Brandywine Twp. Chester County	Tributary to Beaver Creek
PAS10-T066	Gross Equipment Co., Inc. 1200 Route 100 Bechtelsville, PA 19505	New Hanover Twp. Montgomery County	Minister Creek Tributary to Swamp Creek

*Southcentral Regional Office: Water Management Program, Soils and Waterways Section, One Ararat Boulevard, Room 126, Harrisburg, PA 17110, (717) 657-4590.*

**PAS-10-H067.** Individual NPDES. **Nicholas C. Mallios, Costopoulos, Billman & Mallios**, 850 N. Hanover Street, Carlisle, PA 17013. To implement an Erosion and Sedimentation Control Plan for construction of a hotel called Sleep Inn Carlisle on 14.3 acres in Carlisle Borough, **Cumberland County**. The project is located south of the north bound ramp of Interchange I-81 (Carlisle, PA Quadrangle N: 11.25 inches; W: 9.0 inches). Drainage will be to Letort Spring Run.

**PAS-10-H069.** Individual NPDES. **Spring United Telephone Company of PA**, 1201 Walnut Bottom Road, Carlisle, PA 17013. To implement an Erosion and Sedimentation Control Plan for a housing development called Spring Subdivision on 96.4 acres in South Middleton Township, **Cumberland County**. The project is located about 3/4 mile south west of interchange #13 of I-81 along the northside of Walnut Bottom Road (Carlisle, PA Quadrangle N: 10.1 inches; W: 14.0 inches). Drainage will be to Letort Spring Run and Conodoguinet Creek.

**PAS-10-I028.** Individual NPDES. **Department of Transportation**, District 8-0, 2140 Herr Street, Harrisburg, PA 17103-1699. To implement an Erosion and Sedimentation Control Plan for a highway project on 274 acres in Dauphin Borough and Middle Paxton and Reed

Townships, **Dauphin County**. The project is located from the Route 443/Route 22/322 intersection to approximately 2,000 feet south of the Clarks Ferry Bridge along Route 22/322 (Harrisburg West, PA Quadrangle N: 21.7 inches; W: 11.6 inches). Drainage will be to the Susquehanna River, Stony Creek, Clark Creek and Buck Run.

**PAS-10-Y051.** Individual NPDES. **Conway, Hutton & Shettel**, 37 Essex Road, Camp Hill, PA 17011. To implement an Erosion and Sedimentation Control Plan for a residential development known as Memphord Estates on 36.7 acres in Monaghan Township, **York County**. The project is located adjacent to Autumn Drive approximately 1/4 mile north of Siddonsburg Road (Lemoyne, PA Quadrangle N: 2.1 inches; W: 16.6 inches). Drainage will be to Stoney Creek.

**PAS-10-Y062.** Individual NPDES. **Southern York County School District**, P. O. Box 128, Glen Rock, PA 17327. To implement an Erosion and Sedimentation Control Plan for construction of an elementary school on 38.6 acres in Shrewsbury Borough and Township, **York County**. The project is located east of S. R. 3011 (Main Street) approximately 1/2 mile from S. R. 0851 intersection (Glen Rock, PA Quadrangle N: 1.9 inches; W: 7.3 inches). Drainage will be to a tributary Deer Creek.

*Northcentral Region, Water Management, Soils and Waterways Section, F. Alan Sever, Chief, 208 West Third St., Williamsport, PA 17701.*

<i>NPDES Permit No.</i>	<i>Applicant Name and Address</i>	<i>County and Municipality</i>	<i>Receiving Stream</i>
PAS10F060	Jerry B. Haney 15009 S. 24th Way Phoenix, AZ 85048	Centre County Halfmoon Twp.	Halfmoon Creek

**INDIVIDUAL PERMITS  
(PAR)**

The following parties have submitted Notices of Intent (NOI) for Coverage under General NPDES Permits to discharge wastewater into the surface waters of this Commonwealth. The Department of Environmental Protection approves the following coverages under the specified General Permit. This approval is subject to applicable effluent limitations, monitoring and reporting requirements and other conditions set forth in the respective General Permit.

The EPA Region III Regional Administrator has waived the right to review or object to this permit action under the waiver provision: 40 CFR 123.24.

The applications and related documents, effluent limitations and special conditions, and other information are on file and may be inspected and arrangements made for copying at the contact office noted.

List of NPDES General Permits issued by Department of Environmental Protection:

*NPDES  
General Permit Type*

PAG-1	General Permit For Discharges From Stripper Oil Well Facilities
PAG-2	General Permit For Discharges of Stormwater From Construction Activities
PAG-3	General Permit For Discharges of Stormwater From Industrial Activities
PAG-4	General Permit For Discharges From Single Residence Sewage Treatment Plant
PAG-5	General Permit For Discharges From Gasoline Contaminated Ground Water Remediation Systems
PAG-6	General Permit For Wet Weather Overflow Discharges From Combined Sewer Systems

<i>Facility Location County and Municipality</i>	<i>Permit No.</i>	<i>Applicant Name and Address</i>	<i>Receiving Stream or Body of Water</i>	<i>Contact Office and Telephone No.</i>
Lancaster County Manheim Township	PAR403505	Lancaster County Solid Waste Management Authority Jack D. Lausch, Jr. Transfer Station 1299 Harrisburg Pike P. O. Box 4425 Lancaster, PA 17604	UNT to Storm Sewer	Southcentral Regional Office 1 Ararat Boulevard Harrisburg, PA 17110 (717) 657-4590
Indiana County Armstrong Township	PAG046125	Kevin S. Frantz P. O. Box 148 Beyer, PA 16211	Mitchell Run Tributary to Crooked Creek	Southwest Regional Office Water Management Program Manager 400 Waterfront Drive Pittsburgh, PA 15222-4745 (412) 442-4000
Westmoreland County South Greensburg Borough	PAR806178	Ashland Brand Marketing P. O. Box 391 2000 Ashland Drive Ashland, KY 41114	Jacks Run	Southwest Regional Office Water Management Program Manager 400 Waterfront Drive Pittsburgh, PA 15222-4745 (412) 442-4000
Pymatuning Township Mercer County	PAG048449	Mark A. Stanek 6760 Seneca Rd. Sharpsville, PA 16150	Tributary to Brush Run	DEP Northwest Region Water Management 230 Water Street Meadville, PA 16335 (814) 332-6942

### SEWAGE FACILITIES ACT PLAN APPROVAL

The Department of Environmental Protection has taken the following actions on previously received permit applications and requests for plan approval and has issued the following significant orders.

Any person aggrieved by this action may appeal, under section 4 of the Environmental Hearing Board Act (35 P. S. § 7514), and 2 Pa.C.S. §§ 501—508 and 701—704 (relating to the Administrative Agency Law), to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P. O. Box 8457, Harrisburg, PA 17105-8457, (717) 787-3483. TDD users may contact the Board through the Pennsylvania Relay Service, (800) 654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in Braille or on audiotape from the Secretary to the Board at (717) 787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

#### Plan approval granted under the Pennsylvania Sewage Facilities Act (35 P. S. § 750.1—750.20).

*Regional Office: Water Management Program Manager, Southcentral Region, One Ararat Boulevard, Harrisburg, PA 17110.*

*Location: Hopewell Township, Huntingdon County, R. D. 1, Box 95, James Creek, PA 16657.*

The approved plan provided for construction of a pump station and collection system to provide public sewer service to the Pittstown area of Hopewell Township. Conveyance and treatment will be provided by Liberty Township and Saxon Borough respectively. Additionally, an onlot disposal system (OLDS) maintenance program will be implemented throughout the remainder of the Township. The Department's review of the sewage facilities update revision has not identified any significant environmental impacts resulting from this proposal. Any required NPDES Permits or WQM Permits must be obtained in the name of the municipality or authority as appropriate.

*Location: Ephrata Township, Lancaster County, 265 Akron Road, Ephrata, PA 17522.* The approved plan revision consists of a two lot commercial subdivision. A Wal Mart store will be constructed on Lot No. 1 and a small commercial use will occupy Lot No. 2. The total sewage flows of 8,565 gallons per day (gpd) (8,165 gpd for Lot No. 1, 400 gpd for Lot No. 2) of wastewater will be collected into holding tanks and pumped by Kline's Septic Service until capacity is available at the Ephrata Wastewater Treatment Plant. Plan revision granted July 28, 1997.

*Southwest Regional Office: Water Management Program Manager, 400 Waterfront Drive, Pittsburgh, PA 15222, (412) 442-4000.*

*Location: Riviera Mobile Home Park, right side of State Route 88, 1,050 feet north of the intersection of State Route 88 and West Pt. Marion Bridge, Dunkard Township, Greene County.*

*Project Description:* Approval of a revision to the Official Sewage Facility Plan of Dunkard Township, Greene County. Project involves the construction of a sewage treatment plant to serve the existing Riviera Mobile Home Park. This sewage facility will eliminate a malfunctioning onlot septic system. Treated effluent is to be discharged to the Monongahela River.

*Northwest Regional Office: Regional Water Management Program Manager, 230 Chestnut Street, Meadville, PA 16335-3481, (814) 332-6942.*

*Location: City of Titusville, Crawford County, 107 North Franklin Street, Titusville, PA 16354.*

*Project Description:* This approved project consists of a detailed sewer system evaluation survey to identify specific sewer system repair and replacement projects.

The Department's review of the sewage facilities update revision has not identified any significant environmental impacts resulting from this proposal.

*Location: Jay Township, Elk County, Jay Township Supervisors, P. O. Box 216, Weedville, PA 15868.*

*Project Description:* This approved project proposes construction of a conventional sewage collection and conveyance system to extend sanitary sewers to the Villages of Force and Byrnesdale as well as two small unsewered portions of Weedville. To accommodate the additional flows, the Weedville SBR/STP will be upgraded to 0.2 MGD.

The plan also proposes sewerage of the Villages of Caledonia and Scattertown under a separate schedule. In the interim, the Plan recommends that the Township create a modified onlot management program from a sample ordinance contained in the Plan.

The Department's review of the sewage facilities update revision has not identified any significant environmental impacts resulting from this proposal.

### SAFE DRINKING WATER

#### Actions taken under the Pennsylvania Safe Drinking Water Act (35 P. S. §§ 721.1—721.17).

*Southwest Regional Office: Regional Manager, Water Supply Management, 400 Waterfront Drive, Pittsburgh, PA 15222-4745, (412) 442-4000.*

**Permit No. 2688501.** Public water supply. **Municipal Authority of Westmoreland County**, Lincoln Highway West, Greensburg, PA 15601.

*Type of Facility:* Gibson Reservoir No. 2.

*Permit to Operate Issued:* July 17, 1997.

**Permit No. 1197502.** Public water supply. **Carrolltown Borough Municipal Authority**, P. O. Box 37, Carrolltown, PA 15722.

*Type of Facility:* Well No. 3 (Hoover Well).

*Permit to Construct Issued:* July 17, 1997.

**Permit No. 0389505-A3.** Public water supply. **Pennsylvania-American Water Company**, 800 West Hershey Park Drive, Hershey, PA 17033.

*Type of Facility:* Pre-treatment caustic soda feed system.

*Permit to Operate Issued:* July 21, 1997.

**Permit No. 0389505-A2.** Public water supply. **Pennsylvania-American Water Company**, 800 West Hershey Park Drive, Hershey, PA 17033.



*Type of Facility:* Zebra mussel treatment.

*Permit to Operate Issued:* July 21, 1997.

*Northwest Regional Office: Regional Manager, 230 Chestnut Street, Meadville, PA, (814) 332-6899.*

**Permit No. 1097502.** Public water supply. **Villa Vista Estates**, 526 Steiner Bridge Road, Valencia, PA 16059. This project consists of the addition of a new well (well no. 7) to an existing, permitted MHP in Buffalo Township, **Butler County**.

*Type of Facility:* Community Water Supply

*Consulting Engineer:* William J. McGarvey, McGarvey Engineering & Surveying, 172 Woodcrest Rd., Butler, PA 16002

*Permit to Construct Issued:* August 1, 1997.

**Permit No. 2097502.** Public water supply. **Eagle Crest Manor Mobile Home Park**, R. D. 5, Box 365, Meadville, PA 16335. This permit was issued for a newly created mobile home park which will consist of Well No. 1 in Union Township, **Crawford County**.

*Type of Facility:* Community Water Supply

*Consulting Engineer:* Richard A. Deiss, Richard A. Deiss & Associates, 9342 Pettis Rd., Meadville, PA 16335

*Permit to Construct Issued:* August 1, 1997.

## LAND RECYCLING AND ENVIRONMENTAL REMEDIATION

### Under Act 2, 1995

#### Preamble 3

**The following final reports were submitted under the Land Recycling and Environmental Remediation Standards Act (35 P. S. §§ 6026.101—6026.908).**

Provisions of Chapter 3 of the Land Recycling and Environmental Remediation Standards Act (act) require the Department of Environmental Protection (Department) to publish in the *Pennsylvania Bulletin* a notice of submission of any final reports. A final report is submitted to document cleanup of a release of a regulated substance at a site to one of the act's remediation standards. A final report provides a description of the site investigation to characterize the nature and extent of contaminants in environmental media, the basis for selecting the environmental media of concern, documentation supporting the selection of residential or nonresidential exposure factors, a description of the remediation performed, and summaries of sampling methodology and analytical results which demonstrate that the remediation has attained the cleanup standard selected.

For further information concerning the final report, please contact the Environmental Cleanup Program in the Department Regional Office under which the notice of receipt of a final report appears. If information concerning a final report is required in an alternative form, contact the community relations coordinator at the appropriate regional office listed. TDD users may telephone the Department through the AT&T Relay Service at (800) 654-5984.

The Department has received the following final reports:

*Southcentral Regional Office: Environmental Cleanup Program Manager, One Ararat Boulevard, Harrisburg, PA 17110, (717) 657-4592.*

**Highland Industrial Park**, Springettsbury Township, **York County**. Michael Carew, 110 East King Street, York, PA 17403 has submitted a Final Report concerning remediation of site soil and groundwater contaminated with BTEX and PHCs. The report is intended to document remediation or the site to meet the Statewide health standard.

*Northcentral Regional Office: Environmental Cleanup Program Manager, 208 West Third Street, Suite 101, Williamsport, PA 17701-6448, (717) 321-6525.*

**Agway, Inc.—Dalmatia Fertilizer**, Lower Mahonoy Township, **Northumberland County**. Agway Agricultural Products, Inc., P. O. Box 4741, Syracuse, NY 13221-4741 has submitted a Final Report addressing soil contaminated with PHCs. The report is intended to document remediation of the site to meet the Statewide health standard.

## SOLID AND HAZARDOUS WASTE

### LICENSE TO TRANSPORT HAZARDOUS WASTE

**License expired under the Solid Waste Management Act (35 P. S. §§ 6018.101—6018.1003) and regulations for license to transport hazardous waste.**

*Bureau of Land Recycling and Waste Management, Division of Hazardous Waste Management, P. O. Box 8471, Harrisburg, PA 17105-8471.*

**CMD Transportation, Inc.**, 13150 South Clackamas River Drive, Oregon City, OR 97045; License No. **PA-AH S244**; license expired on May 31, 1997.

**Renewal licenses issued under the Solid Waste Management Act (35 P. S. §§ 6018.101—6018.1003) and regulations for license to transport hazardous waste.**

*Bureau of Land Recycling and Waste Management, Division of Hazardous Waste Management, P. O. Box 8471, Harrisburg, PA 17105-8471.*

**Allwaste Transportation and Remediation, Inc.**, P. O. Box 150, San Martin, CA 95046; License No. **PA-AH 0395**; renewal license issued August 1, 1997.

**Burnham Service Company, Inc.**, 5000 Burnham Boulevard, Columbus, GA 31907; License No. **PA-AH S217**; renewal license issued July 24, 1997.

**Gulf South Systems, L.L.C.**, 500 Dakin Street, Jefferson, LA 70121; License No. **PA-AH 0482**; renewal license issued July 22, 1997.

**K&D Industrial Services, Inc.**, 30105 Beverly Road, Romulus, MI 48174; License No. **PA-AH 0320**; renewal license issued July 30, 1997.

**Rust & Sons Trucking, Inc.**, 15260 Willow Road, Lakeside, CA 92040; License No. **PA-AH 0496**; renewal license issued August 1, 1997.

**License issued under the Solid Waste Management Act (35 P. S. §§ 6018.101—6018.1003) and regulations for license to transport hazardous waste.**

*Bureau of Land Recycling and Waste Management, Division of Hazardous Waste Management, P. O. Box 8471, Harrisburg, PA 17105-8471.*

**Earth Protection Services, Inc.**, P. O. Box 23820, Phoenix, AZ 85063-3820; License No. **PA-AH 0570**, license issued July 28, 1997.

### OPERATE WASTE PROCESSING OR DISPOSAL AREA OR SITE

**Permits issued under the Solid Waste Management Act (35 P. S. §§ 6018.101—6018.1003), and regulations to operate solid waste processing or disposal area or site.**

*Southcentral Regional Office, Regional Solid Waste Program Manager, One Ararat Boulevard, Harrisburg, PA 17110, (717) 657-4588.*

**Permit No. 100113. Modern Landfill, Modern Trash Removal of York, Inc.** (R. D. #9, Mt. Pisgah Road, York, PA 17402). Application for modification of an existing Form R permit in Lower Windsor and Windsor Townships, **York County**. Permit issued in the Regional Office July 29, 1997.

### PREVIOUSLY UNPERMITTED CLASS OF SPECIAL HANDLING WASTE

#### INFECTIOUS OR CHEMOTHERAPEUTIC WASTE

**Renewal licenses issued under the Solid Waste Management Act (35 P. S. §§ 6018.101—6018.1003), the Infectious and Chemotherapeutic Waste Law (35 P. S. §§ 6019.1—6019.6) and regulations for license to transport infectious and chemotherapeutic waste.**

*Bureau of Land Recycling and Waste Management, Division of Hazardous Waste Management, P. O. Box 8471, Harrisburg, PA 17105-8471.*

**Medical Express & General Courier Service, Inc.**, 1078 Banksville Road, Pittsburgh, PA 15216; License No. **PA-HC 0056**; renewal license issued August 4, 1997.

## AIR POLLUTION

### OPERATING PERMITS

**Construct, modify or activate air contaminant sources**

**25 Pa. Code § 129.1**

**Operating Permits issued under the Air Pollution Control Act (35 P. S. §§ 4001—4015) and regulations to construct, modify, reactivate or operate air contamination sources and associated air cleaning devices.**

*Regional Office: Northeast Regional Office, Bureau of Air Quality, 2 Public Square, Wilkes-Barre, PA 18711-0790.*

The Department has issued the following Air Quality Operating Permits for the operation of the air contamination sources and associated air cleaning devices described below for the specified companies.

Permit: **45-310-014**  
Source: Stone Crushing Oper. w/Watersprays  
Company: **Haines & Kibblehouse Incorporated**  
Location: Smithfield Township  
County: **Monroe**

Permit: **48-000-020**  
Source: Mineral Wool Cupolas 1 & 2  
Company: **Mineral Fiber Specialists Inc.**  
Location: City of Bethlehem  
County: **Northampton**

Permit: **48-322-003**  
Source: Landfill Gas Flare  
Company: **Chrin Brothers Sanitary Landfill**  
Location: Williams Township  
County: **Northampton**

Permit: **66-310-008**  
Source: Sand and Gravel Operation  
Company: **Wyoming Sand & Stone Company**  
Location: Mehoopany Township  
County: **Wyoming**

**Title V Operating Permits issued under the Air Pollution Control Act (35 P. S. §§ 4001—4015) and regulations to operate air contamination sources and associated air cleaning devices.**

*Regional Office: Northeast Regional Office, Bureau of Air Quality, 2 Public Square, Wilkes-Barre, PA 18711-0790.*

The Department has issued the following Title V Operating Permits for the operation of the air contamination sources and associated air cleaning devices described below for the specified companies.

Permit: **39-000-022T**  
Source: Storage/Distribution Facility  
Company: **Sun Company Incorporated**  
Location: Whitehall Township  
County: **Lehigh**

Permit: **40-000-011T**  
Source: Three Anthracite Coal Fired Boilers  
Company: **Commonwealth of Penna/Chase**  
Location: Jackson Township  
County: **Luzerne**

Permit: **40-000-017T**  
Source: Two Turbines  
Company: **Penna Power & Light Company**  
Location: Laflin Borough  
County: **Luzerne**

### PLAN APPROVALS

**Plan Approvals issued under the Air Pollution Control Act (35 P. S. §§ 4001—4015) and regulations to construct, modify, reactivate or operate air contamination sources and associated air cleaning devices.**

*Regional Office: Northeast Regional Office, Bureau of Air Quality, 2 Public Square, Wilkes-Barre, PA 18711-0790.*

A Plan Approval has been issued by this office for the construction, modification, reactivation or operation of the air contamination sources and associated air cleaning devices described below for the specified companies.

Permit: **35-318-076A**  
Source: Crank Shaft Plating w/Scrubber  
Issued: July 29, 1997  
Company: **Precision National Corporation**  
Location: Abington Township  
County: **Lackawanna**

Permit: **39-302-156**  
Source: Boilers 3 & 4/#6 Oil & By-product  
Issued: July 24, 1997  
Company: **Mallinckrodt Chemical Inc.**  
Location: South Whitehall Township  
County: **Lehigh**

*Regional Office: Southcentral Regional Office, Air Quality Program, One Ararat Boulevard, Harrisburg, PA 17110.*

**36-308-021F:** On July 29, 1997, the Department issued a Plan Approval to **C & D Charter Power Systems, Inc.** (82 East Main Street, Leola, PA 17540) for the installation of a grid casting facility in Upper Leacock Township, **Lancaster County**. The grid casting facility is subject to 40 CFR 60, Subpart KK of the Standards of Performance for New Stationary Sources.

*Regional Office: Southwest Regional Office, Bureau of Air Quality, 400 Waterfront Drive, Pittsburgh, PA 15222-4745.*

**PA-30-109A:** On June 27, 1997 a Plan Approval was issued to **Equitrans, L. P.** (3500 Park Lane, Pittsburgh, PA 15275) for a dehydration unit at its Rogersville Station No. 29 facility located in Center Township, **Greene County**.

**PA-65-137A:** On June 27, 1997 a Plan Approval was issued to **Allegheny Ludlum Corporation** (100 River Road, Brackenridge, PA 15014) for a Candle Fiber Bed Filter on the Sendzimer Cold Rolling Mill at its Vandergrift Plant located in Vandergrift Borough, **Westmoreland County**.

**26-310-017:** On June 27, 1997, a Plan Approval expiration date was extended to October 1, 1997 for **Amerikohl Mining, Inc.** (P. O. Box 427, Acme, PA 15610) for a portable stone crusher at its Jim Mountain Quarry facility located in Springfield Township, **Fayette County**.

**63-307-027:** On June 27, 1997 a Plan Approval expiration date was extended to October 31, 1997 for **American Iron Oxide Company** (Foster Plaza 7, 661 Anderson Drive, Pittsburgh, PA 15220) for a baghouse and scrubbers on the iron oxide production process at its Allenport Plant located in Allenport Borough, **Washington County**.

**04-309-038:** On June 27, 1997, a Plan Approval expiration date was extended to September 30, 1997 for **Eastroc LCC** (P. O. Box 158, Shippingport, PA 15077) for a baghouse and bin vents on the MG-Lime forced oxidation system at its Shippingport Plant facility located in Shippingport Borough, **Beaver County**.

**26-310-018:** On July 24, 1997, a Plan Approval expiration date was extended to November 30, 1997 for **Davison Sand & Gravel Company** (400 Industrial Boulevard, New Kensington, PA 15068) for a limestone crushing process at its Connellsville II Quarry located in Bullskin Township, **Fayette County**.

**26-305-034:** On July 24, 1997, a Plan Approval expiration date was extended to November 30, 1997 for **Matt Canestrone Contracting, Inc.** (P. O. Box 234, Belle Vernon, PA 15012) for a loading/unloading/stockpiling process at its Labelle Site located in Luzerne Township, **Fayette County**.

**65-000-860:** On July 24, 1997, a Plan Approval expiration date was extended to October 1, 1997 for **Fansteel Hydro Carbide** (P. O. Box 363, Latrobe, PA 15650) for a Rota-Cone vacuum mixer/drier at its Latrobe Plant located in Unity Township, **Westmoreland County**.

**04-307-073C:** On July 24, 1997, a Plan Approval expiration date was extended to December 1, 1997 for **Koppel Steel Corporation** (P. O. Box 750, Beaver Falls, PA 15010) for a fabric filter on the Multi-lance Manipulator at its Koppel Plant located in Koppel Borough, **Beaver County**.

## MINING

### APPROVALS TO CONDUCT COAL AND NONCOAL ACTIVITIES

Section 702 of The Bituminous Coal Mine Act (52 P. S. §§ 701—702), provides a mechanism for operators to obtain variances from specific requirements of the act to accommodate the adoption of new machinery, equipment, tools, supplies, methods or processes. The Bureau of Deep Mine Safety has approved a variance request from the **Cyprus Cumberland Resources Corporation** to extend the maximum distance between shelter holes to 130 feet along main line haulage entries at the Cumberland Mine.

Copies of this variance approval can be obtained by contacting Richard E. Stickler, Director, Bureau of Deep Mine Safety, P. O. Box 8463, Harrisburg, PA 17105-8463.

### MINING ACTIVITY ACTIONS

Actions on applications under the Surface Mining Conservation and Reclamation Act (52 P. S. §§ 1396.1—1396.19a); the Noncoal Surface Mining Conservation and Reclamation Act (52 P. S. §§ 3301—3326); The Clean Streams Law (35 P. S. §§ 691.1—691.1001); the Coal Refuse Disposal Control Act (52 P. S. §§ 30.51—30.66); The Bituminous Mine Subsidence and Land Conservation Act (52 P. S. §§ 1406.1—1406.21). The final action on each application also constitutes action on the request for 401 water quality certification. Mining activity permits issued in response to such applications will also address the applicable permitting requirements of the following statutes: the Air Quality Control Act (35 P. S. §§ 4401—4015); the Dam Safety and Encroachments Act (32 P. S. §§ 693.1—693.27); and the Solid Waste Management Act (35 P. S. §§ 6018.101—6018.1003).

*Ebensburg District Office, 437 South Center Street, P. O. Box 625, Ebensburg, PA 15931-0625.*

#### Coal Applications Issued:

**11840112, Permit Renewal. C & K Coal Company** (P. O. Box 69, Clarion, PA 16214), commencement, operation and restoration of a bituminous strip mine, valid for reclamation, only in Reade Township, **Cambria County**, affecting 143.0 acres, receiving stream Muddy Run to Clearfield Creek to West Branch of the Susquehanna, application received May 27, 1997, permit issued July 23, 1997.

**32950108, T.L.H. Coal Company** (R. D. 1, Box 170, Rochester Mills, PA 15771), commencement, operation and restoration of a bituminous strip-auger mine in East Mahoning Township, **Indiana County**, affecting 52.6 acres, receiving stream Dixon Run and unnamed tributaries to Rayne Run, application received December 14, 1995, permit issued July 29, 1997.

*Greensburg District Office, R. D. 2, Box 603-C, Greensburg, PA 15601.*

**03950101. FNR Mining Company** (950 Stonebreaker Road, Indiana, PA 15701). Permit revised to add 5.0 acres, as well as a sedimentation pond and associated ditches, at a bituminous surface/auger mining site located in Burrell and Kittanning Townships, **Armstrong County**, now affecting 67.9 acres. Receiving streams: unnamed tributary to Horney Camp Run to Crooked Creek to the Allegheny River. Application received: May 21, 1997. Revision issued: July 31, 1997.

**26920107R. Amerikohl Mining, Inc.** (202 Sunset Drive, Butler, PA 16001). Renewal issued for continued

reclamation only of a bituminous surface mining site located in Wharton Township, **Fayette County**, affecting 168 acres. Receiving streams: an unnamed tributary to Little Sandy Creek and an unnamed tributary to Big Sandy Creek. Application received: July 7, 1997. Renewal issued: August 1, 1997.

*McMurray District Office*

**37961302. Senate Coal Mines, Inc.** (P. O. Box 972, Latrobe, PA 15650), to operate the Ondo Mine in Brush Valley Township, **Indiana County**, new mine, Ferrier Run. Permit issued July 30, 1997.

*Pottsville District Office, 5 West Laurel Boulevard, Pottsville, PA 17901-2454.*

**54830101T2. K & K Coal Company** (133 Valley Furnace Avenue, Port Carbon, PA 17965), transfer of an existing anthracite surface mine operation in Blythe Township, **Schuylkill County** affecting 176.0 acres, receiving stream—unnamed tributary to the Schuylkill River. Transfer issued July 31, 1997.

*Pottsville District Office, 5 West Laurel Boulevard, Pottsville, PA 17901-2454.*

*Noncoal Permits Issued*

**7975SM5A3C5. Warner Company** (600 Tyburn Road, Morrisville, PA 19067), renewal of NPDES Permit #PA0118338 in Falls Township, **Bucks County**, receiving stream—Delaware Canal. Renewal issued July 29, 1997.

*Pottsville District Office, 5 West Laurel Boulevard, Pottsville, PA 17901-2454.*

*General Small Noncoal Authorizations Granted*

**58970835. David B. Salsman, Sr.** (R. R. 3, Box 179, Meshoppen, PA 18630), commencement, operation and restoration of a small bluestone quarry operation in Rush Township, **Susquehanna County** affecting 1.0 acre, receiving stream—none. Authorization granted July 28, 1997.

**58970842. Raymond Treible** (R. R. 2, Box 155, Susquehanna, PA 18847), commencement, operation and restoration of a small bluestone quarry operation in Oakland Township, **Susquehanna County** affecting 1.0 acre, receiving stream—none. Authorization granted July 28, 1997.

**58970846. John DiMichele** (R. R. 2, Box 106A, Laceyville, PA 18623), commencement, operation and restoration of a small bluestone quarry operation in Auburn Township, **Susquehanna County** affecting 1.0 acre, receiving stream—none. Authorization granted July 28, 1997.

**ACTIONS TAKEN UNDER SECTION 401: FEDERAL WATER POLLUTION CONTROL ACT ENCROACHMENTS**

The Department of Environmental Protection has taken the following actions on previously received permit applications, requests for Environmental Assessment approval, and requests for Water Quality Certification under section 401 of the Federal Water Pollution Control Act (33 U.S.C.A. § 1341(a)).

Any person aggrieved by this action may appeal, under section 4 of the Environmental Hearing Board Act (35 P. S. § 7514), and 2 Pa.C.S. §§ 501—508 and 701—704 (relating to the Administrative Agency Law) to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, P. O. Box 8457, Harrisburg, PA 17105-8457, (717) 787-3483. TDD users may contact the

Board through the Pennsylvania Relay Service, (800) 654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rule of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in Braille or on audiotape from the Secretary to the Board at (717) 787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

**Actions on applications filed under the Dam Safety and Encroachments Act (32 P. S. §§ 693.1—693.27) and section 302 of the Flood Plain Management Act (32 P. S. § 679.302) and sections 5 and 402 of The Clean Streams Law (35 P. S. §§ 691.5 and 691.402) and notice of final action for certification under section 401 of the Federal Water Pollution Control Act (33 U.S.C.A. § 1341(a)).** (Note: Permits issued for Small Projects do not include 401 Certification, unless specifically stated in the description).

*Permits Issued and Actions on 401 Certifications:*

*Southeast Regional Office, Program Manager, Water Management Program, Lee Park, Suite 6010, 555 North Lane, Conshohocken, PA 19428.*

**E46-766.** Encroachment Permit. **Manufacturer's Golf and Country Club**, Box 90, Dreshertown Road, Oreland, PA 19075. To modify, operate and maintain a golf course foot cart bridge across Sandy Run (WWF) and to construct and maintain a 90-foot long retaining wall along Sandy Run (WWF) near the 18th Fairway, at the Manufacturer's Golf and Country Club property. The site is located at 511 Dreshertown Road (Ambler, PA Quadrangle N: 0.2 inch; W: 6.6 inches), in Upper Dublin Township, **Montgomery County**.

*Northeast Regional Office, Regional Soils and Waterways Section, 2 Public Square, Wilkes-Barre, PA 18711-0790, (717) 826-5485.*

**E45-313.** Encroachment. **Keystone Hollow Corporation**, P. O. Box 1158, Marshalls Creek, PA 18335-1158. To give its consent to place fill in wetlands for the construction of a golf tee (Hole No. 14) and to construct and maintain facilities associated with the Great Bear Golf Course as follows: (1) a 24-inch CMP screened intake structure in a pond for irrigation; (2) approximately 150 linear feet of riprap-lined channel change in a Tributary to Sand Hill Creek (associated with "Crossing 2"); (3) approximately 140 linear feet of riprap-lined channel change in a Tributary to Sand Hill Creek (associated with "Crossing 3"); and (4) a road crossing of a Tributary to Sand Hill Creek and adjacent wetlands, utilizing a 36-inch or 43-inch x 27-inch CMP. The activities impact approximately 0.33 acre of wetlands. The project is located along Keystone Road (T-550), south of S. R. 0209 (Bushkill, PA-NJ Quadrangle N: 9 inches; W: 9 inches), in Middle Smithfield Township, Monroe County. Permittee is required to provide 0.56 acre of replacement wetlands by creating 0.34 acre and providing for 0.22 acre by participating in the Pennsylvania Wetland Replacement Project.

**E45-316.** Encroachment. **Stillwater Lakes Civic Association, Inc.**, P. O. Box 118, Pocono Summit, PA 18346. To give its consent to remove the existing structures and to construct and maintain a 22-foot x 45-foot reinforced concrete box culvert in Hawkey Run. The project is located along Holiday Drive in Stillwater Lake Estates on

the east side of S. R. 0380, approximately 1.9 miles north of the intersection of S. R. 0380 and S. R. 0940 (Tobyhanna, PA Quadrangle N: 1.6 inches; W: 3.3 inches) in Coolbaugh Township, **Monroe County**.

**E48-252.** Encroachment. **City of Easton/Hugh Moore Park Commission**, City Hall, One South 3rd Street, Easton, PA 18042. To repair and maintain various aspects of a 2.5 mile section of the Lehigh Canal, situated in Hugh Moore Park, to preserve the functional canal system for historical, educational and recreational purposes as described in the attached list. The project begins approximately 0.8 mile upstream from S. R. 2012 and continues downstream to the intersection of Canal and Stewart Streets (Easton, PA-NJ Quadrangle N: 8.4 inches; W: 15.6 inches) in the City of Easton, **Northampton County**.

**E54-229.** Encroachment. **Port Carbon Borough**, P. O. Box 71, Port Carbon, PA 17965. To give its consent to remove the existing structure and to construct and maintain a single-span, concrete, adjacent, box-beam bridge having a span of 50 feet and an underclearance of 8 feet across Mill Creek. This project is located along Washington Street south of the intersection with Canal Street (Pottsville, PA Quadrangle N: 13 inches; W: 6 inches) in Port Carbon Borough, **Schuylkill County**.

*Northcentral Region, Water Management—Soils and Waterways, F. Alan Sever, Chief, 208 West Third St., Williamsport, PA 17701.*

**E08-314.** Encroachment. **Pa. Dept. of Transportation**, 715 Jordan Ave., Montoursville, PA 17754. To remove the existing structure and to construct and maintain a 10 foot long outlet section of 72 inch diameter CMP pipe along with a new gabion basket headwall and outlet rock protection in Wallace Run on S. R. 4007 about 1.75 miles north of the Rt. 6 intersection with S. R. 4007 (Ulster, PA Quadrangle N: 9.8 inches; W: 13.7 inches) in Burlington Township, **Bradford County**. This permit was issued under Section 105.13(e) "Small Projects." This permit also includes 401 Water Quality Certification.

**E08-315.** Encroachment. **Mountain Hardwood Inc.**, R. R. 3, Box 3130, Rome, PA 18837. To remove a vegetated gravel bar 250 feet long x 31 feet wide and to restore and maintain the stream banks in the removal area for the purpose of flood control in Wysox Creek on S. R. 187 (Rome, PA Quadrangle N: 21.40 inches; W: 10.50 inches) in Rome Township, **Bradford County**. This permit was issued under Section 105.13(e) "Small Projects." This permit also includes 401 Water Quality Certification.

**E19-165.** Encroachment. **Romaine E. Grasley**, R. R. 1, Box 21, Benton, PA 17814. To construct and maintain 12 16-inch concrete piers in the floodway of Fishing Creek to support a 24 foot by 36 foot private 2 story residential house above the 100 year flood elevation located approximately 240 feet east of the S. R. 254 bridge over Fishing Creek (Bloomsburg, PA Quadrangle N: 9.5 inches; W: 1.5 inches) in Benton Township, **Columbia County**. This permit was issued under Section 105.13(e) "Small Projects."

**E41-404.** Encroachment. **Muncy Borough**, 14 N. Washington St., Muncy, PA 17756. To remove the deposits of gravel for a distance of approximately 5,000-feet and maximum depth of 2.5 feet for a total removal of approximately 9,000-cubic yards from Glade Run from 1,000-feet downstream of the Main St. bridge to 200-feet upstream of Penn Street bridge for the purpose of flood control over a period of 5 years and repair existing, or install new

riprap and maintain both as necessary for streambank protection (Muncy, PA Quadrangle N: 14.9 inches; W: 4.8 inches) in Muncy Borough and Muncy Creek Township, **Lycoming County**.

**E47-059.** Encroachment. **Speedex Industries Inc.**, James Paugh, P. O. Box 241, Danville, PA 17821. To remove soil deposits which resulted from flooding for a length of 800 feet and average width of 6 feet and average depth of 2 feet 6 inches in an unnamed trib. to Chillisquaque Creek on the north side of S. R. 254 about 2,400 feet west of the intersection of S. R. 54 (Washingtonville, PA Quadrangle N: 8.6 inches; W: 8.05 inches) in Derry Township, **Montour County**. This permit was issued under Section 105.13(e) "Small Projects." This permit also includes 401 Water Quality Certification.

**E47-061.** Encroachment. **Pa. Dept. of Transportation**, 715 Jordan Ave., Montoursville, PA 17754. To remove the existing structure and to construct and maintain a prestressed adjacent box beam bridge having a normal span of 37.9 feet and an average underclearance of 6.0 feet over County Line Branch on S. R. 4001 approximately 0.1 mile west of the village of Comly (Washingtonville, PA Quadrangle N: 22.5 inches; W: 14.5 inches) in Anthony Township, **Montour County**.

**E49-207.** Encroachment. **Pa. Dept. of Transportation**, P. O. Box 218, Montoursville, PA 17754. To remove the existing structure and to construct and maintain a precast reinforced concrete box culvert skewed 50 degrees left ahead having a clear normal span of 16.0 feet and a minimum underclearance of 4.5 feet in County Line Branch located on the Lewis/Anthony township boundary line on S. R. 1010. Section 001, Segment 0080 (Hughesville, PA Quadrangle N: 5.6 inches; W: 14.6 inches) in Lewis Township and Anthony Township, **Northumberland County** and **Montour County**. This permit was issued under Section 105.13(e) "Small Projects." This permit also includes 401 Water Quality Certification.

**E55-143.** Encroachment. **PG Energy**, 39 Public Square, Wilkes-Barre, PA 18711. To construct and maintain a 12 inch steel gas main under Penns Creek. This project is located 290 feet west of S. R. 522 (Sunbury, PA Quadrangle N: 11.7 inches; W: 14.7 inches) in Monroe and Penn Townships, **Snyder County**.

*Northwest Regional Office, Soils and Waterways Section, 230 Chestnut Street, Meadville, PA 16335-3481, (814) 332-6942.*

**E10-259.** Encroachment. **PA Department of Transportation, District 10-0**, P. O. Box 429, Route 286 South, Indiana, PA 15701. To remove the existing steel truss bridge and to construct and maintain a prestressed concrete adjacent box beam bridge having two clear spans of 78.26 feet and an average underclearance of 17 feet across Connoquenessing Creek on S. R. 0288, Segment 0030, Offset 0000 approximately 3,600 feet west of S. R. 0019 (Zelienople, PA Quadrangle N: 8.0 inches; W: 3.5 inches) located in the Borough of Zelienople, **Butler County**. This project will include temporary relocation of the existing steel truss bridge to immediately upstream of its present location.

**E25-544.** Encroachment. **Metro Health Center**, 252 West 11th Street, Erie, PA 16501. To fill a total of 1.22 acres of seven wetland areas for the construction of medical/commercial offices, retail facilities and senior living facilities at the northeast corner of Zuck Road and Zimmerly Road approximately 2,000 feet west of I-79 (Erie South, PA Quadrangle N: 12.0 inches; W: 1.0 inch) in Millcreek Township, **Erie County**. This project in-

cludes creation of 1.84 acres of replacement wetlands adjacent to an existing wetland at the northeast portion of the

**E27-055.** Encroachment. **PA Department of Transportation, District 1-0**, 1140 Liberty Street, Franklin, PA 16323. To install concrete streambed paving 1-foot below the existing streambed, rock riprap scour protection and to maintain the existing bridge having a clear span of 8 feet and an underclearance of 5.5 feet across a tributary to Little Hickory Creek on S. R. 3004, Segment 0040, Offset 0000 approximately 1 mile east of S. R. 0062 just south of West Hickory (West Hickory, PA Quadrangle N: 10.1 inches; W: 3.5 inches) located in Hickory Township, **Forest County**. This permit was issued under Section 105.13(e) "Small Projects." This permit also includes 401 Water Quality Certification.

**E61-209.** Encroachment. **The Conair Group**, Route 8 North, Franklin, PA 16323. To fill a total of 0.3 acre of four separate wetland areas (including the 0.056 acre filled prior to this permit) for the construction of a parking area associated with expansion of an existing industrial facility along the north side of S. R. 0008/0062 approximately 0.7 mile east of S. R. 0322 (Franklin, PA Quadrangle N: 5.5 inches; W: 7.1 inches) in Sugar Creek Borough, **Venango County**. This project includes contribution to the Pennsylvania Wetland Replacement Fund for replacement of a total of 0.36 acre of wetland (0.245 acre @ 1:1 and 0.056 acre @ 2:1).

#### ENVIRONMENTAL ASSESSMENT

*Southeast Regional Office, Program Manager, Water Management Program, Lee Park, Suite 6010, 555 North Lane, Conshohocken, PA 19428.*

**EA15-003.** Environmental Assessment. **Sealed Air Corporation**, 450 Riverfront Drive, Reading, PA 19602. To close two abandoned wastewater treatment lagoons and to restore the 100-year floodplain along the West Branch of the Brandywine Creek (WWF-MF) impacting a total of 0.97 acre of body of water (POW) at the Sealed Air Corporation—Modena Plant located (Coatesville USGS Quadrangle N: 16.25 inches, W: 7.75 inches) in Modena Borough, **Chester County**. This Environmental Assessment approval also constitutes the acknowledgment of waiver WL-1597305.

#### WATER ALLOCATIONS

**Actions taken on applications filed under the act of June 24, 1939 (P. L. 842, No. 365) (32 P. S. §§ 631—641) relating to the acquisition of rights to divert waters of this Commonwealth.**

*Northwest Regional Office, Regional Program Manager, Water Supply and Community Health, 230 Chestnut Street, Meadville, PA 16335-3481, (814) 332-6899.*

#### Permits Issued

**Permit No. WA 43-1002.** Subsidiary Water Allocation. **322/Reynolds Company LTD**, c/o Daniel E. Inks, I&R Properties, 4090 Greenwood Oval, North Royalton, OH 44133. Granting the right to purchase up to 19,073 gpd from Reynolds Water Company. 322/Reynolds Company LTD is a mobile home park located in Pymatuning Township, **Mercer County**.

*Type of Facility:* Mobile Home Park

*Consulting Engineer:* P Eldon Bauer, P.E., Makeever & Associates, Inc., 207B South Sandusky Avenue, P. O. Box 325, Bucyrus, OH 44820.

*Permit Issued:* August 1, 1997.

#### SPECIAL NOTICES

#### Certification to Perform Radon-Related Activities in Pennsylvania

In the month of July 1997 the Department of Environmental Protection, under the authority contained in the Radon Certification Act (63 P. S. §§ 2001—2014) and regulations promulgated thereunder at 25 Pa. Code Chapter 240, has certified the persons listed below to perform radon-related activities in Pennsylvania. The period of certification is 2 years. For a complete list of persons currently certified to perform radon-related activities in Pennsylvania and for information as to the specific testing devices that persons certified for testing or laboratory are certified to use, contact the Bureau of Radiation Protection, Radon Division, P. O. Box 8469, Harrisburg, PA 17105-8469, (800) 23RADON.

<i>Name</i>	<i>Address</i>	<i>Type of Certification</i>
Daniel Bayer	203 Hemlock Drive McMurray, PA 15317	Testing
Frank Becker	36 York Drive Pittsburgh, PA 15214	Testing
Marvin "D" Goldstein Building Inspection Service, Inc.	1675 Winding Road Southampton, PA 18966	Testing
William Cairnes	P. O. Box 101 Auburn, PA 17922	Testing & Mitigation
W. James Nice D-Tech, Inc.	P. O. Box 372 Lafayette Hill, PA 19444	Testing
Louis Del Pinto	R. R. 1, Box 463 Uniontown, PA 15401	Testing
Alexander Efremenko, Jr.	3467 Gibsonia Road Gibsonia, PA 15044	Testing
Jason Esposito	2 Hayes Street Elmsford, NY 10523	Laboratory

<i>Name</i>	<i>Address</i>	<i>Type of Certification</i>
Cynthia Lawn Franklin Environmental Analysis	2334 Orthodox Street Philadelphia, PA 19137	Testing & Laboratory
Raymond King	1812 Willow Street Pike Lancaster, PA 17602	Mitigation
Carl Mastropaolo	1839 Ashurst Road Philadelphia, PA 19151	Testing
Pierre McKenzie	1124 Concord Road Aston, PA 19014	Testing
Richard Haag Safe Shelter Environmental	346 North Pottstown Pike Exton, PA 19341	Testing & Mitigation
Lewis Nelson, IV Tri-County Radon Testing Co., Inc.	P. O. Box 830 Huntingdon Valley, PA 19066	Testing
Nathaniel Burden, Jr. Douglas Strong U. S. Toxic Substance Testing Bureau Advantage Radon Control Center UST Labs	804 Second Street Pike Southampton, PA 18966	Testing, Mitigation, Laboratory

[Pa.B. Doc. No. 97-1309. Filed for public inspection August 15, 1997, 9:00 a.m.]

### Availability of Technical Guidance

*Materials related to its technical guidance documents, on DEP's World Wide Web site*

DEP's Web address is <http://www.dep.state.pa.us>. These materials are all located at the Public Participation Center. The "June 1997 Inventory" heading is the Governor's List of Nonregulatory Documents. The "Search the Inventory of Technical Guidance Documents" heading is a database of the Inventory. The "Final Documents" heading is the link to a menu of the various DEP bureaus and from there to each bureau's final technical guidance documents. DEP will be adding its revised documents to the Web throughout 1997. The "Draft Technical Guidance" heading is the link to DEP's draft technical guidance documents.

#### *Ordering Paper Copies of DEP Technical Guidance*

Persons can order a bound paper copy of the latest Inventory or an unbound paper copy of any of the final documents listed on the Inventory by calling DEP at (717) 783-8727.

In addition, bound copies of some of DEP's documents are available as DEP publications. Persons should check with the appropriate bureau for more information about the availability of a particular document as a publication.

#### *Changes to Technical Guidance Documents*

Here is the current list of recent changes. Persons who have any questions or comments about a particular document should call the contact person whose name and phone number is listed with each document. Persons who have questions or comments in general should call Nina Huizinga at (717) 783-8727.

#### *Notice of Intent to Revise Technical Guidance*

DEP ID: 254-2000-715 Title: Policy and Procedure Establishing Criteria for Use of Uncontaminated Soils, Rock, Stone, Brick and Block, Gravel, Concrete, Used Asphalt, Dredged Material and Waste from Land Clearing, Grubbing and Excavation as Clean Fill Background: The program is revising this guidance to conform the clean fill levels of regulated substances to the Statewide health standards (SHS) adopted under the land recycling

program of Act 2. Anticipated Effective Date: November 15, 1997, Anticipated Draft Development Date: August 15, 1997, Proposed Development and Review Process: Guidelines will be developed internally by DEP's staff with input from DEP's regional and field operation staff. Notice of the availability of the draft guidelines will be published in the *Pennsylvania Bulletin* and DEP's *UP-DATE* for public comment. Contact: Khatija P. Swaroop at (717) 787-7381.

JAMES M. SEIF,  
*Secretary*

[Pa.B. Doc. No. 97-1310. Filed for public inspection August 15, 1997, 9:00 a.m.]

### Pennsylvania Wetland Replacement Project; Public Notice

**S6010C-01.** Wetland Restoration Project. The Division of Waterways, Wetlands and Erosion Control, in cooperation with William Seigel proposes to restore 2.5 to 3.0 acres of wetlands, approximately 1,000 feet north of T-375 on an unnamed tributary to Buffalo Creek (Mifflinburg Quadrangle N: 17.5 inches; W: 1.0 inch) in Buffalo Township, **Union County**.

The goal of the Seigel wetland restoration project is to provide educational opportunities by increasing the wildlife diversity in the area by restoring waterfowl and wading bird habitat. It is also anticipated that water quality will improve to Buffalo Creek. The restoration area is located in the Upper Susquehanna subbasin where 1.07 acres of wetland impacts have been reported. Upon completion 80% of the site will have standing water 3 to 18 inches deep. The site will be stabilized and allow to stand for 1 year before determining what additional planting is required.

JAMES M. SEIF,  
*Secretary*

[Pa.B. Doc. No. 97-1311. Filed for public inspection August 15, 1997, 9:00 a.m.]

## Radiation Protection Advisory Committee Meeting

A Radiation Protection Advisory Committee (RPAC) meeting is scheduled for August 20, 1997, at 9 a.m. in Room 105, Rachel Carson State Office Building, 400 Market Street, Harrisburg, PA

Questions concerning the RPAC meeting should be addressed to Stuart Levin at (717) 787-3720 or e-mail at levin.stuart@a1.dep.state.pa.us. The agenda is also available through the Public Participation Center on DEP's World Wide Web site at <http://www.dep.state.pa.us>.

Persons in need of accommodations as provided for in the Americans With Disabilities Act of 1990 should contact Stuart Levin directly at (717) 787-3720 or through the Pennsylvania AT&T Relay Service at (800) 654-5984 (TDD) to discuss how the Department may accommodate their needs.

JAMES M. SEIF,  
*Secretary*

[Pa.B. Doc. No. 97-1312. Filed for public inspection August 15, 1997, 9:00 a.m.]

# DEPARTMENT OF GENERAL SERVICES

## Design Professional Selections

The Selections Committee for the Department of General Services (Department) will meet to consider selections of Design Professionals for the following projects:

**Project No. DGS 401-51**—Renovation of Centennial Gymnasium, Bloomsburg University, Bloomsburg, Columbia County, PA. Construction Cost: \$8,684,000. The scope of work includes, but is not limited to, renovation of Centennial Gym to provide for three separate floors. The first floor area would include faculty offices, small gym and a lecture hall; second floor to include a health center, classrooms and faculty offices; and the third floor would house a speech, hearing and language clinic in addition to seminar rooms.

**Project No. DGS 570-23 Phase 7**—Construction of a 1,236 cell Close Custody, Correctional Institution in Western Pennsylvania. Construction Cost: \$105,984,000. The scope of work includes, but is not limited to, L-2, L-3, L-4 and L-5 Housing Units, Administration, Visiting, Reception/Security Facilities, Health, Dietary and Educational Services, Activity and Recreation Facilities, Correctional Industries, Warehouse and Shops and other support facilities and utilities to provide a complete operating institution. The design will be developed from the current modified Prototypical Design for a 1,000 Cell, Correctional Institution and the Department of Corrections Policy Standards Manual.

### Requirements and Information

#### *Note - Project Program*

A Project Program, prepared by the Using Agency, for the above advertised projects may be available and can be obtained upon request to the Selections Committee, Department of General Services, Room 104, 18th & Herr Streets, Harrisburg, PA 17125, (717) 783-8468.

### *Instructions for Filing Application*

Professionals will not be considered by the Committee until all of the following requirements are met.

(a) Signed Revised 1994 Form 150, not more than 1 year old as of the deadline date stated in paragraph (d) below, must be filed with the Department of General Services for the requesting professional firm and the designated key consultants listed on the requesting professional firm's application (Form 150-S). All signatures on Form 150 must be original signatures. Consultants listed on the requesting professional firm's application (Form 150-S) shall be deemed to be designated key consultants. If these documents are not on file with the Department, the requesting professional firm must submit them with the firm's application (Form 150-S). A photocopy of Form 150 without an original signature of a principal of the firm is not acceptable. Revised 1994 Form 150, Architect/Engineer Questionnaire, may be obtained upon request to the Selections Committee, Department of General Services, Room 104, 18th & Herr Streets, Harrisburg, PA 17125, (717) 783-8468.

(b) The requesting professional firm shall obtain from each consultant listed in the requesting professional firm's application (Form 150-S) a signed letter of certification on the consultant's letterhead, attesting to the firm's consent to participate in the requesting professional firm's application (Form 150-S) for the specific project. Signed letters of certification from consultants are required and constitute a part of the requesting professional firm's application (Form 150-S) for the specific project. All signatures on letters of certification must be original signatures.

(c) The requesting professional firm must submit six signed copies of Revised 1994 Form 150-S, Specific Project Form, for each project herein advertised in which the firm is interested and qualified to perform. All signatures on Form 150-S must be original signatures. For architectural projects and, when appropriate, for engineering projects, the Professional shall supply photographs showing a maximum of two different views of each of the three projects described in Question 14, Page 5 of the application (Form 150-S). The requesting professional firm or Joint Venture members must be the Professional of Record for the projects described in Question 14, Page 5 of the application (Form 150-S). It is not acceptable to list work performed by key consultants. The identification and appropriate supportive information concerning each photograph shall include the name, project title, location and the name of the Professional of Record. Renderings and brochures will not be accepted in lieu of photographs. The photographs shall be attached to each copy of the application, (Form 150-S). The pages of each copy of revised 1994 Form 150-S must be stapled with photographs and consultant's letters of certification followed by photocopies of licenses of registered professionals included as the last section of the application. Do not bind the application (Form 150-S) in any way to any other documentation. Do not bind the application (Form 150-S) in a binder of any type. Revised 1994 Form 150-S may be obtained upon request to the Selections Committee, Department of General Services, Room 104, 18th and Herr Streets, Harrisburg, PA 17125, (717) 783-8468.

(d) A complete project submission, which consists of documents described in paragraphs (a), (b) and (c) above, must be received on or before the close of business (5 p.m.) Wednesday, September 10, 1997, and addressed to the Selections Committee, Department of General Ser-



vices, Room 104, 18th & Herr Streets, Harrisburg, PA 17125. Fax applications are not acceptable.

Project submissions must be made on the current 1994 forms. Outdated forms are not acceptable.

(e) The Selections Committee may at its discretion establish interviews with any or all of the Professionals who have requested consideration for appointment as designer for the above projects. If an interview is required, the Professional will be notified by the Committee as to the date, time and location.

(f) Additional information, in writing, may be requested by the Committee as required. Additional services—Indoor Air Quality Assessment Program and Hazardous Materials.

The Professional firm selected to design a project will be expected to perform and administer, when required by the Department as Additional Services, an Indoor Air Quality Assessment Program during Building or Renovation Commissioning and the sampling, testing, inspection and monitoring for removal of any asbestos, other hazardous waste or contaminants encountered during project design or construction, unless otherwise stated in the Scope.

The professional agrees to comply with the terms of the Agreement and specifically as it relates to the Professional Liability Insurance and the General Liability Insurance Requirements.

The Selections Committee encourages responses from small firms, minority firms, women-owned firms and firms who have not previously performed State work, and will consider Joint Ventures, which will enable them to participate in this program.

All applications submitted are subject to review by the Selections Committee. The Selections Committee disclaims any liability whatsoever as to its review of the applications submitted and in formulating its recommendations for selection. All recommendations for selection made by the Committee shall be final under the act of July 22, 1975 (P.L. 75, No. 45).

GARY E. CROWELL,  
*Secretary*

[Pa.B. Doc. No. 97-1313. Filed for public inspection August 15, 1997, 9:00 a.m.]

## DEPARTMENT OF HEALTH

### Laboratories Approved to Perform Blood Lead and/or Erythrocyte Protoporphyrin Determinations under the Clinical Laboratory Act

The following laboratories are licensed in accordance with the Clinical Laboratory Act (35 P. S. §§ 2151—2165) and/or the Federal Clinical Laboratory Improvement Act of 1967 (42 U.S.C.A. § 263a), and are currently approved under 28 Pa. Code § 5.50 (relating to approval to provide special analytical services) to perform analyses of blood for lead or erythrocyte protoporphyrin content. This approval is based on demonstrated proficiency in periodic evaluations conducted by the Bureau of Laboratories of the Department of Health (Department).

Lead poisoning is a reportable noncommunicable disease. Approved laboratories which offer blood lead or erythrocyte protoporphyrin testing services are required

to inform the Department of actual or possible incidents of this condition in accordance with 28 Pa. Code § 27.4 (relating to reportable noncommunicable diseases and conditions). In addition, the Department requests laboratories to submit reports on children under 6 years of age and pregnant women, on whom laboratory tests confirm venous blood lead concentrations of 15 micrograms per deciliter or higher. The Department's collection and review of these latter reports would be consistent with the most recent revision of the guideline titled, *Preventing Lead Poisoning in Young Children*, which was published in 1991 by the United States Department of Health and Human Services (HHS), Public Health Service, Centers for Disease Control and Prevention, and is available from them.

All reports must be sent to the Department of Health, Division of Environmental Health, P.O. Box 90, Harrisburg, PA 17108. Report forms are available on request from the Division of Environmental Health.

Erythrocyte protoporphyrin determinations may be performed as an adjunct determination to substantiate blood lead levels of 25 micrograms per deciliter or higher. Since erythrocyte protoporphyrin concentrations may not increase as a result of low level exposures to lead, direct blood lead analysis is the only reliable method for identifying individuals with blood lead concentrations below 25 micrograms per deciliter.

Persons seeking blood lead or erythrocyte protoporphyrin analyses should determine that the laboratory employs techniques and procedures acceptable for the purpose for which the analyses are sought. Laboratories offering blood lead analysis only are designated with the letter "L" following the name of the laboratory. Those offering erythrocyte protoporphyrin analysis only are designated with the letter "P." Laboratories offering both services are designated with the letters "LP."

Blood lead analyses performed for occupational safety and health purposes must be conducted by a laboratory which also meets the requirements of the Occupational Safety and Health Administration of the United States Department of Labor as specified in 29 CFR 1910.1025(j)(2)(iii).

The list of approved laboratories will be reviewed semiannually and if there are any changes to the list, a notice to that effect will be published in the *Pennsylvania Bulletin* at that time.

The Department's blood lead proficiency testing program is approved by HHS in accordance with the requirements contained in the Clinical Laboratory Improvement Amendments of 1988 (42 CFR 493.901 and 493.937) which are administered by the Health Care Financing Administration (HCFA). Participation in these programs may therefore be used to demonstrate acceptable performance for approval purposes under both Federal and Commonwealth statutes.

DANIEL F. HOFFMANN,  
*Secretary*

Allegheny County Coroners Office-L  
3441 Forbes Avenue Oakland  
Pittsburgh, PA 15213  
412-578-8072

Allegheny General Hospital-L  
320 East North Avenue  
Pittsburgh PA 15212  
412-359-3521

American Medical Laboratories, Inc.-LP  
14225 Newbrook Drive  
Chantilly, VA 20153  
703-802-6900

Angeline Kirby Memorial Health Center-L  
71 North Franklin Street  
Wilkes-Barre, PA 18701  
717-823-5450

Associated Regional & University Pathologists-LP  
500 Chipeta Way  
Salt Lake City, UT 84108  
800-242-2787

Children's Hospital of Philadelphia-P  
One Children's Center, 34th and Civic  
Philadelphia, PA 19104  
215-590-1000

Clarendon Laboratory-L  
1125 Flatbush Avenue  
Brooklyn, NY 11226  
718-856-4700

D/B/A MetPath-LP  
7655 Market Street, Suite 2500  
Youngstown OH 44512  
216-758-5788

East Penn Manufacturing Company, Inc.-LP  
Deka Road  
Lyons Station, PA 19536  
610-682-6361

Edison Medical Laboratories, Inc.-LP  
1692 Oak Tree Road, Suite 12  
Edison NJ 08820  
908-906-7800

Ellwood City General Hospital-P  
724 Pershing Street  
Ellwood City PA 16117  
412-752-0081

Exide Corp. Indus. Hygiene Lab.-LP  
6313 Rising Sun Avenue  
Philadelphia, PA 19111  
215-342-1414

Geisinger Medical Center-L  
North Academy Road  
Danville PA 17822  
717-271-6338

Health Network Laboratories-LP  
2024 Lehigh Street  
Allentown PA 18103  
610-402-8150

Helena Laboratories-P  
PO Box 752  
Beaumont TX 77704  
409-842-3714

LabCorp of America Holdings-LP  
6370 Wilcox Road  
Dublin, OH 43016  
800-282-7300

LabCorp of America Holdings-P  
1447 York Court  
Burlington NC 27216  
800-334-5161

LabCorp of America Holdings-LP  
69 First Avenue, P.O. Box 500  
Raritan, NJ 08869  
201-526-2400

Laboratory Corp of America-LP  
13900 Park Center Road  
Herndon, VA 22071  
703-742-3100

LabOne, Inc.-LP  
8915 Lenexa Drive  
Overland Park KS 66214  
913-888-1770

Lancaster General Hospital-L  
555 North Duke Street, P.O. Box 3555  
Lancaster, PA 17603  
717-299-5511

LeadTech Corporation-L  
1 Marine Plaza  
N. Bergen, NJ 07047  
201-868-7707

Main Line Clinical Laboratory-L  
Lankenau Hospital  
100 Lancaster Avenue  
Wynnewood PA 19096  
610-645-2601

Mayo Clinic-LP  
200 First Street, S.W., Hilton 530  
Rochester, MN 55905  
507-284-8626

Medlab Clinical Testing, Inc.-L  
212 Cherry Lane  
New Castle, DE 19720  
800-633-5221

Mercy Health Lab-Mercy Fitzgerald Hospital-L  
Lansdowne Avenue and Bailey Road  
Darby, PA 19023  
610-237-4175

Mercy Hosptial Lab-L  
Pride and Locust Streets  
Pittsburgh PA 15219  
412-232-7831

National Medical Services-LP  
3701 Welsh Road  
Willow Grove, PA 19090  
215-657-4900

Omega Medical Laboratories, Inc.-L  
2001 State Hill Road, Suite 100  
Wyomissing, PA 19610  
610-378-1900

Pacific Toxicology Laboratories-LP  
1545 Pontius Avenue  
Los Angeles CA 90025  
310-479-4911

Pennsylvania Department of Health-LP  
Bureau of Laboratories  
P.O. Box 500  
Exton, PA 19341-0500  
610-363-8500

Princeton Biomedical Labs., Inc.-P  
2000 B Hartel Complex  
Levittown PA 19057  
215-943-0700

Public Health Laboratory City of Philadelphia-L  
500 South Broad Street  
Philadelphia, PA 19146  
215-685-6811

Quest Diagnostics Incorporated-LP  
One Malcolm Avenue  
Teterboro NJ 07608  
201-288-0900

Quest Diagnostics of PA, Inc.-LP  
875 Greentree Road, RD4  
Four Parkway Center  
Pittsburgh PA 15220-3610  
412-920-7600

Quest Diagnostics of Pa., Inc.-LP  
900 Business Center Drive  
Horsham PA 19044  
215-957-9300

Quest Diagnostics, Inc.-P  
33608 Ortega Highway  
San Juan Capistrano CA 92690  
714-728-4000

Reading Hospital and Medical Center-L  
6th and Spruce Streets  
Reading PA 19603  
610-378-6080

SmithKline Beecham Clinical Laboratories-LP  
400 Egypt Road  
Norristown, PA 19403  
610-631-4200

SmithKline Bioscience Laboratories-LP  
7600 Tyrone Avenue  
Van Nuys, CA 91405  
818-376-6259

Specialty Laboratories-L  
2211 Michigan Avenue  
Santa Monica CA 90404  
310-828-6543

St. Joseph Quality Medical Laboratory-L  
215 North 12th Street, Box 316  
Reading, PA 19603  
610-378-2200

Tamarac-P  
7000 South Broadway , Suite 2C  
Littleton CO 80122  
303-794-1083

Toxi-Con Laboratories-LP  
120 Monahan Avenue  
Suite 101  
Dunmore PA 18512  
717-963-0722

University of Pittsburgh Medical Center-LP  
Room 5929 CLSI MT  
200 Lothrop Street  
Pittsburgh PA 15213-2582  
412-647-7813

West Allis Memorial Industrial Toxi-LP  
8901 West Lincoln Avenue  
West Allis, WI 53227  
414-328-7945

[Pa.B. Doc. No. 97-1314. Filed for public inspection August 15, 1997, 9:00 a.m.]

## DEPARTMENT OF PUBLIC WELFARE

### Income Limits for the Subsidized Child Day Care Program

The Department of Public Welfare (Department) increases the income limits codified at 55 Pa. Code §§ 3040.62(c), 3040.63(a)(4),(b) and (c), and 3040 Appendix B effective July 1, 1997. Based on the increased income limits, the Department has also revised Appendix C, reference companion to Appendix B and Fee Formula—Statement of Policy.

The regulation at 55 Pa. Code § 3040.62(c) establishes the Department's requirement to update the income conversion charts located at 55 Pa. Code Chapter 3040 Appendix B and the companion Fee Schedule in Appendix C. Appendices B and C are being revised to reflect the changes in the Federal Poverty Income Guidelines (FPIG) which establish the annual income guidelines for the subsidized child day care program. As per § 3040.63, effective July 1, 1997, the income guidelines will be increased due to the increase in the FPIG. These changes will be used when the eligibility agent determines eligibility and establishes a weekly family fee. The Fee Schedule is adjusted to reflect the increases in the income guidelines. Appendix B establishes the income limit of 235% of the FPIG to be used to establish a family's eligibility. Appendix B also establishes the family fee levels according to the family's computed annual income and the family's priority for service in comparing the computed family income to the percentage of the FPIG. Appendix C lists the weekly family fee based on the annual family income.

Under 55 Pa. Code § 3040.62(c), the Department revised the income limits for the subsidized child day care program effective July 1, 1997. Those limits and corresponding fees are set forth in Appendices B and C which are recommended for codification in 55 Pa. Code Chapter 3040.

FEATHER O. HOUSTOUN,  
*Secretary*

**Fiscal Note:** 14-NOT-150. No fiscal impact; (8) recommends adoption.

**Appendix B**  
**1997-1998 Federal Poverty Income Guideline and DPW Conversion Chart**

<i>% FPL</i>	<i>N%</i>	<i>FAMILY SIZE OF: 1</i>		<i>FAMILY SIZE OF: 2</i>		<i>FAMILY SIZE OF: 3</i>		<i>FAMILY SIZE OF: 4</i>	
50%	5%	\$0	\$3,945	\$0	\$5,305	\$0	\$6,665	\$0	\$8,025
70%	6%	\$3,946	\$5,523	\$5,306	\$7,427	\$6,666	\$9,331	\$8,026	\$11,235
90%	7%	\$5,524	\$7,101	\$7,428	\$9,549	\$9,332	\$11,997	\$11,236	\$14,445
110%	8%	\$7,102	\$8,679	\$9,550	\$11,671	\$11,998	\$14,663	\$14,446	\$17,655
130%	9%	\$8,680	\$10,257	\$11,672	\$13,793	\$14,664	\$17,329	\$17,656	\$20,865
150%	10%	\$10,258	\$11,835	\$13,794	\$15,915	\$17,330	\$19,995	\$20,866	\$24,075
170%	11%	\$11,836	\$13,413	\$15,916	\$18,037	\$19,996	\$22,661	\$24,076	\$27,285
190%	12%	\$13,414	\$14,991	\$18,038	\$20,159	\$22,662	\$25,327	\$27,286	\$30,495
210%	13%	\$14,992	\$16,569	\$20,160	\$22,281	\$25,328	\$27,993	\$30,496	\$33,705
235%	14%	\$16,570	\$18,542	\$22,282	\$24,934	\$27,994	\$31,326	\$33,706	\$37,718
50%		\$3,945		\$5,305		\$6,665		\$8,025	
100%		\$7,890		\$10,610		\$13,330		\$16,050	
185%		\$14,597		\$19,629		\$24,661		\$29,693	
<i>% FPL</i>	<i>N%</i>	<i>FAMILY SIZE OF: 5</i>		<i>FAMILY SIZE OF: 6</i>		<i>FAMILY SIZE OF: 7</i>		<i>FAMILY SIZE OF: 8</i>	
50%	5%	\$0	\$9,385	\$0	\$10,745	\$0	\$12,105	\$0	\$13,465
70%	6%	\$9,386	\$13,139	\$10,746	\$15,043	\$12,106	\$16,947	\$13,466	\$18,851
90%	7%	\$13,140	\$16,893	\$15,044	\$19,341	\$16,948	\$21,789	\$18,852	\$24,237
110%	8%	\$16,894	\$20,647	\$19,342	\$23,639	\$21,790	\$26,631	\$24,238	\$29,623
130%	9%	\$20,648	\$24,401	\$23,640	\$27,937	\$26,632	\$31,473	\$29,624	\$35,009
150%	10%	\$24,402	\$28,155	\$27,938	\$32,235	\$31,474	\$36,315	\$35,010	\$40,395
170%	11%	\$28,156	\$31,909	\$32,236	\$36,533	\$36,316	\$41,157	\$40,396	\$45,781
190%	12%	\$31,910	\$35,663	\$36,534	\$40,831	\$41,158	\$45,999	\$45,782	\$51,167
210%	13%	\$35,664	\$39,417	\$40,832	\$45,129	\$46,000	\$50,841	\$51,168	\$56,553
235%	14%	\$39,418	\$44,110	\$45,130	\$50,502	\$50,842	\$56,894	\$56,554	\$63,286
50%		\$9,385		\$10,745		\$12,105		\$13,465	
100%		\$18,770		\$21,490		\$24,210		\$26,930	
185%		\$34,725		\$39,757		\$44,789		\$49,821	
<i>% FPL</i>	<i>N%</i>	<i>FAMILY SIZE OF: 9</i>		<i>FAMILY SIZE OF: 10</i>		<i>FAMILY SIZE OF: 11</i>		<i>FAMILY SIZE OF: 12</i>	
50%	5%	\$0	\$14,825	\$0	\$16,185	\$0	\$17,545	\$0	\$18,905
70%	6%	\$14,826	\$20,755	\$16,186	\$22,659	\$17,546	\$24,563	\$18,906	\$26,467
90%	7%	\$20,756	\$26,685	\$22,660	\$29,133	\$24,564	\$31,581	\$26,468	\$34,029
110%	8%	\$26,686	\$32,615	\$29,134	\$35,607	\$31,582	\$38,599	\$34,030	\$41,591
130%	9%	\$32,616	\$38,545	\$35,608	\$42,081	\$38,600	\$45,617	\$41,592	\$49,153

<i>% FPL</i>	<i>N%</i>	<i>FAMILY SIZE OF: 9</i>		<i>FAMILY SIZE OF: 10</i>		<i>FAMILY SIZE OF: 11</i>		<i>FAMILY SIZE OF: 12</i>	
150%	10%	\$38,546	\$44,475	\$42,082	\$48,555	\$45,618	\$52,635	\$49,154	\$56,715
170%	11%	\$44,476	\$50,405	\$48,556	\$55,029	\$52,636	\$59,653	\$56,716	\$64,277
190%	12%	\$50,406	\$56,335	\$55,030	\$61,503	\$59,654	\$66,671	\$64,278	\$71,839
210%	13%	\$56,336	\$62,265	\$61,504	\$67,977	\$66,672	\$73,689	\$71,840	\$79,401
235%	14%	\$62,266	\$69,678	\$67,978	\$76,070	\$73,690	\$82,462	\$79,402	\$88,854
50%		\$14,825		\$16,185		\$17,545		\$18,905	
100%		\$29,650		\$32,370		\$35,090		\$37,810	
185%		\$54,853		\$59,885		\$64,917		\$69,949	
<i>% FPL</i>	<i>N%</i>	<i>FAMILY SIZE OF: 13</i>		<i>FAMILY SIZE OF: 14</i>		<i>FAMILY SIZE OF: 15</i>		<i>FAMILY SIZE OF: 16</i>	
50%	5%	\$0	\$20,265	\$0	\$21,625	\$0	\$22,985	\$0	\$24,345
70%	6%	\$20,266	\$28,371	\$21,626	\$30,275	\$22,986	\$32,179	\$24,346	\$34,083
90%	7%	\$28,372	\$36,477	\$30,276	\$38,925	\$32,180	\$41,373	\$34,084	\$43,821
110%	8%	\$36,478	\$44,583	\$38,926	\$47,575	\$41,374	\$50,567	\$43,822	\$53,559
130%	9%	\$44,584	\$52,689	\$47,576	\$56,225	\$50,568	\$59,761	\$53,560	\$63,297
150%	10%	\$52,690	\$60,795	\$56,226	\$64,875	\$59,762	\$68,955	\$63,298	\$73,035
170%	11%	\$60,796	\$68,901	\$64,876	\$73,525	\$68,956	\$78,149	\$73,036	\$82,773
190%	12%	\$68,902	\$77,007	\$73,526	\$82,175	\$78,150	\$87,343	\$82,774	\$92,511
210%	13%	\$77,008	\$85,113	\$82,176	\$90,825	\$87,344	\$96,537	\$92,512	\$102,249
235%	14%	\$85,114	\$95,246	\$90,826	\$101,638	\$96,538	\$108,030	\$102,250	\$114,422
50%		\$20,265		\$21,625		\$22,985		\$24,345	
100%		\$40,530		\$43,250		\$45,970		\$48,690	
185%		\$74,981		\$80,013		\$85,045		\$90,077	
<i>% FPL</i>	<i>N%</i>	<i>FAMILY SIZE OF: 17</i>		<i>FAMILY SIZE OF: 18</i>		<i>FAMILY SIZE OF: 19</i>		<i>FAMILY SIZE OF: 20</i>	
50%	5%	\$0	\$25,705	\$0	\$27,065	\$0	\$28,425	\$0	\$29,785
70%	6%	\$25,706	\$35,987	\$27,066	\$37,891	\$28,426	\$39,795	\$29,786	\$41,699
90%	7%	\$35,988	\$46,269	\$37,892	\$48,717	\$39,796	\$51,165	\$41,700	\$53,613
110%	8%	\$46,270	\$56,551	\$48,718	\$59,543	\$51,166	\$62,535	\$53,614	\$65,527
130%	9%	\$56,552	\$66,833	\$59,544	\$70,369	\$62,536	\$73,905	\$65,528	\$77,441
150%	10%	\$66,834	\$77,115	\$70,370	\$81,195	\$73,906	\$85,275	\$77,442	\$89,355
170%	11%	\$77,116	\$87,397	\$81,196	\$92,021	\$85,276	\$96,645	\$89,356	\$101,269
190%	12%	\$87,398	\$97,679	\$92,022	\$102,847	\$96,646	\$108,015	\$101,270	\$113,183
210%	13%	\$97,680	\$107,961	\$102,848	\$113,673	\$108,016	\$119,385	\$113,184	\$125,097
235%	14%	\$107,962	\$120,814	\$113,674	\$127,206	\$119,386	\$133,598	\$125,098	\$139,990
50%		\$25,705		\$27,065		\$28,425		\$29,785	

<i>% FPL</i>	<i>N%</i>	<i>FAMILY SIZE OF: 17</i>		<i>FAMILY SIZE OF: 18</i>		<i>FAMILY SIZE OF: 19</i>		<i>FAMILY SIZE OF: 20</i>	
100%		\$51,410		\$54,130		\$56,850		\$59,570	
185%		\$95,109		\$100,141		\$105,173		\$110,205	
<i>% FPL</i>	<i>N%</i>	<i>FAMILY SIZE OF: 21</i>		<i>FAMILY SIZE OF: 22</i>		<i>FAMILY SIZE OF: 23</i>		<i>FAMILY SIZE OF: 24</i>	
50%	5%	\$0	\$31,145	\$0	\$32,505	\$0	\$33,865	\$0	\$35,225
70%	6%	\$31,146	\$43,603	\$32,506	\$45,507	\$33,866	\$47,411	\$35,226	\$49,315
90%	7%	\$43,604	\$56,061	\$45,508	\$58,509	\$47,412	\$60,957	\$49,316	\$63,405
110%	8%	\$56,062	\$68,519	\$58,510	\$71,511	\$60,958	\$74,503	\$63,406	\$77,495
130%	9%	\$68,520	\$80,977	\$71,512	\$84,513	\$74,504	\$88,049	\$77,496	\$91,585
150%	10%	\$80,978	\$93,435	\$84,514	\$97,515	\$88,050	\$101,595	\$91,586	\$105,675
170%	11%	\$93,436	\$105,893	\$97,516	\$110,517	\$101,596	\$115,141	\$105,676	\$119,765
190%	12%	\$105,894	\$118,351	\$110,518	\$123,519	\$115,142	\$128,687	\$119,766	\$133,855
210%	13%	\$118,352	\$130,809	\$123,520	\$136,521	\$128,688	\$142,233	\$133,856	\$147,945
235%	14%	\$130,810	\$146,382	\$136,522	\$152,774	\$142,234	\$159,166	\$147,946	\$165,558
50%		\$31,145		\$32,505		\$33,865		\$35,225	
100%		\$62,290		\$65,010		\$67,730		\$70,450	
185%		\$115,237		\$120,269		\$125,301		\$130,333	

**Subsidized Child Day Care Fee Chart  
(Based on the 1997 Federal Poverty Scales)**

<i>FEE:</i>	<i>1 person household:</i>	<i>2 person household:</i>	<i>3 person household:</i>	<i>4 person household:</i>	<i>5 person household:</i>	<i>6 person household:</i>
\$5.00	\$8,679	\$10,176	\$11,997	\$13,592	\$14,952	\$16,312
\$10.00	\$10,442	\$12,524	\$14,663	\$16,148	\$17,506	\$19,341
\$15.00	\$12,215	\$14,402	\$16,773	\$18,133	\$20,647	\$22,116
\$20.00	\$13,692	\$15,938	\$18,362	\$20,865	\$22,382	\$23,742
\$25.00	\$14,991	\$18,037	\$19,995	\$22,322	\$24,401	\$26,630
\$30.00	\$16,569	\$19,386	\$22,026	\$24,075	\$26,282	\$27,936
\$35.00	\$17,871	\$20,302	\$22,912	\$25,749	\$28,155	\$30,242
\$40.00	\$18,541	\$22,280	\$25,079	\$27,285	\$29,473	\$32,235
\$45.00	N/A	\$22,945	\$25,662	\$28,606	\$31,837	\$33,197
\$50.00	N/A	\$24,803	\$27,662	\$30,495	\$32,132	\$35,560
\$55.00	N/A	\$24,933	\$28,020	\$31,022	\$34,299	\$36,533
\$60.00	N/A	N/A	\$29,877	\$33,022	\$35,663	\$37,826
\$65.00	N/A	N/A	\$31,325	\$33,705	\$36,382	\$39,992
\$70.00	N/A	N/A	N/A	\$34,951	\$38,382	\$40,831
\$75.00	N/A	N/A	N/A	\$36,808	\$39,417	\$41,742
\$80.00	N/A	N/A	N/A	\$37,717	\$40,025	\$43,742

<i>FEE:</i>	<i>1 person household:</i>	<i>2 person household:</i>	<i>3 person household:</i>	<i>4 person household:</i>	<i>5 person household:</i>	<i>6 person household:</i>
\$85.00	N/A	N/A	N/A	N/A	\$41,883	\$45,128
\$90.00	N/A	N/A	N/A	N/A	\$43,740	—
\$95.00	N/A	N/A	N/A	N/A	\$44,109	\$46,957
\$100.00	N/A	N/A	N/A	N/A	N/A	\$48,814
\$105.00	N/A	N/A	N/A	N/A	N/A	\$50,501
<i>FEE:</i>	<i>7 person household:</i>	<i>8 person household:</i>	<i>9 person household:</i>	<i>10 person household:</i>	<i>11 person household:</i>	<i>12 person household:</i>
\$5.00	\$17,672	\$19,032	\$20,755	\$22,659	\$24,040	\$25,400
\$10.00	\$21,386	\$22,746	\$24,106	\$25,466	\$26,826	\$28,186
\$15.00	\$23,476	\$24,836	\$26,685	\$29,133	\$30,541	\$31,901
\$20.00	\$26,631	\$28,086	\$29,446	\$30,806	\$32,166	\$34,029
\$25.00	\$27,990	\$29,623	\$32,615	\$34,056	\$35,416	\$36,776
\$30.00	\$30,879	\$32,239	\$33,599	\$35,607	\$38,599	\$40,026
\$35.00	\$31,602	\$35,009	\$36,488	\$37,848	\$39,208	\$41,591
\$40.00	\$34,202	\$35,562	\$38,545	\$40,737	\$42,097	\$43,457
\$45.00	\$36,315	\$38,162	\$39,522	\$42,081	\$44,986	\$46,346
\$50.00	\$36,920	\$40,395	\$42,122	\$43,482	\$45,617	\$49,153
\$55.00	\$39,284	\$40,644	\$44,475	\$46,082	\$47,442	—
\$60.00	\$41,157	\$43,008	—	\$48,555	\$50,042	\$51,402
\$65.00	\$41,352	\$45,371	\$46,731	—	\$52,635	\$54,002
\$70.00	\$43,519	\$45,781	\$49,095	\$50,455	—	\$56,602
\$75.00	\$45,686	\$47,046	\$50,405	\$52,818	\$54,178	\$56,715
\$80.00	\$45,999	\$49,212	\$50,572	\$55,029	\$56,542	\$57,902
\$85.00	\$47,102	\$51,167	\$52,739	—	\$58,906	\$60,266
\$90.00	\$49,102	—	\$54,906	\$56,266	\$59,653	\$62,629
\$95.00	\$50,840	\$52,462	\$56,335	\$58,432	\$59,792	\$64,277
\$100.00	—	\$54,462	—	\$60,599	\$61,959	—
\$105.00	\$52,031	\$56,462	\$57,822	\$61,503	\$64,126	\$65,486
\$110.00	\$53,888	\$56,552	\$59,822	—	\$66,292	\$67,652
\$115.00	\$55,745	\$57,105	\$61,822	\$63,182	\$66,671	\$69,819
\$120.00	\$56,893	\$58,963	\$62,264	\$65,182	—	\$71,839
\$125.00	N/A	\$60,820	—	\$67,182	\$68,542	—
\$130.00	N/A	\$62,677	\$64,037	\$67,977	\$70,542	\$71,902
\$135.00	N/A	\$63,285	\$65,894	—	\$72,542	\$73,902
\$140.00	N/A	N/A	\$67,751	\$69,111	\$73,689	\$75,902

<i>FEE:</i>	<i>7 person household:</i>	<i>8 person household:</i>	<i>9 person household:</i>	<i>10 person household:</i>	<i>11 person household:</i>	<i>12 person household:</i>
\$145.00	N/A	N/A	\$69,608	\$70,968	—	\$77,902
\$150.00	N/A	N/A	\$69,677	\$72,825	\$74,185	\$79,401
\$155.00	N/A	N/A	N/A	\$74,683	\$76,043	—
\$160.00	N/A	N/A	N/A	76,069	\$77,900	—
\$165.00	N/A	N/A	N/A	N/A	\$79,757	\$81,117
\$170.00	N/A	N/A	N/A	N/A	\$81,614	\$82,974
\$175.00	N/A	N/A	N/A	N/A	\$82,461	\$84,831
\$180.00	N/A	N/A	N/A	N/A	N/A	\$86,688
\$185.00	N/A	N/A	N/A	N/A	N/A	\$88,545
\$190.00	N/A	N/A	N/A	N/A	N/A	\$88,853

EFFECTIVE: July 1, 1997

[Pa.B. Doc. No. 97-1315. Filed for public inspection August 15, 1997, 9:00 a.m.]

## DEPARTMENT OF TRANSPORTATION

### Approved Speed-Timing Devices and Appointment of Maintenance and Calibration Stations

#### *Addendum*

The Department of Transportation, Bureau of Motor Vehicles, under authority of Section 3368 of the Vehicle Code (75 Pa.C.S. § 3368), published at 26 Pa.B. 6225 (December 28, 1996, a notice approved speed-timing devices and maintenance and calibration stations for use until the next comprehensive list is published.

#### *Change of Location*

As an addendum to the listing of approved Official Electronic Device Testing Stations for radar devices which may only be used by members of the State Police, the Department hereby gives notice of the change of location for the following station:

Simco Electronics, 2125 South West 28th Street, Allentown, Lehigh County, PA 18103 (Appointed 09/19/96, Station R9).

Comments, suggestions or questions may be directed to John Munafo, Manager, Inspection Field Operations, Vehicle Inspection Division, Bureau of Motor Vehicles, Third Floor, Riverfront Office Center, 1101 South Front Street, Harrisburg, PA 17104 or by telephoning (717) 787-2895.

Other approved speed-timing devices and appointment of maintenance and calibration stations appear at 26 Pa.B. 6225 (December 28, 1996), 27 Pa.B. 1206 (March 8, 1997), 27 Pa.B. 1610 (March 29, 1997) and 27 Pa.B. 3285 (July 5, 1997).

BRADLEY L. MALLORY,  
*Secretary*

[Pa.B. Doc. No. 97-1316. Filed for public inspection August 15, 1997, 9:00 a.m.]

### Retention of Engineering Firms

#### **Chester County Reference No. 08430AG2102**

The Department of Transportation will retain an engineering firm to perform environmental studies, preliminary engineering, final design, and construction consultation for S.R. 3004, Section 55S, State Road in New London Township, Chester County. This project involves replacement of the 2-span bridge over Big Elk Creek. The limit of work is from Segment 0050 Offset 14521 to Segment 0050 Offset 15571. The estimated project construction cost is \$650 thousand.

The selected firm will be required to provide the following engineering and design services: surveys; roadway design; pavement design; preparation of cross sections; soils and geological investigations; erosion and sedimentation control design; right-of-way investigation and plan; structure design; hydrologic and hydraulic analysis; preparation of traffic control, pavement marking, and signing plans; utility coordination and design; coordination with PennDEP, municipal officials, and the public; preparation of final plans, specifications and estimates; shop drawing review; and alternate design review.

Firms that are currently serving, or are being considered for selection, as the municipal engineer in the municipalities listed in the project description will not be considered for this assignment. Also, firms that are under contract, or are being considered, to provide engineering services to a land developer for a site located along the project will likewise not be considered for this assignment. Firms should state in the letter of interest that they are not serving in either capacity as a municipal engineer or as a representative of a site developer. Any questions concerning this requirement should be directed to Timothy R. O'Brien, P.E., at the telephone number listed below.

The goal for Disadvantaged Business Enterprise (DBE) participation in this Agreement shall be fifteen (15%) percent of the total contract price. Additional information concerning DBE participation in this Agreement is con-



tained in the General Requirements and Information section after the advertised project(s).

We encourage small firms to submit a letter of interest for this assignment.

Letters of interest will be evaluated at the Engineering District 6-0 office with emphasis on the following factors:

—Specialized experience and technical competence of the firm including the firm's experience with similar type projects and their ability to provide innovative solutions to complex technical problems.

—Experience of employees to be associated with this project. Particularly important are the key people assigned to the projects including their experience and past record of performance with similar projects.

—Size of the firm, small firms will be given special consideration.

—Overall current workload of the firm.

—Past performance record.

The District will announce the firms that have been shortlisted at an open public meeting scheduled for September 12, 1997 at 10 a.m. at Engineering District 6-0's Large Conference Room.

The second copy of the letter of interest and required forms (see general requirements and information section) shall be sent to: Mr. Andrew Warren, District Administrator, District 6-0, 200 Radnor-Chester Road, St. Davids, PA 19087.

Any technical questions concerning the requirements for this project should be directed to Mr. Timothy R. O'Brien, P.E., District 6-0, at (610) 964-6526, or Mr. Lawrence J. Link, P.E., District 6-0, at (610) 965-6536.

Any questions concerning the submittal of the letter of interest can be directed to the Consultant Agreement Division, at (717) 783-9309.

**Cameron, Centre, Clearfield, Clinton, Elk, Juniata,  
McKean, Mifflin, and Potter Counties  
Project Reference No. 08430AG2103**

The Department of Transportation will retain an engineering firm for an Open-End Contract for various engineering services (with emphasis on utility coordination and relocation) and environmental studies on various projects located in Cameron, Centre, Clearfield, Clinton, Elk, Juniata, McKean, Mifflin and Potter Counties in Engineering District 2-0. The Contract will be for a sixty (60) month period with projects assigned on an as-needed basis. The required services may encompass a wide range of design and environmental efforts with the possibility of several different types of projects having short completion schedules. The anticipated types of projects may include, but are not limited to, major projects, bridge replacements or bridge rehabilitations with minor approach work, roadway betterments (3R Type), SAMI studies, SAMI final design, Capital Improvement Projects (bridges or roadways), and minor location studies. The maximum amount of the Open-End Contract will be \$1.0 million dollars.

The Department will establish an order of ranking of a minimum of three (3) firms for the purpose of negotiating an Open-End Contract based on the Department's evaluation of the acceptable letters of interest received in response to this solicitation. The ranking will be established directly from the letters of interest. Technical proposals will not be requested prior to the establishment of the ranking.

The following factors, listed in order of importance, will be considered by the Department during the evaluation of the firms submitting letters of interest:

a. Specialized PADOT experience and technical competence of firm (with emphasis on utility coordination/relocations).

b. Current workload.

c. Available staffing for this assignment.

d. Staff familiarity with Design Manual - Part 5.

e. Relative size of firm to size of projects that may be completed under this Contract.

f. Past record of performance with respect to cost control, work quality, and ability to meet schedules.

The firm may be required to perform any or all of the following engineering services: attend field views and prepare minutes; prepare submissions for field views and safety review meeting; field surveys; plot topography and cross sections; prepare submissions and materials necessary for the Department to prepare the application to Public Utility Commission (PUC) for the PUC field conference; attend and supply any required information for all PUC meetings and hearings during project design; develop erosion control details and narrative; develop right-of-way plans; prepare type, size, and location reports; prepare hydraulic report for waterway approval; prepare bridge drawings; traffic control plans and narrative; procure core borings; provide the soil and foundation engineering report; investigate utility and property involvement; prepare and disseminate right of entry letters; prepare prints and information required for a value engineering review; make the necessary investigations and adjustments to the design as a result of the value engineering review comments; make all necessary contact with railroad officials for any railroad-related costs estimates, permits, insurance, approvals, and other required information; collect traffic signal timing and accident data; perform traffic counts and speed delay studies; prepare plans for signal design and implementation of signal interconnections; evaluate alternatives using benefit/cost analysis; document study activities and findings; obtain design specifications and approvals from utilities for designs performed by the Department's Design Consultant for the Utility Company; obtain all utility easements and rights-of-way from the utilities to be included on right-of-way and construction plans so that substitute right-of-way can be incorporated by design consultants for utilities that qualify for such acquisitions; ensure all preliminary and final plan submissions to utilities will be in accordance with Design Manual - Part 5 (all pole numbers, manhole numbers and other identified utility facilities must be shown on the right-of-way and construction plans); obtain necessary drawings and cross-sections from preliminary/final design consultants to provide utilities for their use in verification and relocation engineering of their facilities; coordinate all utility bridge attachment approvals with the District bridge unit; schedule and coordinate all utility meetings and inform the District Utility Unit of any monthly status meetings to determine if the Utility Unit should be represented; obtain all permit and agreement information from utilities and prepare submissions to the District Utility Unit for permits and draft agreements in accordance with Design Manual - Part 5 (provide necessary forms to utilities); prepare Draft 419 (utility clearance document); and perform any other duties as required to relocate/coordinate utilities; and prepare construction plans, specifications, and estimates.

The format and content of all documents, plans and specifications will be consistent with applicable State and Federal regulations and guidelines.

The firm may be required to perform any or all of the following environmental studies: air quality; surface water and groundwater hydrology; terrestrial ecology; wetlands; soils; geology; farmland; visual quality; socio-economic; cultural; Section 4(f) and Section 106 documents; and other related studies not identified above. The environmental studies will be conducted in accordance with Department policy and accepted analysis techniques and methodologies.

The firm may also be required to perform any or all of the following in order to ensure a complete environmental investigation has been performed: provide all necessary environmental services, material and equipment necessary to collect, analyze and organize data; assess impacts; conduct agency and public involvement activities; and prepare reports and design mitigation plans.

The reports and other written graphic material to be prepared may include, but are not limited to, early coordination and scoping correspondence; plans of study; meeting minutes; public meetings and hearing presentations; handouts and displays; technical basis reports; NEPA environmental documents; Section 106 documents; Section 4(f) evaluations; mitigation plans and reports; and wetland and floodplain findings.

The engineering services and environmental studies identified above are the general work activities that can be expected under this Open-End Contract. A more specific and project-related scope of work will be outlined for each individual Work Order developed under this Open-End Contract.

The second copy of the letter of interest and required forms (see general requirements and information section) shall be sent to: District Engineer, District 2-0, 1924-30 Daisy Street, P.O. Box 342, Clearfield, PA 16830.

Any technical questions concerning the requirements for this project should be directed to Mr. Vasco A. Ordonez, P.E. District 2-0, at (814) 765-0439.

Any questions concerning the submittal of the letter of interest can be directed to the Consultant Agreement Division at (717) 783-9309.

**Beaver and Allegheny Counties  
Project Reference No. 08430AG2104**

The Department of Transportation will retain an engineering firm for a multi-phase, specific project agreement to: perform preliminary engineering and environmental studies; prepare final plans, specifications and estimates; and perform shop drawing review and consultation services during construction for S.R. 3052, Section B01, in Beaver and Allegheny Counties. The project involves a new bridge structure over the Ohio River between the Rochester/Monaca Bridge in Beaver County and the Sewickley Bridge in Allegheny County. The design portion of this multi-phase project is expected to have an overall duration of approximately sixty (60) months with shorter, varying schedules for individual phases. The estimated construction cost of the new structure is \$50 million.

The selected firm will be required to provide a variety of engineering services including the following: environmental studies for environmental document preparation and public involvement; preliminary engineering studies involving field surveys, utility contacts, H&H studies, joint permit preparation line, grade and typical section development; type, size and location submissions; geologic

studies; erosion and sedimentation control plans and narratives; hydraulic computations; safety reviews; and Step 9 submissions; final design activities including drainage and highway lighting design, right-of-way and traffic control plans, foundation submissions, structure designs and plan preparation, various field and office meetings, and plans, specification, and estimates preparation; and engineering services during construction including shop drawing reviews, consultation service and review of contractor's alternate design.

The Department is seeking a moderate to large, multi-disciplined firm with multi-span bridge design capability.

Letters of interest will be evaluated at the Engineering District 11-0 office with emphasis on the following factors:

- \* Specialized experience and technical competence of firm.
- \* Experience in preparation of environmental documents.
- \* Experience in design of multi-span bridges.
- \* Past record of performance with respect to cost control, work quality, and ability to meet schedules.
- \* Workload.
- \* Listing of subconsultants.
- \* Other factors, if any, specific to project.

The District will announce the firms that have been shortlisted at an open public meeting to be held in Engineering District 11-0, 45 Thoms Run Road, Bridgeville, PA 15017. All candidates that have submitted a letter of interest will be notified of the date. Specify a contact person in the letter of interest.

Limits to the letter of interest submittals, in addition to the General Requirements and Information, are as follows:

1. Resumes—five (5) total pages of resumes, one sided.
2. Standard Form 255, Item 8 (Number of project descriptions which demonstrate the firm's competence)—five (5) project descriptions.

The goal for Disadvantaged Business Enterprise (DBE) participation in this Agreement shall be fifteen (15%) percent of the total contract price. Additional information concerning DBE participation in this Agreement is contained in the General Requirements and Information section after the advertised project(s).

The second copy of the letter of interest and required forms (see general requirements and information section) shall be sent to: Mr. Henry Nutbrown, P.E., District 11-0, 45 Thoms Run Road, Bridgeville, PA 15017, Attention: Mr. Richard T. Curry, P.E.

Any technical questions concerning the requirements for this project should be directed to Mr. Terry McCue, District 11-0, at (412) 429-4926.

Any questions concerning the submittal of the letter of interest can be directed to the Consultant Agreement Division at (717) 783-9309.

**General Requirements and Information**

Firms interested in providing the above work and services are invited to submit two copies of a Letter of Interest and required information for each Project Reference Number for which the applicant wishes to be considered.

The first copy of the Letter of Interest and required information must be submitted to Charles W. Allwein,

P.E., Chief, Consultant Selection Committee, 7th Floor, Forum Place, 555 Walnut Street, Harrisburg, PA 17101-1900.

The Letter of Interest and required information must be received within thirteen (13) calendar days of this Notice. The Deadline for receipt of a Letter of Interest at the above address is 4:30 p.m. prevailing time of the thirteenth day.

The second copy of the Letter of Interest and required information must be submitted to the appropriate District Engineer/Administrator or the Bureau Director as indicated in the individual advertisement. This copy must be postmarked or delivered on or before the deadline indicated above.

If an individual, firm, or corporation not authorized to engage in the practice of engineering desires to submit a Letter of Interest, said individual, firm or corporation may do so as part of a Joint Venture with an individual, firm or corporation which is permitted under the state law to engage in the practice of engineering.

If a Joint Venture responds to a project advertisement, the Department of Transportation will not accept separate Letters of Interest from the Joint Venture constituents. A firm will not be permitted to submit on more than one (1) Joint Venture for the same Project Reference Number. Also a firm that responds to a project as a prime may not be included as a designated subcontractor to another firm that responds as a prime to the project. Multiple responses under any of the foregoing situations will cause the rejection of all responses of the firm or firms involved. The above does not preclude a firm from being set forth as a designated subcontractor to more than one (1) prime responding to the project advertisement.

If a goal for Disadvantaged Business Enterprise (DBE) participation is established for an advertised project, firms expressing interest in the project must agree to ensure that Disadvantaged Business Enterprise (DBE) firms as defined in the Intermodal Surface Transportation Efficiency Act of 1991 and currently certified by the Department of Transportation shall have the maximum opportunity to participate in any subcontracting or furnishing supplies or services approved under Form 442, Section 1.10(a). The Act requires that firms owned and controlled by women (WBEs) be included, as a presumptive group, within the definition of Disadvantaged Business Enterprise (DBE). The goal for DBE participation shall be as stated in the individual project advertisement. Responding firms shall make good faith efforts to meet the DBE goal using DBEs (as they were defined prior to the act), WBEs or combinations thereof.

Proposing DBE firms must be certified at the time of submission of the Letter of Interest. If the selected firm fails to meet the established DBE participation goal, it shall be required to demonstrate its good faith efforts to attain the goal.

Responses are encouraged by small firms, Disadvantaged Business Enterprise (DBE) firms, and other firms who have not previously performed work for the Department of Transportation.

Each Letter of Interest must include the following information and the information *must be* packaged and presented in the following order:

1. Transmittal Letter (Maximum of two typed pages, one side)

The subject heading of the transmittal letter must include the project reference number for which the applicant wishes to be considered, the firm's legal name, fictitious name (if applicable), and the firm's federal identification number. If the project advertisement indicated the Department will retain an engineering firm for the project, the applicant must indicate in the body of their transmittal letter the names and Professional engineer License Number of individuals who are directing heads or employes of the firm who have responsible charge of the firm's engineering activities, and whose names and seals shall be stamped on all plans, specifications, plats, and reports issued by the firm.

2. Project Organization Chart (one page, one side)

This Chart should show key staff from the prime and each subconsultant and their area of responsibility.

3. Standard Form 255, "Architect-Engineer and Related Services Questionnaire for Specific Project" (one Form 255 for the project team).

The Standard Form 255 must be signed, dated and filled out in its entirety, including Item No. 6 listing the proposed subconsultants and the type of work or service they will perform on the project. Under Item 4 of this form, Column A should include the number of subconsultant personnel and Column B should include the number of prime consultant personnel to be assigned to work on this project reference number.

If a Disadvantaged Business Enterprise (DBE) goal is specified for the project, the DBE must be currently certified by the Department of Transportation, and the name of the DBE and the work to be performed must be indicated in Item No. 6. If a Woman Business Enterprise (WBE) firm is substituted for the DBE, the WBE firm must also be presently certified by the Department of Transportation and indicated in Item 6.

4. Standard Form 254, "Architect-Engineer for Related Services Questionnaire"

A Standard Form 254, not more than 1 year old as of the date of this advertisement, must accompany each Letter of Interest for the firm, each party to a Joint Venture, and for each subconsultant the firm or Joint Venture is proposing to use for the performance of professional services regardless of whether the subconsultant is an individual, a college professor, or a Company, unless an acceptable Standard Form 254 for the prime and *each* subconsultant/subcontractor is on file in both the Bureau of Design and the Engineering District Office or Central Office Bureau identified in the individual project advertisement.

If the Standard Form 254 is not submitted with the Letter of Interest, the transmittal letter shall indicate the dates that the Standard Forms 254 were submitted to the Bureau of Design and appropriate Engineering District/Central Office Bureau.

These Forms shall be assembled with the prime's first, followed by the subconsultant's in the same order as they appear in Item 6 of Form 255.

5. Workload Projection Graph (Not required for Construction Inspection Services)

A Workload Projection Graph for the prime and each subconsultant should indicate the firm's current and anticipated workload compared to the anticipated capacity available for the next two-year time frame. The Workload Projection Graph should be submitted for the office(s) where the work would be performed and should

only include the personnel classifications required for providing the advertised services and work.

#### 6. Authorization Letters (if required)

If the advertisement requires a letter signed by individuals giving their approval to use their names in the Letter of Interest, the letters from proposed prime employees should be first, followed by subconsultant employees, in the same order as shown in Item 6 of Form 255.

#### 7. Registration To Do Business

Firms with out-of-state headquarters or corporations not incorporated in Pennsylvania must include, with each Letter of Interest, a copy of their registration to do business in the Commonwealth as provided by the Department of State. Firms who are not registered to do business in Pennsylvania at the time of this advertisement must document that they have applied for registration to the Department of State, Corporation Bureau. The telephone number for the Corporation Bureau is (717) 787-1057 or (717) 787-2004.

#### 8. Overhead Rates (one page)

This page must show the latest audited overhead rate developed in accordance with Federal Acquisition Regulations (FAR) for the prime consultant and each subconsultant. If a FAR rate is not available, the latest rate available from a Certified Public Account must be indicated. New firms should indicate how long the firm has been in existence and when an audited overhead rate would be available.

#### 9. Additional Information

Additional information, not to exceed ten (10) one sided pages or five (5) double sided pages may be included at the discretion of the submitting firm.

The assignment of the agreement/contract for the above advertisement(s) will be made to one of the firms who submitted an acceptable Letter of Interest in response to the project advertisement. The assignment will be made based on the Department's evaluation of the firm's qualification and capabilities. The Department reserves the right to reject all letters submitted, to cancel the solicitations requested under this Notice and/or to readvertise solicitation for the work and services.

BRADLEY L. MALLORY,  
*Secretary*

[Pa.B. Doc. No. 97-1317. Filed for public inspection August 15, 1997, 9:00 a.m.]

## ENVIRONMENTAL HEARING BOARD

Delaware Valley Recycling, Inc. v. DEP; Doc. No.  
96-087-MG

The Department of Environmental Protection (Department) and Delaware Valley Recycling (DVR) have proposed a settlement of the above appeal.

On March 20, 1996, the Department issued an order to DVR suspending Solid Waste Permit No. 101541, requiring the removal of all solid waste materials located on the DVR facility, the removal of certain solid waste material placed on the property of Louis Dreyfus Energy Corporation (hereinafter LDE), and the payment of civil penalties.

The parties have agreed to a settlement of the appeal, the major provisions of which include:

1. DVR may continue to accept concrete and rubble for processing into aggregate, and may continue to accept grubbing material for processing into wood chips.

2. DVR will remove the semi-processed material known as the "berm material" or "toothpick material" from the DVR site and from the LDE property within 18 months of the effective date of the CO&A, under a plan approved by the Department.

3. DVR may accept used asphalt shingles and similar used asphalt-based roofing materials (collectively shingles) for processing. To facilitate the efficient handling of these used shingles, DVR has submitted and the Department has approved plans for the installation of a bituminous pad, for storage of the unprocessed shingles, and for temporary storage of the processed shingles, in separate piles.

4. DVR has provided security in the amount of \$150,000 to guarantee the removal of the berm material. This security shall be released to DVR if the berm material is removed in accordance with the agreed schedule and the penalty of \$75,000 is fully paid in accordance with the provisions of the CO&A.

5. Once DVR has removed the berm material located on the DVR property, the Department will promptly lift the permit suspension imposed by the Department order, provided that DVR is in compliance with the provisions of the CO&A. Once the permit suspension is lifted, the storage of unprocessed C&D waste shall be limited to an area measuring 7,500 cubic yards. Except as modified in the CO&A, the existing Department permit held by DVR shall continue as it presently exists. Asphalt processing may continue in accordance with the plans found at Appendix B of the CO&A. Within 60 days of the date that the permit suspension is lifted, DVR shall submit a minor permit amendment application covering the asphalt shingle processing facilities which are covered by this CO&A.

6. DVR shall pay a civil penalty of \$75,000 in settlement of the penalties assessed in the Department's order. This penalty shall also cover any additional penalties which the Department could assess for matters covered by this CO&A occurring since the issuance of the order.

7. DVR may submit a minor permit amendment application to:

(a) Permit the extension of the concrete pad upon which the mixed C&D has been located from its existing location to DVR's processing equipment.

(b) Add an 11 foot diameter tub grinder with fabricated metal hood mounted on skids for easy movement when not needed (already in place);

(c) Add miscellaneous storage and operations associated with the roofing material processing operation;

(d) Add certain inlets and fire hydrants (already in place);

(e) Add miscellaneous conveyors (already in place);

- (f) Add a portable screen (already in place);
- (g) Add two trommel screens (already in place); and
- (h) Add a dual chamber concrete settling tank (already in place).

For those items which are noted as being already in place, a minor permit amendment application shall be submitted within 60 days of the effective date of this CO&A. DVR may submit permit amendment applications to cover all other desired changes to the operation and design of the DVR site, including new equipment and new construction. The Department will also entertain a permit amendment proposal which would allow DVR to bring equipment on to the site on an experimental basis.

Copies of the full agreement are in the hands of:

Wm. Stanley Sneath, Assistant Counsel, Department of Environmental Protection, Office of Chief Counsel-Southeast Region, 555 North Lane, Suite 6015, Conshohocken, PA 19428 (610) 832-6300;

Nancy Roncetti, Solid Waste Operations Manager, 555 North Lane, Suite 6010, Conshohocken, Pa 19428, (610) 832-6300;

Paul R. Ober, Esquire, 234 North Sixth Street, Reading, PA 19601, (610) 378-0121;

and at the office of the Environmental Hearing Board and may be reviewed by an interested party on request during normal business hours.

A person aggrieved by the above settlement has a right to appeal to the Environmental Hearing Board, 2nd Floor, Rachel Carson State Office Building, 400 Market Street, P. O. Box 8457, Harrisburg, PA 17105-8457. Appeals must be filed within 20 days after publication.

The Environmental Hearing Board is empowered to approve this settlement which becomes final if no objection is timely made.

GEORGE J. MILLER,  
*Chairperson*

[Pa.B. Doc. No. 97-1318. Filed for public inspection August 15, 1997, 9:00 a.m.]

### **Elliott Turbomachinery Company, Inc. v. DEP; EHB Doc. No. 97-157-MR**

Elliott Turbomachinery Company, Inc. has appealed the issuance by the Department of Environmental Protection of an NPDES permit to same for a facility in Jeannette, Westmoreland County.

A date for the hearing on the appeal has not yet been scheduled.

The appeal is filed with the Environmental Hearing Board at its office on the Second Floor, Rachel Carson State Office Building, 400 Market Street, P. O. Box 8457, Harrisburg, PA 17105-8457, and may be reviewed by any interested party on request during normal business hours. If information concerning this notice is required in an alternative form, please contact the Secretary to the Board at (717) 787-3483. TDD users may telephone the Board through the AT&T Pennsylvania Relay Center at 1 (800) 654-5984.

Petitions to intervene in the appeal may be filed with the Board by interested parties under 25 Pa. Code § 1021.62. Copies of the Board's rules of practice and procedure are available upon request from the Board.

GEORGE J. MILLER,  
*Chairperson*

[Pa.B. Doc. No. 97-1319. Filed for public inspection August 15, 1997, 9:00 a.m.]

### **Settlement under the Hazardous Sites Cleanup Act**

The Department of Environmental Protection (Department) under the authority of the Hazardous Sites Cleanup Act (HSCA) (35 P.S. §§ 6020.101—6020.1305), The Clean Streams Law (35 P.S. §§ 691.1—691.1001) and the Solid Waste Management Act (35 P.S. §§ 6018.101—6018.1003) has entered into an agreement regarding the sale of the Abramson Auto Wrecking Site, which is hydrogeologically downgradient from the Centre County Kepone Site (which is the site of Rutgers-Nease's operations). The settlement involves a Consent Order and Agreement (COA) between Nittany Commons, L.P. (the buyer of the site), Abramson Auto Wrecking (the seller of the site) and the Department.

The property which is the subject of this COA is a parcel of approximately 15 acres located on Pennsylvania Route 26 in College Township, Centre County, PA. The Abramson Auto Wrecking Site lies hydrogeologically downgradient from the Centre County Kepone Site, and contamination from the Centre County Kepone Site has entered the groundwater which flows underneath the Abramson Auto Wrecking Site. The Centre County Kepone Site is currently on the National Priorities List. The Centre County Kepone Site has been divided into separate operable units, and the final remedy for every operable unit has not yet been selected. The buyer of the Abramson Auto Wrecking property, Nittany Commons, L.P., is not presently a responsible person who is liable for response costs at the Abramson Auto Wrecking property or the Centre County Kepone Site. However, if Nittany Commons, L.P., acquires the property, it could become liable as an owner of the Abramson Auto Wrecking Site, under section 701 of HSCA and section 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 E.S.C.A. §§ 9601, *et seq.*

Under the terms of the COA, Abramson Auto Wrecking's remedial obligations include monitoring groundwater and sampling soil to determine whether any contamination exists at the Site and if so, at what levels that contamination exists. Abramson Auto Wrecking further agrees to submit and implement, if applicable, a remedial investigation report and cleanup plan under Act 2.

Under the terms of the COA, the buyer Nittany Commons, L.P., agrees to pay the Department \$10,000.00 for its share of costs incurred by the Department for the Abramson Auto Wrecking Site. Upon submitting that payment under the final COA, Nittany Commons, L.P., resolves its liability with the Department and is eligible for contribution protection under HSCA regarding matters addressed in the COA, as provided in sections 705(c)(2) of HSCA, 35 P.S. § 6020.705(c)(2). The COA also has provisions for access, non-interference with response actions, covenants not to sue, transferability of benefits and obligations and other matters.

This notice is provided under section 1113 of HSCA (35 P. S. § 6020.1113). That section also provides that "settlement shall become final upon the filing of the Department's response to the significant written comments" of this notice. The COA contains the specific terms of the settlement and it is available for public review and comment. The COA can be examined from 8 a.m. to 4 p.m. at the Department's office at 208 West Third Street, Williamsport, PA 17701, by contacting Mike Welch at (717) 321-6518. A public comment period on the COA will extend for 60 days from today's date. Persons may submit written comments regarding the COA to the Department within 60 days from this date by submitting them to Mike Welch at the above address.

GEORGE J. MILLER,  
*Chairperson*

[Pa.B. Doc. No. 97-1320. Filed for public inspection August 15, 1997, 9:00 a.m.]

## INDEPENDENT REGULATORY REVIEW COMMISSION

### Notice of Filing of Final-Form Rulemakings

The Independent Regulatory Review Commission received, on the dates indicated, the following final-form regulations for review. The regulations will be considered within 30 days of their receipt at a public meeting of the Commission. To obtain the date and time of the meeting, interested parties may contact the office of the Commission at (717) 783-5417. To obtain a copy of a regulation, interested parties should contact the agency promulgating the regulation.

<i>Reg. No.</i>	<i>Agency/Title</i>	<i>Received</i>
57-183	Pennsylvania Public Utility Commission Perfection of Security Interests in Intangible Transition Property	8/04/97
7-290	Environmental Quality Board Stream Redesignations; Tinicum et al.	8/05/97
7-296	Environmental Quality Board Storage Tank Technical Standards	8/05/97
2-110	Department of Agriculture Peach and Nectarine Research Program	8/06/97

JOHN R. MCGINLEY, Jr.,  
*Chairperson*

[Pa.B. Doc. No. 97-1321. Filed for public inspection August 15, 1997, 9:00 a.m.]

## INSURANCE DEPARTMENT

### Application for Acquisition of Colonial Penn Insurance Company

General Electric Capital Corporation submitted an application to acquire the issued and outstanding stock of Colonial Penn Insurance Company, the parent company of the following domestic casualty insurance corporations: Colonial Penn Franklin Insurance Company, Colonial Penn Madison Insurance Company, and Bay Colony Insurance Company, from Leucadia National Corporation. The filing was made under the requirements set forth under the Insurance Holding Company Act, 40 P. S. § 991.1402 *et. seq.* Persons wishing to comment on the acquisition are invited to submit a written statement to the Insurance Department within 30 days from the date of this issue of the *Pennsylvania Bulletin*. Each written statement must include the name, address and telephone number of the interested party, identification of the application to which the statement is addressed, and a concise statement with sufficient detail and relevant facts to inform the Insurance Department of the exact basis of the statement. Written statements should be directed to Carolyn Smith, Insurance Company Licensing Specialist, Insurance Department, 1345 Strawberry Square, Harrisburg, PA 17120 (717) 787-1879.

GREGORY S. MARTINO,  
*Acting Insurance Commissioner*

[Pa.B. Doc. No. 97-1322. Filed for public inspection August 15, 1997, 9:00 a.m.]

### Application for Acquisition of American Independent Life Insurance Company

Bankers Fidelity Life Insurance Company filed an application to acquire 100% of the issued and outstanding stock of American Independent Life Insurance Company from American Independent Insurance Company, BCI Holdings, Inc. and Arnold M. Katz. The filing was made under the requirements set forth under the Insurance Holding Company Act (40 P. S. § 991.1402 *et. seq.*) Persons wishing to comment on the acquisition are invited to submit a written statement to the Insurance Department (Department) within 30 days from the date of this issue of the *Pennsylvania Bulletin*. Each written statement must include the name, address and telephone number of the interested party, identification of the application to which the statement is addressed, and a concise statement with sufficient detail and relevant facts to inform the Department of the exact basis of the statement. Written statements should be directed to Carolyn Smith, Insurance Company Licensing Specialist, Insurance Department, 1345 Strawberry Square, Harrisburg, PA 17120, (717) 787-1879.

GREGORY S. MARTINO,  
*Acting Insurance Commissioner*

[Pa.B. Doc. No. 97-1323. Filed for public inspection August 15, 1997, 9:00 a.m.]

**Capital Blue Cross and Pennsylvania Blue Shield;  
Community-Rated Group Major Medical Program;  
Rate Increase; Filing No. 97-W**

By Filing No. 97-W, Capital Blue Cross and Pennsylvania Blue Shield propose to increase the rates for the Community-Rated Group Major Medical Program. The proposed increase is 22.8%. This rate change will produce an estimated additional annual income of \$14.5 million and will affect approximately 92,600 policy holders. An effective date of October 1, 1997 is requested.

Copies are available for public inspection, by appointment, during normal working hours at the Insurance Department's Office in Harrisburg.

Interested parties are invited to submit written comments, suggestions or objections to Bharat Patel, Insurance Department, Office of Rate and Policy Regulation, Bureau of Accident and Health Insurance, 1311 Strawberry Square, Harrisburg, PA 17120, within 30 days after publication of this notice in the *Pennsylvania Bulletin*.

GREGORY S. MARTINO,  
*Acting Insurance Commissioner*

[Pa.B. Doc. No. 97-1324. Filed for public inspection August 15, 1997, 9:00 a.m.]

**Capital Blue Cross and Pennsylvania Blue Shield;  
Individual Comprehensive Major Medical Program;  
Rate Increase; Filing No. 97-V**

By Filing No. 97-V, Capital Blue Cross and Pennsylvania Blue Shield propose to increase the rates for the individual Comprehensive Major Medical Program. The proposed increase is 16.3%. This rate change will produce an estimated additional annual income of \$1.2 million and will affect approximately 2,700 policy holders. An effective date of January 1, 1998 is requested.

Copies are available for public inspection, by appointment, during normal working hours at the Insurance Department's Office in Harrisburg.

Interested parties are invited to submit written comments, suggestions or objections to Bharat Patel, Insurance Department, Office of Rate and Policy Regulation, Bureau of Accident and Health Insurance, 1311 Strawberry Square, Harrisburg, PA 17120, within 30 days after publication of this notice in the *Pennsylvania Bulletin*.

GREGORY S. MARTINO,  
*Acting Insurance Commissioner*

[Pa.B. Doc. No. 97-1325. Filed for public inspection August 15, 1997, 9:00 a.m.]

**Capital Blue Cross and Pennsylvania Blue Shield;  
Individual Major Medical Program; Rate Increase;  
Filing No. 97-U**

By Filing No. 97-U, Capital Blue Cross and Pennsylvania Blue Shield propose to increase the rates for the Individual Major Medical Program. The proposed increase is 16.4%. This rate change will produce an estimated

additional annual income of \$1.0 million and will affect approximately 5,200 policy holders. An effective date of January 1, 1998 is requested.

Copies are available for public inspection, by appointment, during normal working hours at the Insurance Department's Office in Harrisburg.

Interested parties are invited to submit written comments, suggestions or objections to Bharat Patel, Insurance Department, Office of Rate and Policy Regulation, Bureau of Accident and Health Insurance, 1311 Strawberry Square, Harrisburg, PA 17120, within 30 days after publication of this notice in the *Pennsylvania Bulletin*.

GREGORY S. MARTINO,  
*Acting Insurance Commissioner*

[Pa.B. Doc. No. 97-1326. Filed for public inspection August 15, 1997, 9:00 a.m.]

**Highmark, Inc.; Requesting Authority to Increase  
Community-Rated Medical/Surgical Group Product Rates;  
Filing No. 1-CGMS-97-HI**

By Filing No. 1-CGMS-97-HI, Highmark, Inc. requests approval of an increase to its Community-Rated Medical/Surgical Group product rates for UCR 100, UCR 80-20, 5000S, Plan C, 1800S, and the UCR 100 deductible options. The filing requests an average increase of 19.1%, varying by product and Blue Cross Plan area. The rate increase will impact about 209,000 policyholders and produce an additional annual premium income of \$28.3 million. The requested approval date is November 1, 1997.

Copies of the filing are available for public inspection during normal working hours, by appointment, at the Insurance Department's Offices in Harrisburg, Philadelphia, Pittsburgh and Erie.

Interested parties are invited to submit written comments, suggestions or objections to Bharat Patel, Actuary, Insurance Department, Office of Rate and Policy Regulation, Bureau of Accident and Health Insurance, 1311 Strawberry Square, Harrisburg, PA 17120, within 30 days of publication of this notice in the *Pennsylvania Bulletin*.

GREGORY S. MARTINO,  
*Acting Insurance Commissioner*

[Pa.B. Doc. No. 97-1327. Filed for public inspection August 15, 1997, 9:00 a.m.]

**Highmark, Inc.; Requesting Authority to Increase  
Community-Rated Medicare Supplement Group Product Rates;  
Filing No. 1-CGCM-97-HI**

By Filing No. 1-CGCM-97-HI, Highmark, Inc. requests approval of an increase to its Community-Rated Medicare Supplement Group product rates. The filing requests an average increase of 20.1%, varying by Blue Cross Plan area. The rate increase will impact about 27,000 policyholders and produce an additional annual premium income of \$3.3 million. The requested approval date is November 1, 1997.

Copies of the filing are available for public inspection during normal working hours, by appointment, at the Insurance Department's Offices in Harrisburg, Philadelphia, Pittsburgh and Erie.

Interested parties are invited to submit written comments, suggestions or objections to Bharat Patel, Actuary, Insurance Department, Office of Rate and Policy Regulation, Bureau of Accident and Health Insurance, 1311 Strawberry Square, Harrisburg, PA 17120, within 30 days of publication of this notice in the *Pennsylvania Bulletin*.

GREGORY S. MARTINO,  
*Acting Insurance Commissioner*

[Pa.B. Doc. No. 97-1328. Filed for public inspection August 15, 1997, 9:00 a.m.]

### Requirements of an Arbitration Provision in Private Passenger Uninsured and Underinsured Motorist Coverage; Doc. No. DO97-07-001

On June 30, 1997, The Insurance Federation of Pennsylvania, Inc. filed a Petition for Declaratory Order seeking a determination by the Insurance Commissioner of Pennsylvania "that the Insurance Department does not have the authority under existing statutes and regulations to require private passenger auto policies to include an arbitration provision covering uninsured and underinsured motorist disputes."

And Now, this 5th day of August, 1997, upon consideration of the Petition for Declaratory Order and the Answer thereto of the Insurance Department, Notice is hereby given under 1 Pa. Code § 35.30 that interested persons desiring to participate shall submit a Petition to Intervene, under 1 Pa. Code §§ 35.27—35.32, on or before September 5, 1997.

Petitions to Intervene shall be filed with the Docket Clerk of the Administrative Hearing Office, Insurance Department, Capitol Associates Building Room 200, 901 North Seventh Street, Harrisburg, PA 17102.

Interested persons are reminded of the need to serve all parties with any document which is filed with the Administrative Hearing Office. Copies of pertinent docket material relating to this case may be obtained from F. Karen Bernhard, Acting Assistant Docket Clerk at the above address, (717) 783-2126.

GREGORY S. MARTINO,  
*Acting Insurance Commissioner*

[Pa.B. Doc. No. 97-1329. Filed for public inspection August 15, 1997, 9:00 a.m.]

### Review Procedure Hearings; Cancellation or Refusal of Insurance

The following insureds have requested a hearing, as authorized by section 9(a) of the act of June 5, 1968 (P. L. 140, No. 78) (40 P. S. § 1008.9(a)) in connection with their company's termination of the insured's automobile policies.

The hearings will be held in the Capitol Associates Building, 901 North Seventh Street, Second Floor Hearing Room, Harrisburg, PA 17102.

Appeal of Klinger, John and Oliver; file no. 97-121-03965; State Farm Mutual Automobile Insurance Co.; doc. no. P97-07-035; September 9, 1997, at 11 a.m.

Parties may appear with or without counsel and offer relevant testimony or evidence to support their respective positions. The representative of the company must bring relevant claims files, documents, photographs, drawings, witnesses and the like necessary to substantiate the case. The insured must bring any evidence which the insured may want to offer at the hearing. The hearing will be held in accordance with the requirements of sections 9 and 10 of the act (40 P. S. §§ 1008.9 and 1008.10) and 1 Pa. Code Part II (relating to the General Rules of Administrative Practice and Procedure).

After the hearing, the Insurance Commissioner will issue a written order resolving the factual issues presented at the hearing and stating what remedial action, if any, is required. The Commissioner's Order will be sent to those persons participating in the hearing or their designated representatives. The order of the Commissioner is subject to judicial review by the Commonwealth Court.

Persons with a disability who wish to attend the above-referenced administrative hearing, and require an auxiliary aid, service or other accommodation to participate in the hearing should contact Tracey Pontius, Agency Coordinator at (717) 787-4298.

GREGORY S. MARTINO,  
*Acting Insurance Commissioner*

[Pa.B. Doc. No. 97-1330. Filed for public inspection August 15, 1997, 9:00 a.m.]

### Review Procedure Hearing; Cancellation or Refusal of Insurance

*Appeal of Mark A. McKeown under Act 78; File No. 95-188-00885; Erie Insurance Exchange; Doc. No. P95-03-027.*

A hearing was previously held on June 1, 1995 in this matter. The Insurance Department does not have a transcript of those proceedings and therefore the Insurance Commissioner cannot make a decision in accordance with 2 Pa.C.S. §§ 501—508 and 701—704 (relating to the Administrative Agency Law) and 1 Pa. Code Part II (relating to the Administrative Rules of Practice and Procedure). The Administrative Hearing Office has made diligent inquiries to the court reporting service in attendance at the hearing, as well as to the parties, to obtain a transcript. A new hearing, to be held de novo, is necessary to afford both parties a fair opportunity to be heard and to resolve the pending appeal. Therefore, under the act of June 5, 1968 (P. L. 140, No. 78) (40 P. S. §§ 1008.1—1008.11) (act) notice is hereby given that the above-captioned insured has requested a hearing, as authorized by section 9(a) of the act (40 P. S. § 1008.9(a)) in connection with the Company's termination of the above-captioned automobile policy.

The hearing will be held in the Capitol Associates Building, 901 North Seventh Street, Second Floor Hearing Room, Harrisburg, PA 17102 on September 11, 1997, at 11 a.m.

Both parties may appear with or without counsel and offer relevant testimony or evidence to support their respective positions. The representative of the company must bring relevant claims files, documents, photographs,



drawings, witnesses, and the like, necessary to substantiate the case. The insured must bring any evidence which the insured may want to offer at the hearing. The hearing will be held in accordance with the requirements of sections 9 and 10 of the act (40 P. S. §§ 1008.9—1008.10) and 1 Pa. Code Part II (relating to the Administrative Rules of Practice and Procedure).

After the hearing, the Insurance Commissioner will issue a written order resolving the factual issues presented at the hearing and stating what remedial action, if any, is required. The Commissioner's Order will be sent to those persons participating in the hearing or their designated representatives. The order of the Commissioner is subject to judicial review by the Commonwealth Court.

Persons with a disability who wish to attend the above-referenced administrative hearing and require an auxiliary aid, service or other accommodation to participate in the hearing, should contact Tracey Pontius, Agency Coordinator at (717) 787-4298.

GREGORY S. MARTINO,  
*Acting Insurance Commissioner*

[Pa.B. Doc. No. 97-1331. Filed for public inspection August 15, 1997, 9:00 a.m.]

## LEGISLATIVE REFERENCE BUREAU

### Documents Filed But Not Published

The Legislative Reference Bureau accepted the following documents during the preceding calendar month for filing without publication under 1 Pa. Code § 3.13(b) (relating to contents of Bulletin). The Bureau will continue to publish on a monthly basis either a summary table identifying the documents accepted during the preceding calendar month under this subsection or a statement that no such documents have been received. For questions concerning or copies of documents filed, but not published, please call (717) 783-1530.

#### *Executive Board*

Resolution #CB-97—150, Dated, July 2, 1997. The Commonwealth of Pennsylvania entered into a side letter of agreement with the American Federation of State, County, and Municipal Employees (AFSCME); providing for the applicability of certain sections of the master memorandum between the Commonwealth of Pennsylvania and AFSCME to employees classified as Assistant Regional Supervisor, Fish and Boat Commission.

Resolution #CB-97—178, Dated, July 14, 1997. The Commonwealth of Pennsylvania entered into a side letter with the American Federation of State, County, and Municipal Employees (AFSCME); providing for meal expense for certain employes in the Inspection, Investigation, and Safety Units of the Master Agreement and Master Memorandum of Understanding.

Resolution #CB-97—183, Dated, July 14, 1997. The Commonwealth of Pennsylvania entered into a side letter of agreement with the Pennsylvania Nurses Association on June 23, 1997, which covers the Medical and Support-

ive Services First Level Supervisory Unit effective July 1, 1997, through June 30, 2000. The Commonwealth of Pennsylvania has notified the Pennsylvania Nurses Association of its intent to not implement a specific provision of Recommendation 16, Salaries and Wages, Section 15, of the Memorandum of Understanding.

Resolution #CB-97—191, Dated, July 29, 1997. The Commonwealth of Pennsylvania entered into a side letter with the American Federation of State, County, and Municipal Employees (AFSCME), Pennsylvania Social Services Union (PSSU), Pennsylvania Nurses Association (PNA), Correctional Institution Vocational Education Association (CIVEA), Pennsylvania State Education Association (PSEA), and Independent State Store Union (ISSU); these side letters amend the Collective Bargaining Agreements and Memoranda of Understanding entered into with these unions to remove language that states that cash payments provided in the Salaries Articles/Recommendations "will require neither employe nor employer retirement contributions, nor will these payments be considered compensation for the calculation of retirement benefits."

#### *Governor's Office*

Manual M505.2 Personnel Management Review—Amended Dated, July 9, 1997.

Management Directive No. 205.19—Smoking in Commonwealth Buildings and Facilities Amended July 1, 1997.

Management Directive No. 245.12 Implementation of the Data Center Project Plan Dated, July 1, 1997.

Management Directive No. 505.20 Wage Complement Management and Control Amended July 8, 1997.

Management Directive No. 515.2 Transfer of Employees From One Agency to Another Amended July 8, 1997.

Management Directive No. 525.16 Physicians and Related Occupations Quality Assurance Program Amended July 2, 1997.

Management Directive No. 530.15 Disability Benefits, Related Pay Status Options, and Retired Employee Health Program (REHP) Effective Dates Amended July 8, 1997.

Management Directive No. 530.20 State Paid Benefits While on Cyclical Leave Without Pay Amended July 8, 1997.

Management Directive No. 590.1 Labor Relations Amended July 8, 1997.

Management Directive No. 590.3 Deduction of Union Dues/Fair Share Fees Amended July 8, 1997.

Management Directive No. 615.6 License Plates for Commonwealth-Owned Vehicles Amended June 30, 1997.

Management Directive No. 615.7 Commonwealth Vehicle Invoices Amended July 3, 1997.

Management Directive No. 615.14 Repairs and Maintenance, Commonwealth Automotive Fleet Amended June 25, 1997.

GARY R. HOFFMAN,  
*Director*  
*Pennsylvania Bulletin*

[Pa.B. Doc. No. 97-1332. Filed for public inspection August 15, 1997, 9:00 a.m.]

# PENNSYLVANIA PUBLIC UTILITY COMMISSION

## Merger Without Hearing

**A-110150 F0015. DQE, Inc., Allegheny Power System, Inc. and AYP Sub, Inc.** Joint Application of DQE, Inc., and Allegheny Power System, Inc., and AYP Sub, Inc., for approval of the transfer by merger of the property and rights of Duquesne Light Company to Allegheny Power System, Inc.

This application may be considered without a hearing. Protests or petitions to intervene can be filed with the Pennsylvania Public Utility Commission, Harrisburg, with a copy served on the applicant on or before September 2, 1997, under 52 Pa. Code (relating to public utilities).

*Applicant:* Duquesne Light Company, Allegheny Power

*Through and By Counsel:* Leonard W. Belter, Raymond B. Wuslich, Winston and Strawn, 1400 L Street, NW, Washington, DC 20005-3502.

JAMES J. MCNULTY,  
*Acting Secretary*

[Pa.B. Doc. No. 97-1333. Filed for public inspection August 15, 1997, 9:00 a.m.]

## Service of Notice of Motor Carrier Applications

The following temporary authority and/or permanent authority applications for the right to render service as a common carrier or contract carrier in this Commonwealth have been filed with the Pennsylvania Public Utility Commission (Commission). Publication of this notice shall be considered as sufficient notice to all carriers holding authority from this Commission. Applications will be considered without hearing in the absence of protests to the application. Protests to the applications published herein are due on or before September 8, 1997, as set forth at 52 Pa. Code § 3.381 (relating to applications for transportation of property and persons). The protests shall also indicate whether it applies to the temporary authority application or the permanent application or both.

**Applications of the following for approval of the beginning of the exercise of the right and privilege of operating as common carriers for transportation of persons as described under each application.**

**A-00114159. Jim Thorpe River Adventures, Inc., t/d/b/a Kuhn Bros. Transportation** (One Adventure Lane, Jim Thorpe, Carbon County, PA 18229), a corporation of the Commonwealth of Pennsylvania—persons, in group and party service, between points in the county of Carbon, and from points in said county, to points in Pennsylvania, and return; limited to transportation in 15-passenger vans and school bus-type vehicles not to exceed 28 passengers. *Attorney:* Daniel A. Miscavige, 67 North Church Street, Hazleton, PA 18201.

**Applications of the following for amendment to the certificate of public convenience approving the operation of motor vehicles as common carriers for transportation of persons as described under each application.**

**A-00079143. F. 8. Am-G. Harrisburg Taxicab & Baggage Company, t/d/b/a/ Yellow Cab** (50 Market Street, Lemoyne, Cumberland County, PA 17043), a corporation of the Commonwealth of Pennsylvania—inter alia, persons upon call or demand in the city of York, the townships of Spring Garden, Springettsbury, York, Manchester, West Manchester, Hellam, East Manchester, Springfield, Dover, Conawago, and Jackson, and the boroughs of Hellam, Dover, West York and North York, York County: *so as to permit* the transportation of persons upon call or demand in the counties of York and Adams. Temporary authority application filed seeking the right cited above. *Attorney:* John Fullerton, P. O. Box 9500, Harrisburg, PA 17108.

**Applications of the following for approval of discontinuance of service for the transportation of persons as described under each application.**

**A-00110760. F. 1. Am-A. Seneca Charter Tours, Inc.** (221 Thompson Run Road, Pittsburgh, Allegheny County, PA 15235), a corporation of the Commonwealth of Pennsylvania—discontinuance of service—persons in group and party service, from that part of the city of Pittsburgh bounded and described as follows: beginning at the intersection of Interstate Route 579 (Crosstown Boulevard) and Bigelow Boulevard; then via Bigelow Boulevard to North Craig Street; then via North Craig Street to Baum Boulevard; then via Baum Boulevard to its intersection with Negley Avenue; then north on Negley Avenue to its intersection with East Liberty Boulevard; then via East Liberty Boulevard to its intersection with Collins Street; then north on Collins Street to its intersection with Negley Run Boulevard; then via Negley Run Boulevard to its intersection with Washington Boulevard; then north on Washington Boulevard to its intersection with Allegheny River Boulevard; then east on Allegheny River Boulevard to the city line of the City of Pittsburgh; then south via the city line to Penn Avenue; then west on Penn Avenue to Penn Circle South; then via Penn Circle South to Center Avenue; then via Center Avenue to its intersection with Morgan Street; then via Morgan Street to its intersection with Aliquippa Street; then via Aliquippa Street to its intersection with Robinson Street; then via Robinson Street to its intersection with Fifth Avenue; then west via Fifth Avenue to the Crosstown Boulevard; then via Crosstown Boulevard to the point of beginning, to points in Pennsylvania; subject to the following condition: that no right, power or privilege is granted to transport between points in Allegheny County or to transport groups and parties of persons in charter service (but not including persons on special excursions and tours or sightseeing service) from points in Allegheny County to points outside of Allegheny County within an airline distance of 40 statute miles of the City-County Building in the City of Pittsburgh, Allegheny County.

**Applications of the following for approval of the additional right and privilege of operating motor vehicles as common carriers for transportation of persons as described under each application.**

**A-00111258 F. 4. Hermes Transportation Co., Inc.** (460 Eagleview Boulevard, Exton, Chester County, PA 19341-0636), a corporation of the Commonwealth of Pennsylvania—additional right—persons in group and party service, between points in the counties of Philadelphia,

Bucks, Montgomery, Delaware and Chester, and from points in said counties to points in Pennsylvania, and return. *Attorney:* Raymond A. Thistle, Jr., Suite 3, 726 Fitzwatertown Road, Willow Grove, PA 19090-1390.

**Applications of the following for approval of the beginning of the exercise of the right and privilege of operating motor vehicles as *common carriers* for the transportation of *persons* by *transfer of rights* as described under each application.**

**A-00113947. Tracy W. Harmon, t/d/b/a TR's Limo Service** (R. D. 1, Box 24, Mayport, Clarion County, PA 16240)—persons, in limousine service, between points in the counties of Venango, Clarion and Armstrong, and from said counties, to points in Pennsylvania, and return; which is to be a transfer of the right authorized under the certificate issued at A-00109349 to Otto N. Schiberl, Jr., t/d/b/a B & B Limousine Rental, subject to the same limitations and conditions. *Attorney:* Kent S. Pope, Ten Grant Street, Clarion, PA 16214.

**Motor Carrier Applications—Property, Excluding Household Goods in Use**

The following applications for the authority to transport property, excluding household goods in use, between points in Pennsylvania, have been filed with the Pennsylvania Public Utility Commission. Public comment to these applications may be filed, in writing with the Secretary, Pennsylvania Public Utility Commission, P. O. Box 3265, Harrisburg, PA 17105-3265 on or before September 2, 1997.

- A-00114168 Charles R. & Mildred S. Altemus, t/d/b/a Altemus Farms  
R. D. 1, Box 134, Penn Run, PA 15765
- A-00114169 B & B Freight Lines, Inc.  
471 Oak Street, Florence, NJ 08518
- A-00114171 Stephen Glenn Boore, t/d/b/a  
Boore's Towing  
50 Bonnybrook Road, #39, Carlisle, PA 17013
- A-00114172 A. S. Nansen, Inc.  
35 Old Beaver Run Road, Lafayette, NJ 07848; Walter I. Hill, 100 Main Street, Newton, NJ 07860
- A-00114173 Robert T. Smith, t/d/b/a  
O R C Enterprises  
221 D Street, Johnstown, PA 15906-2256
- A-00114174 Curtis F. Matthews, t/d/b/a  
Curtis Matthews Trucking  
1614 Scrubgrass Road, Mercer, PA 16137; William A. Gray, 2310 Grant Building, Pittsburgh, PA 15219
- A-00114158 Dennis R. Gilbert  
23 Sheep Hill Road, Oley, PA 19547
- A-00114164 Michael L. Drake, t/d/b/a  
Drake's Mobile Home Transporting  
R. D. 1, Box 44, Grand Valley, PA 16420
- A-00114175 Johnson's Piano Movers, Inc.  
1723 Oakland Road, Freeland, MD 21053; Jeffrey Gray, York Road, Parkton, MD 21120

- A-00114176 James A. Dovicsak, t/d/b/a  
Dovicsak Excavating and Hauling  
Box 180, Saunders Station Road, Trafford, PA 15085; David Robinson, Esquire, 101 West Pittsburgh Street, Greensburg, PA 15601
- A-00114177 Wayne M. Cornell  
878 Beaver Dam, Friedens, PA 15541; George Kauffman, Esquire, 204 Scull Building, Somerset, PA 15501
- A-00114178 Gregory J. Pierre, t/d/b/a  
Gregory J. Pierre Trucking  
R. R. 1, Box 1306 Center Street, Gouldsboro, PA 18424
- A-00114179 Hahn Transportation, Inc.  
90 West Main Street, New Market, MD 21774

JAMES J. MCNULTY,  
*Acting Secretary*

[Pa.B. Doc. No. 97-1334. Filed for public inspection August 15, 1997, 9:00 a.m.]

## PORT OF PITTSBURGH COMMISSION

### Request for Proposals; No. PPC-971015

The Port of Pittsburgh Commission is soliciting proposals from qualified vendors to conduct financial statement audits of its books, accounts and records for each of the fiscal years ending June 30, 1998, 1999 and 2000. The audit will be conducted in Harrisburg and Pittsburgh. Interested parties may receive copies of the Request for Proposals by calling the Port of Pittsburgh Commission at (412) 442-5204. Proposals will be received at the Commission's office, D. L. Clark Building, 503 Martindale Street, 5th Floor, Pittsburgh, PA 15212 until 1 p.m. on October 15, 1997.

JAMES R. MCCARVILLE,  
*Executive Director*

[Pa.B. Doc. No. 97-1335. Filed for public inspection August 15, 1997, 9:00 a.m.]

## PUBLIC SCHOOL EMPLOYEES' RETIREMENT BOARD

### Hearings Scheduled

Hearings have been scheduled, as authorized by 24 Pa.C.S. Part IV (relating to Public School Employees' Retirement Code), in connection with the Public School Employees' Retirement System's denial of Claimants' requests concerning the indicated accounts.

The hearings will be held before a hearing examiner at the Public School Employes' Retirement System, 5 North Fifth Street, Harrisburg, PA 17101:

September 3, 1997	Alfreda J. Armstrong (Change of Retirement Plan)	1 p.m.
September 17, 1997	William A. Maguire, (D) (Reelection of Retirement Option)	1 p.m.

Persons with a disability who wish to attend the above-listed hearings and require an auxiliary aid, service or other accommodation to participate in the proceedings, should contact Arthur J. Granito, Assistant Executive Director, at (717) 783-5613 to discuss how the Public School Employes' Retirement System may best accommodate their needs.

Parties may appear with or without counsel and offer relevant testimony or evidence to support their respective positions. The hearings will be held in accordance with the requirements of 2 Pa.C.S. §§ 501—508 and 701—704 (relating to the Administrative Agency Law). Under 22 Pa. Code § 201.1, (relating to applicability of general rules), procedural matters will be in conformance with 1 Pa. Code Part II (relating to the General Rules of Administrative Practice and Procedure) unless specific exemption is granted.

JAMES. A. PERRY,  
*Secretary*

[Pa.B. Doc. No. 97-1336. Filed for public inspection August 15, 1997, 9:00 a.m.]

## TURNPIKE COMMISSION

### Retention of an Engineering Firm

### Modification and Expansion of the Gettysburg Pike Interchange Cumberland County, PA

#### Reference No. 3-097

The Turnpike Commission will retain an engineering firm to prepare preliminary and final design plans for the modification and expansion of the Gettysburg Pike Interchange Toll Plaza (Milepost 236.1) to provide an expanded facility for access to and from S. R. 0015, in Upper Allen Township, Cumberland County, PA.

The required engineering services will include field surveys, coordination with utility companies and services, soils investigations, and corresponding reports. Architectural services will include design of the toll plaza building, interior design, landscape design, toll booths, canopy and other related tasks necessary for the Project. Significant building program data will be provided from previous similar Projects. In addition, the necessary plans and contract documents will be required for interchange signing, lighting, maintenance and protection of traffic, construction staging, contour grading, drainage, and roadside development. Additional Right-of-Way is not anticipated as part of this Project. If environmental services are needed for this Project, they will be provided by others.

Direct inquiries to Jeffrey C. Davis, P.E., at (717) 939-9551, extension 5160.

### General Requirements and Information

Firms interested in performing the above services are invited to submit expanded letters of interest to Barry L. Troup, P.E., Assistant Chief Engineer for Design, at the PA Turnpike Commission Administration Building located on Eisenhower Boulevard at the Harrisburg-East Interchange near Highspire, PA (Mailing Address: P. O. Box 67676, Harrisburg, PA 17106-7676).

The expanded letters of interest must include in the heading the project reference number indicated in the advertisement. A Standard Form 254, "Architect-Engineer and Related Services Questionnaire," not more than 1 year old as of the date of this advertisement, and Standard Form 255, "Architect-Engineer and Related Services Questionnaire for Specific Project," must accompany each expanded letter of interest. Explanation that the firm has successfully completed similar type projects, of the same magnitude, is required. If the firm has multiple offices, the location of the office performing the work must be identified.

Firms with out-of-State headquarters or corporation not incorporated in Pennsylvania must include with each expanded letter of interest a copy of their registration to do business in the Commonwealth as provided by the Department of State.

The Turnpike Commission currently limits its participation in the remuneration of principals or consultant employes performing work on projects to \$72,800 per annum or \$35 per hour or their actual audited remuneration, whichever is less. The Commission currently limits its participation in the consultant's indirect payroll costs (overhead) on design projects to 130% or the consultant's actual audited overhead rate, whichever is less.

The following factors should be identified by the Consultant in their submission:

(A) Specialized experience and technical competence of firm. The firm must clearly demonstrate their capabilities of completing this project by identifying similar projects that have been completed, the magnitude of the project, and the client.

(B) Past record of performance with respect to cost control, work quality and ability to meet schedules. The specific experience of individuals who constitute the firms shall be considered.

(C) Expanded letters of interest must include an indication of the prime consultant's and subconsultant's current workload for all Department of Transportation and Turnpike Commission projects.

(D) Location of consultant's office where the work will be performed.

(E) Listing of subconsultant's intended. Any deviation from the subconsultant's listed in the expanded letter of interest will require written approval from the Commission.

(F) Special requirements of the project.

(G) An organization chart for the Project, identifying key personnel. Only resumes of key personnel should be included.

(H) Other factors, if any, specific to the project.

Each firm should demonstrate in their expanded letter of interest their ability to perform the specific requirements indicated for this project by including a maximum three page report on this Project.

The expanded letter of interest and required form must be received by 12 p.m. Friday, September 5, 1997. Any letters of interest received after this date and time will be time-stamped and returned.

Based on an evaluation of acceptable expanded letters of interest received in response to this solicitation, one firm will be selected for this Project. The order of preference will be established for the purpose of negotiating an agreement with the highest ranked firm estab-

lished by the Technical Review Committee and approved by the Selection Committee. Technical Proposals or Requests for Proposals will not be requested prior to selection.

The Commission reserves the right to reject all expanded letters of interest, to cancel solicitation requested under this notice, and/or to re-advertise solicitation for these services.

JAMES F. MALONE, III,  
*Chairperson*

[Pa.B. Doc. No. 97-1337. Filed for public inspection August 15, 1997, 9:00 a.m.]

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# STATE CONTRACTS INFORMATION

## DEPARTMENT OF GENERAL SERVICES

Notices of invitations for bids and requests for proposals on State contracts for services and commodities for which the bid amount is reasonably expected to be over \$10,000, are published in the State Contracts Information Section of the *Pennsylvania Bulletin* prior to bid opening date. Information in this publication is intended only as notification to its subscribers of available bidding and contracting opportunities, and is furnished through the Department of General Services, Vendor Information and Support Division. No action can be taken by any subscriber or any other person, and the Commonwealth of Pennsylvania is not liable to any subscriber or any other person, for any damages or any other costs incurred in connection with the utilization of, or any other reliance upon, any information in the State Contracts Information Section of the *Pennsylvania Bulletin*. Interested persons are encouraged to call the contact telephone number listed for the particular solicitation for current, more detailed information.

**EFFECTIVE JULY 1, 1985, A VENDOR'S FEDERAL IDENTIFICATION NUMBER (NUMBER ASSIGNED WHEN FILING INCOME TAX DOCUMENTS) OR SOCIAL SECURITY NUMBER IF VENDOR IS AN INDIVIDUAL, MUST BE ON ALL CONTRACTS, DOCUMENTS AND INVOICES SUBMITTED TO THE COMMONWEALTH.**

Act 266 of 1982 provides for the payment of interest penalties on certain invoices of "qualified small business concerns". A qualified small business concern is an independently owned, operated for profit, business employing 100 or fewer employes and is not a subsidiary or affiliate of a corporation otherwise not qualified.

Such penalties apply to invoices for goods or services when payments are not made by the required payment date or within a 15 day grace period thereafter. The small business concern must include on every invoice submitted to the Commonwealth: "(name of vendor) is a qualified small business concern as defined at 4 Pa. Code § 2.32".

For information on the required payment date and annual interest rate, please call the Pennsylvania Department of Commerce, Small Business Action Center, 483 Forum Building, 783-5700.

### Reader's Guide

## Legal Services & Consultation—26

- ① Service Code Identification Number
- ② Commodity/Supply or Contract Identification No.
- ③ Contract Information
- ④ Department
- ⑤ Location
- ⑥ Duration
- ⑦ (For Commodities: Contact: Vendor Services Section 717-787-2199 or 717-787-4705)

**B-54137.** Consultant to provide three 2-day training sessions, covering the principles, concepts, and techniques of performance appraisal and standard setting with emphasis on performance and accountability, with a knowledge of State Government constraints.  
 Department: General Services  
 Location: Harrisburg, Pa.  
 Duration: 12/1/93-12/30/93  
 Contact: Procurement Division 787-0000

### REQUIRED DATA DESCRIPTIONS

- ① Service Code Identification Number: There are currently 39 state service and contractual codes. See description of legend.
- ② Commodity/Supply or Contract Identification No.: When given, number should be referenced when inquiring of contract of Purchase Requisition. If more than one number is given, each number represents an additional contract.
- ③ Contract Information: Additional information for bid preparation may be obtained through the departmental contracting official.
- ④ Department: State Department or Agency initiating request for advertisement.
- ⑤ Location: Area where contract performance will be executed.
- ⑥ Duration: Time estimate for performance and/or execution of contract.
- ⑦ Contact: (For services) State Department or Agency where vendor inquiries are to be made.  
 (For commodities) Vendor Services Section (717) 787-2199 or (717) 787-4705

## GET THAT COMPETITIVE EDGE—FOR FREE!

Do you want to do business with your state government? The Treasury Department's office of Contract Information Services can assist you by providing you with information that may be helpful to you in successfully bidding on State contracts.

Act 244 of 1980 requires Commonwealth departments and agencies to file with the Treasury Department a copy of all contracts involving an expenditure of \$5,000 or more.

These fully executed contracts usually contain the vendor's name, dollar value, effective and termination dates and contract specifications. Some contracts also include the names of other bidding vendors and the bid proposal compiled by the awarded vendor. There is a minimal cost for photocopying contracts.

Allow the Treasury Department to "make a difference for you." For contract information call the office of Contract Information Services TOLL-FREE (in Pennsylvania) at 1-800-252-4700 or (717) 787-4586. Or you may write or visit the office at Room G13, Finance Building, Harrisburg, Pa. 17120.

BARBARA HAFER,  
*State Treasurer*

**Online Subscriptions At <http://www.statecontracts.com> 1-800-334-1429 x340**

### Commodities

- |  |  |
|--|--|
| <p><b>6810-09</b> Annual Contract—Chemicals boiler water treatment.<br/> <b>Department:</b> General Services<br/> <b>Location:</b> Harrisburg, Dauphin County, PA<br/> <b>Duration:</b> 12/01—11/30<br/> <b>Contact:</b> Vendor Services: Fax request to (717) 783-6241 or call (717) 787-2199</p> <p><b>0057-08</b> Annual Contract—PA Heritage.<br/> <b>Department:</b> Historical and Museum Commission<br/> <b>Location:</b> Harrisburg, Dauphin County, PA<br/> <b>Duration:</b> 12/01—11/30<br/> <b>Contact:</b> Vendor Services: Fax request to (717) 783-6241 or call (717) 787-2199</p> <p><b>0096-08</b> Annual Contract—Lottery POS materials.<br/> <b>Department:</b> Revenue<br/> <b>Location:</b> Harrisburg, Dauphin County, PA<br/> <b>Duration:</b> 11/01—10/31<br/> <b>Contact:</b> Vendor Services: Fax request to (717) 783-6241 or call (717) 787-2199</p> <p><b>2550-02</b> Annual Contract—Engines diesel new and exchange.<br/> <b>Department:</b> Transportation<br/> <b>Location:</b> Various locations<br/> <b>Duration:</b> 12/01—11/30<br/> <b>Contact:</b> Vendor Services: Fax request to (717) 783-6241 or call (717) 787-2199</p> <p><b>5510-02</b> Annual Contract—Lumber.<br/> <b>Department:</b> All Using Agencies<br/> <b>Location:</b> Various Locations<br/> <b>Duration:</b> 12/01—11/30<br/> <b>Contact:</b> Vendor Services: Fax request to (717) 783-6241 or call (717) 787-2199</p> <p><b>5610-15</b> Annual Contract—Coarse and fine, aggregate Parts A and B.<br/> <b>Department:</b> Transportation/Conservation and Natural Resources/Corrections/<br/> Environmental Protection/Game and Boat/Fish Commission<br/> <b>Location:</b> Various Locations<br/> <b>Duration:</b> 01/01—12/31<br/> <b>Contact:</b> Vendor Services: Fax request to (717) 783-6241 or call (717) 787-2199</p> <p><b>5820-02</b> Annual Contract—2-way radio communications equipment and accessory equipment.<br/> <b>Department:</b> All Using Agencies<br/> <b>Location:</b> Various Locations<br/> <b>Duration:</b> 12/01—11/30<br/> <b>Contact:</b> Vendor Services: Fax request to (717) 783-6241 or call (717) 787-2199</p> <p><b>6240-01</b> Annual Contract—Lamps: incandescent/fluorescent/hi intensity discharge.<br/> <b>Department:</b> All Using Agencies<br/> <b>Location:</b> Various Locations<br/> <b>Duration:</b> 12/01—11/30<br/> <b>Contact:</b> Vendor Services: Fax request to (717) 783-6241 or call (717) 787-2199</p> <p><b>6592-01</b> Annual Contract—Medical ware, hospital.<br/> <b>Department:</b> All Using Agencies<br/> <b>Location:</b> Various Locations<br/> <b>Duration:</b> 11/15—11/14<br/> <b>Contact:</b> Vendor Services: Fax request to (717) 783-6241 or call (717) 787-2199</p> | <p><b>6760-01</b> Annual Contract—Industrial photo ID supplies.<br/> <b>Department:</b> All Using Agencies<br/> <b>Location:</b> Various Locations<br/> <b>Duration:</b> 12/01—11/30<br/> <b>Contact:</b> Vendor Services: Fax request to (717) 783-6241 or call (717) 787-2199</p> <p><b>7350-05</b> Annual Contract—Food service equipment.<br/> <b>Department:</b> All Using Agencies<br/> <b>Location:</b> Various Locations<br/> <b>Duration:</b> 12/01—11/30<br/> <b>Contact:</b> Vendor Services: Fax request to (717) 783-6241 or call (717) 787-2199</p> <p><b>7440-01</b> Annual Contract—Tapes/cartridges data processing.<br/> <b>Department:</b> All Using Agencies<br/> <b>Location:</b> Various Locations<br/> <b>Duration:</b> 12/01—11/30<br/> <b>Contact:</b> Vendor Services: Fax request to (717) 783-6241 or call (717) 787-2199</p> <p><b>7490-03</b> Annual Contract—Mailroom equipment and supplies.<br/> <b>Department:</b> All Using Agencies<br/> <b>Location:</b> Various Locations<br/> <b>Duration:</b> 01/01—12/31<br/> <b>Contact:</b> Vendor Services: Fax request to (717) 783-6241 or call (717) 787-2199</p> <p><b>7920-06</b> Annual Contract—Dilution control systems contract.<br/> <b>Department:</b> All Using Agencies<br/> <b>Location:</b> Various Locations<br/> <b>Duration:</b> 12/01—11/30<br/> <b>Contact:</b> Vendor Services: Fax request to (717) 783-6241 or call (717) 787-2199</p> <p><b>8010-06</b> Annual Contract—Glass beads, traffic line paint.<br/> <b>Department:</b> Transportation<br/> <b>Location:</b> Various Locations<br/> <b>Duration:</b> 12/01—11/30<br/> <b>Contact:</b> Vendor Services: Fax request to (717) 783-6241 or call (717) 787-2199</p> <p><b>8430-06</b> Annual Contract—Footwear, police types.<br/> <b>Department:</b> All Using Agencies<br/> <b>Location:</b> Various Locations<br/> <b>Duration:</b> 12/01—11/30<br/> <b>Contact:</b> Vendor Services: Fax request to (717) 783-6241 or call (717) 787-2199</p> <p><b>8430-08</b> Annual Contract—Footwear, furnish and fit, (South Mountain and Wernersville).<br/> <b>Department:</b> Public Welfare<br/> <b>Location:</b> Various Locations<br/> <b>Duration:</b> 12/01—11/30<br/> <b>Contact:</b> Vendor Services: Fax request to (717) 783-6241 or call (717) 787-2199</p> <p><b>9905-11</b> Annual Contract—Traffic control devices, work zone.<br/> <b>Department:</b> All Using Agencies<br/> <b>Location:</b> Various Locations<br/> <b>Duration:</b> 12/01—11/30<br/> <b>Contact:</b> Vendor Services: Fax request to (717) 783-6241 or call (717) 787-2199</p> <p><b>9905-14</b> Annual Contract—Aluminum sign blanks.<br/> <b>Department:</b> All Using Agencies<br/> <b>Location:</b> Various Locations<br/> <b>Duration:</b> 11/15—11/14<br/> <b>Contact:</b> Vendor Services: Fax request to (717) 783-6241 or call (717) 787-2199</p> <p><b>1198157</b> Clothing and individual equipment—125 each police uniform jacket (coat), navy blue color.<br/> <b>Department:</b> General Services<br/> <b>Location:</b> Harrisburg, Dauphin County, PA<br/> <b>Duration:</b> FY 97/98<br/> <b>Contact:</b> Vendor Services: Fax request to (717) 783-6241 or call (717) 787-2199</p> |
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**1203207** Clothing and individual equipment—50,000 each shoulder patch, made in strict accordance with PA State Police Spec 1-18A.

**Department:** State Police  
**Location:** Harrisburg, Dauphin County, PA  
**Duration:** FY 97/98  
**Contact:** Vendor Services: Fax request to (717) 783-6241 or call (717) 787-2199

**1200157** Pipe tubing, hose and fittings—1 lot stainless steel trench and piping work.

**Department:** General Services  
**Location:** Harrisburg, Dauphin County, PA  
**Duration:** FY 97/98  
**Contact:** Vendor Services: Fax request to (717) 783-6241 or call (717) 787-2199

**1202157** Tents and tarpaulins—1 lot casework, for Commonwealth Media Services new facility at 22nd and Foster Streets, Harrisburg.

**Department:** General Services  
**Location:** Harrisburg, Dauphin County, PA  
**Duration:** FY 97/98  
**Contact:** Vendor Services: Fax request to (717) 783-6241 or call (717) 787-2199

**1214117** Textiles—25,000 yards bleached sheeting, per PCID No. 1021, width 72", color: snow white (Pantone Color 11-0602TP).

**Department:** Corrections  
**Location:** Correctional Industries, Huntingdon, Huntingdon County, PA  
**Duration:** FY 97/98  
**Contact:** Vendor Services: Fax request to (717) 783-6241 or call (717) 787-2199

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## SERVICES

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### Agricultural Services—02

**23-60003029** Provide fish feed productions used in a Statewide fish culture program during the period October 01, 1997 through December 31, 1997. Fish feed productions purchased in bulk and bagged quantities only from vendors who have had their products tested and accepted by the Fish and Boat Commission.

**Department:** Fish and Boat Commission  
**Location:** Statewide to various fish culture stations as requested  
**Duration:** October 01, 1997—December 31, 1997  
**Contact:** Dennis C. Ricker, (814) 359-5141

### Audio/Video—04

**SP-97-005** Cellular phone service. The contractor shall provide cellular air time, maintenance and repair service for the State Correctional Institution at Coal Township.

**Department:** Corrections  
**Location:** State Correctional Institution at Coal Township, 1 Kelley Drive, Coal Township, PA 17866  
**Duration:** 3 years  
**Contact:** Nancy A. Lasko, Purchasing Agent, (717) 644-7890, ext. 142

### Construction Maintenance—09

**080988** Bucks County—SR 2002(52M).

**Department:** Transportation  
**Location:** District 6-0  
**Duration:** FY 1997-98  
**Contact:** V. C. Shah, (717) 787-5914

**Contract No. FDC-321-286** Repair of two bridges including: concrete underpinning; R-4 and R-7 rock lining with geotextile; and seeding and mulching. Both bridges are located within Fowlers Hollow State Park.

**Department:** Conservation and Natural Resources  
**Location:** Toboyne Township, Perry County, PA  
**Duration:** 90 days  
**Contact:** Construction Management Section, (717) 787-5055

**RFP 948-10.OA Phase 7, PT A** Project title: Replace Sound System. Brief description: Replace the existing sound system with new audio systems and subsystems within the 1,500 seat auditorium of the Forum Building, Capitol Park, Harrisburg, Dauphin County, PA. General construction. Plans price: \$30 per set. Payable to Commonwealth of PA. This price is nonrefundable. Mail request to: Department of General Services, Room 107, Headquarters Building, 18th and Herr Streets, Harrisburg, PA 17125, (717) 787-3923. Bid date Monday, September 8, 1997 at 2 p.m. A facility tour is scheduled for Monday, August 18, 1997 at 10 a.m. Participants are to meet at main entrance of the Auditorium of the Forum Building. A preproposal conference has been scheduled for Monday, August 25, 1997 at 10:30 a.m. in the Forum Building Auditorium, 5th and Walnut Streets, Harrisburg, PA. Contact: Fuller Runyan at the Forum, (717) 783-9100. All contractors who have secured contract documents are invited and urged to attend the facility tour and the preproposal conference.

**Department:** General Services  
**Location:** Forum Building Auditorium, Harrisburg, Dauphin County, PA  
**Duration:** Indeterminate 1997-98  
**Contact:** Contract Bidding Unit, (717) 787-6556

**DGS 964-25 Phase I** Project title: Construction and Renovation. Brief description: work consists of the construction of new parking areas, site access, paving, fencing, curbing, drainage and retention pond sewage holding tanks to replace existing septic tank and leaching bed. General construction. Plans deposit: \$100 per set. Payable to: E. Pawlowski Associates. Refundable upon return of plans and specifications in reusable condition as construction documents within 15 days after the bid opening date. Bidder is responsible for the cost of delivery of the plans and specifications. Contact the office listed below to arrange for delivery of documents. A separate check must be submitted to cover the cost of delivery. Mail request to: E. Pawlowski Associates, 430 Main Street, Johnstown, PA 15901, (814) 536-5321. Bid date Wednesday, September 10, 1997 at 11 a.m.

**Department:** General Services  
**Location:** Johnstown Armory, Johnstown, Cambria County, PA  
**Duration:** 230 calendar days from date of initial job conference  
**Contact:** Contract Bidding Unit, (717) 787-6556

**DGS 964-26** Project title: New Armory. Brief description: construction of a new Armory including offices, locker rooms, supply rooms, vault, drill hall, classrooms, maintenance bay, fuel dispensing, wash platform and parking. Work includes general, HVAC, plumbing and electrical construction. General, HVAC, plumbing and electrical construction. Plans deposit: \$86 per set. Payable to: EADS Architects, Inc. Refundable upon return of plans and specifications in reusable condition as construction documents within 15 days after the bid opening date. The bidder is responsible for the cost of delivery of the plans and specifications. Contact the office listed below to arrange for delivery of documents. A separate check must be submitted to cover the cost of delivery. Mail request to: EADS Architects, Inc., 450 Aberdeen Drive, Somerset, PA 15501, (814) 445-6551. Bid date Wednesday, September 10, 1997 at 11 a.m.

**Department:** General Services  
**Location:** Mount Pleasant Township, Mount Pleasant, Westmoreland County, PA  
**Duration:** 300 calendar days from date of initial job conference  
**Contact:** Contract Bidding Unit, (717) 787-6556



**Engineering Services—14**

**97-5** The Department of Corrections is soliciting proposals to provide a comprehensive analysis and documentation of certain Department of Corrections' facilities including infrastructure conditions/demands, buildings, utilities/services and an environmental assessment. The contractor will be required to recommend to the Department such new construction, repairs, renovations, and the like as are necessary. In accordance with Commonwealth law, the contractor will be prohibited from entering into contracts or receiving compensation for any projects, repairs, renovations, and the like, which the contractor recommends to the Commonwealth.

**Department:** Corrections  
**Location:** 2520 Lisburn Road, Camp Hill, PA 17011  
**Duration:** Contract duration will be based on the contractor's timetable  
**Contact:** Suzanne Malhenzie, Bureau of Administration, (717) 975-4973

**08430AG2102** To perform environmental studies, preliminary engineering, final design, shop drawing review and consultation during construction for S. R. 3004, Section 55S, State Road, New London Township, Chester County.

**Department:** Transportation  
**Location:** Engineering District 6-0  
**Duration:** Twenty-four (24) months  
**Contact:** Consultant Agreement Division, (717) 783-9309

**08430AG2103** Open-end contract for design (with emphasis on utility coordination) and environmental services in Engineering District 2-0, that is Cameron, Centre, Clearfield, Clinton, Elk, Juniata, McKean, Mifflin and Potter counties.

**Department:** Transportation  
**Location:** Engineering District 2-0  
**Duration:** Sixty (60) months  
**Contact:** Consultant Agreement Division, (717) 783-9309

**08430AG2104** A multi-phase specific project agreement to provide preliminary engineering, environmental studies, final design, shop drawing review and services during construction for S. R. 3052, Section B01, Ambridge—Aliquippa Bridge (new river crossing) in Allegheny and Beaver counties.

**Department:** Transportation  
**Location:** Engineering District 11-0  
**Duration:** Sixty (60) months  
**Contact:** Consultant Agreement Division, (717) 783-9309

**Environmental Maintenance—15**

**BOGM 97-3** Clean out and plug one abandoned oil and gas well estimated to be 1,300 feet deep.

**Department:** Environmental Protection  
**Location:** Bradford, McKean County, PA  
**Duration:** 30 days after Notice to Proceed  
**Contact:** Construction Contracts Unit, (717) 783-7994

**Food—19**

**6951** Bread, rolls and related products, fresh.

**Department:** Military and Veterans Affairs  
**Location:** Hollidaysburg Veterans Home, Route 220 at Meadows Intersection, P. O. Box 319, Hollidaysburg, PA 16648  
**Duration:** October, November, December 1997  
**Contact:** Becky Clapper, Purchasing Agent, (814) 696-5210

**HVAC—22**

**061003** This work is for the maintenance and repair of the two boilers and the heating system at the Bucks County Maintenance Facility in Doylestown, PA. It includes three maintenance visits as well as allowances for emergency visits and a parts allowance. The boilers are believed to be Weil McClain 894 boilers with Power Flame CR3-G-20 burners. A site visit is recommended for prospective bidders unfamiliar with this system.

**Department:** Transportation  
**Location:** Maintenance District 6-1, 229 North Broad Street, Doylestown, PA 18901  
**Duration:** 10/02/97 to 9/30/98  
**Contact:** Scott Bittner, (215) 345-6060

**Janitorial Services—23**

**016022** Janitorial services for administrative offices, garage offices, conference room, lunch rooms, locker room and rest rooms for the Pennsylvania Department of Transportation, Warren/Forest County Offices, 2579 Pennsylvania Avenue West Extension, Warren, PA 16365. Detailed specifications and an SPC are available upon request. FAX requests to William F. Kulinski at (814) 723-7084.

**Department:** Transportation  
**Location:** Maintenance District 0160, 2579 Pennsylvania Avenue West Extension, Warren, PA 16365-0985  
**Duration:** 11/01/97 to 10/30/98  
**Contact:** William F. Kulinski, (814) 723-3500

**Medical Services—29**

**SP 351223** Medical tests for employees to perform asbestos abatement work—service shall include the following: health and occupational history (monitoring, evaluation, and the like), physical exams by a physician licensed to practice medicine in this Commonwealth, radiologic services (chest x-ray) by a certified radiology technician and x-ray to be interpreted and classified by a Class B reader, pulmonary function spirometry screen (performed by a certified pulmonary function technologist or an individual who has completed a training course in spirometry), written interpretation of medical exams/tests for each individual employee, comparison of exam results, and the like. Exams to be performed at the contractor's place of business if within 15-mile radius of WSH, if beyond 15 mile radius they shall be performed at WSH with contractor providing his/her own equipment. Certified mobile units are acceptable. Approximately 18 employees covered by this contract. Complete details and specifications of services can be obtained from the hospital.

**Department:** Public Welfare  
**Location:** Wernersville State Hospital, Box 300, Route 422, Wernersville, Berks County, PA 19565  
**Duration:** November 1, 1997 through October 31, 2000  
**Contact:** Karl Koenig, Purchasing Agent, (610) 670-4127

**SP 351226** Psychological rehabilitative specialist—the contractor shall provide psychological rehabilitative training for patients and staff to assist the chronically mentally ill patient to reside successfully in the community. The provider/contractor must have a current Pennsylvania Psychology License, Ph.D. in clinical psychology, experience working in a State mental hospital as well as documented experience in current patient care activities with community mental health/mental retardation facilities. The provider/contractor is to spend two full day sessions (8 hours each) every month on a schedule mutually agreed upon between the contractor and the hospital. Complete details and specifications of services can be obtained from the hospital.

**Department:** Public Welfare  
**Location:** Wernersville State Hospital, Box 300, Route 422, Wernersville, Berks County, PA 19565  
**Duration:** November 1, 1997 to June 30, 1999  
**Contact:** Karl Koenig, Purchasing Agent, (610) 670-4127

**Property Maintenance—33**

**9807** Roof repairs.

**Department:** Military and Veterans Affairs  
**Location:** PAARNG Armory, Rapps Dam Road, Phoenixville, Chester County, PA  
**Duration:** 1 September 97—30 June 98  
**Contact:** Emma Schreff, (717) 861-8518

**8/1/97 TMA** The Bureau of Forestry is planning several individual contracts involving hand and/or machine planting tree seedlings on strip mined land in the following counties: Jefferson, Clearfield, Indiana, Washington and Somerset.

**Department:** Conservation and Natural Resources  
**Location:** Bureau of Forestry  
**Duration:** 4/1/98—5/15/98  
**Contact:** Tina M. Alban, (814) 364-5150

**AE-5145** Roof replacement over office area. FAX (717) 783-7971.

**Department:** Transportation  
**Location:** County Maintenance Building, Honesdale, Wayne County, PA  
**Duration:** 60 calendar days—proposed bid September 1997  
**Contact:** Tina Chubb, (717) 787-7001

**AE-5146** Replacement of glass monitor panels with fiberglass reinforced plastic. FAX (717) 783-7971.

**Department:** Transportation  
**Location:** Harrisburg International Airport, Building No. 28, Middletown, Dauphin County, PA  
**Duration:** 90 calendar days—proposed bid September 1997  
**Contact:** Tina Chubb, (717) 787-7001

**Contract No. FDC-313-313** Replacing miscellaneous steel items within the primary settling tank; replacing filter media in filters 1 and 2; painting the existing primary settling tank and two gravity sand filters. All work is located at Shawnee State Park.

**Department:** Conservation and Natural Resources  
**Location:** Napier Township, Bedford County, PA  
**Duration:** 70 days  
**Contact:** Construction Management Section, (717) 787-5055

**SPC 297191** This contract will involve hand and/or machine planting approximately 150,000 hardwood and conifer seedlings on strip mine land in Jefferson County. The contract will also require the installation of 10,000 tree shelters.

**Department:** Conservation and Natural Resources  
**Location:** Bureau of Forestry  
**Duration:** 4/1/98—5/15/98  
**Contact:** Tina M. Alban, (814) 364-5150

**Real Estate Services—35**

**6A** Lease Office Space to the Commonwealth of Pennsylvania. Proposals are invited to provide the Department of Labor and Industry with 2,675 useable square feet of new or existing office space, in Bucks County, PA, with minimum parking for 13 vehicles within the following boundaries: North: Route 313; South: Bristol Road; East: Route 263 (Old York Road); West: Route 611 (Easton Road). Proposals due: October 10, 1997. Solicitation No.: 92533.

**Department:** General Services  
**Location:** Real Estate, 505 North Office Building, Harrisburg, PA 17105  
**Duration:** Indeterminate 1997-98  
**Contact:** Doris Deckman or John A. Hocker, (717) 787-4394

**0504XX** Real Estate Fee Appraisals of selected properties as delineated on the official highway R/W plan S. R. 0222-001 and 002, known as Warren Street ByPass, project limits being West Lawn to Adamstown, PA, Berks County. Fee Appraisers must be on PennDOT preapproved list.

**Department:** Transportation  
**Location:** R/W 5-0, 2460 Parkwood Drive, Allentown, PA 18103  
**Duration:** 1997—2002  
**Contact:** Kenneth Kipp, Chief Appraiser, (610) 791-6010

**0222-003** Real Estate Fee Appraisals of selected properties as delineated on the official highway R/W plan S. R. 0222-003; known as Warren Street ByPass, project limits being West Lawn to Old Fritztown Road, Berks County. Fee Appraisers must be on PennDOT preapproved list.

**Department:** Transportation  
**Location:** R/W 5-0, 2460 Parkwood Drive, Allentown, PA 18103  
**Duration:** 1997—2002  
**Contact:** Kenneth Kipp, Chief Appraiser, (610) 791-6010

**Sanitation—36**

**040083** Provide and maintain containers and remove rest area refuse at specified intervals at two rest areas on I-84 in Pike County, and one safety rest area on State Route 6 in Pike County.

**Department:** Transportation  
**Location:** District 4-0, Pike County, PA  
**Duration:** 10/1/97 to 9/30/99—one renewal  
**Contact:** Martha Spaide, (717) 963-4048

**Service Purchase Contract No. 332046** Pick up and disposal of solid waste from Frances Slocum State Park, Luzerne County, PA.

**Department:** Conservation and Natural Resources  
**Location:** Frances Slocum State Park, 565 Mount Olivet Road, Wyoming, Luzerne County, PA 18644-9333  
**Duration:** October 31, 2000  
**Contact:** Park Office, (717) 696-3525

**0200-28** Contract will provide removal and disposal of trash from PennDOT Engineering District 2 office located at 1924-30 Daisy Street (Route 322), Clearfield, PA. Contract will provide one four-yard trash container and trash pickup every Tuesday and Friday. Request for a bid package can be faxed to the attention of Janis Miele at (814) 765-0424 or phone (814) 765-0404.

**Department:** Transportation  
**Location:** Engineering District 2, Clearfield County, PA  
**Duration:** One year with option of four 1-year renewals  
**Contact:** Janis Miele, (814) 765-0404

### Security Services—37

**SP-336445** Furnish, install and maintain a leased 24-hour monitored Central Station Audio Sensor Security Alarm System in approximately 24 Pennsylvania Wine and Spirits Shoppes and/or facilities located in Philadelphia, Chester, Montgomery, Delaware and Bucks counties.

**Department:** Liquor Control Board  
**Location:** Philadelphia and surrounding counties  
**Duration:** 10/01/97—08/31/2000  
**Contact:** Debra L. Brinser, (717) 772-2043

### Vehicle, Heavy Equipment—38

**2476** Rental of aerial work platform. Specifications and other terms and conditions may be obtained from the hospital.

**Department:** Public Welfare  
**Location:** Warren State Hospital, Institutional Storeroom, Route 62 North, North Warren, Warren County, PA 16365  
**Duration:** 01/01/98—12/31/00  
**Contact:** JD Sample, (814) 726-4448

**SPC 323114** Rental of a Caterpillar 312 excavator including mobilization and demobilization within the Sproul State Forest District.

**Department:** Conservation and Natural Resources  
**Location:** Bureau of Forestry Sproul District No. 10, Sandy Run Road, Clinton County, PA 4 miles north of Route 144  
**Duration:** Six weeks  
**Contact:** Richard Kugel, (717) 923-6011

### Miscellaneous—39

**97-4** The Department of Corrections is soliciting proposals for counseling and treatment services for inmates housed at the State Correctional Institution at Chester. Services will include case management and classification, substance abuse education and treatment, therapeutic counseling and psychological services.

**Department:** Corrections  
**Location:** State Correctional Institution at Chester, Chester, PA  
**Duration:** Maximum of 3 years  
**Contact:** Suzanne Malhenzie, Bureau of Administration, (717) 975-4973

**97-8** The Department of Corrections is soliciting proposals to provide contract facility, group home treatment services for persons under the supervision of the Department of Corrections and the PA Board of Probation and Parole. Services provided include room and board, treatment services, inmate/parolee monitoring, vocational and educational counseling, and the like. These services are used to supplement the Department of Corrections and Board of Probation and Paroles programs operating in the community and are needed Statewide.

**Department:** Corrections  
**Location:** 2520 Lisburn Road, Camp Hill, PA 17011  
**Duration:** Contract due to expire on June 30, 2003  
**Contact:** Suzanne Malhenzie, Bureau of Administration, (717) 975-4973

**97-9** The Department of Corrections is seeking proposals for commissary services at the medium security male prison currently under construction in Chester, PA. The new prison is slated to open in March 1998 and will have a capacity of 1,096 inmates. Interested contractors will be asked to provide proposals for both onsite and off-site commissary operations.

**Department:** Corrections  
**Location:** State Correctional Institution, Chester, Chester County, PA  
**Duration:** Three (3) years  
**Contact:** Patricia J. Cassell, (717) 975-4999

**L&I-10-97** For the Office for the Deaf and Hard of Hearing—to provide as-needed deaf and hard of hearing services. Specifically, must assess mental health facilities for accessibility to persons with hearing loss; provide follow-up training concerning accessibility and the Americans with Disabilities Act (ADA); provide sensitivity training to other agencies when referred by the ODHI; and provide information, referral and advocacy to clients when referred by the ODHI. Must serve: Allegheny, Armstrong, Beaver, Butler, Fayette, Greene, Indiana, Washington and Westmoreland counties.

**Department:** Labor and Industry  
**Location:** Office for the Deaf and Hearing Impaired (ODHI); nine (9) county area as listed in contract information  
**Duration:** Through June 30, 1998  
**Contact:** Denise Reihart, Administrative Assistant, (717) 783-4912 (V/TTY)

**L&I-11-97** For the Office for the Deaf and Hard of Hearing—to provide as-needed deaf and hard of hearing services. Specifically, must assess mental health facilities for accessibility to persons with hearing loss; provide follow-up training concerning accessibility and the Americans with Disabilities Act (ADA); provide ADA Workshop focusing on helpful hints for consumers who are deaf and hard of hearing (that is when interpreters/assistive listening devices, auxiliary aids and services are required under Title III of the ADA, and the like); provide sensitivity training to other agencies when referred by the ODHI, and provide information, referral and advocacy to clients when referred by the ODHI. Attend meetings as directed by the ODHI on its behalf and provide a brief overview of meeting highlights (that is Consumer Connection Meeting of Liberty Resources, and the like). Must serve: Bucks, Chester, Delaware, Montgomery and Philadelphia counties.

**Department:** Labor and Industry  
**Location:** Office for the Deaf and Hearing Impaired (ODHI); Five (5) county area as listed in contract information  
**Duration:** Through June 30, 1998  
**Contact:** Denise Reihart, Administrative Assistant, (717) 783-4912 (V/TTY)

[Pa.B. Doc. No. 97-1338. Filed for public inspection August 15, 1997, 9:00 a.m.]

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## DESCRIPTION OF LEGEND

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| <p><b>1</b> Advertising, Public Relations, Promotional Materials</p> <p><b>2</b> Agricultural Services, Livestock, Equipment, Supplies &amp; Repairs: Farming Equipment Rental &amp; Repair, Crop Harvesting &amp; Dusting, Animal Feed, etc.</p> <p><b>3</b> Auctioneer Services</p> <p><b>4</b> Audio/Video, Telecommunications Services, Equipment Rental &amp; Repair</p> <p><b>5</b> Barber/Cosmetology Services &amp; Equipment</p> <p><b>6</b> Cartography Services</p> <p><b>7</b> Child Care</p> <p><b>8</b> Computer Related Services &amp; Equipment Repair: Equipment Rental/Lease, Programming, Data Entry, Payroll Services, Consulting</p> <p><b>9</b> Construction &amp; Construction Maintenance: Buildings, Highways, Roads, Asphalt Paving, Bridges, Culverts, Welding, Resurfacing, etc.</p> <p><b>10</b> Court Reporting &amp; Stenography Services</p> <p><b>11</b> Demolition—Structural Only</p> <p><b>12</b> Drafting &amp; Design Services</p> <p><b>13</b> Elevator Maintenance</p> <p><b>14</b> Engineering Services &amp; Consultation: Geologic, Civil, Mechanical, Electrical, Solar &amp; Surveying</p> <p><b>15</b> Environmental Maintenance Services: Well Drilling, Mine Reclamation, Core &amp; Exploratory Drilling, Stream Rehabilitation Projects and Installation Services</p> <p><b>16</b> Extermination Services</p> <p><b>17</b> Financial &amp; Insurance Consulting &amp; Services</p> <p><b>18</b> Firefighting Services</p> <p><b>19</b> Food</p> <p><b>20</b> Fuel Related Services, Equipment &amp; Maintenance to Include Weighing Station Equipment, Underground &amp; Above Storage Tanks</p> <p><b>21</b> Hazardous Material Services: Abatement, Disposal, Removal, Transportation &amp; Consultation</p> | <p><b>22</b> Heating, Ventilation, Air Conditioning, Electrical, Plumbing, Refrigeration Services, Equipment Rental &amp; Repair</p> <p><b>23</b> Janitorial Services &amp; Supply Rental: Interior</p> <p><b>24</b> Laboratory Services, Maintenance &amp; Consulting</p> <p><b>25</b> Laundry/Dry Cleaning &amp; Linen/Uniform Rental</p> <p><b>26</b> Legal Services &amp; Consultation</p> <p><b>27</b> Lodging/Meeting Facilities</p> <p><b>28</b> Mailing Services</p> <p><b>29</b> Medical Services, Equipment Rental and Repairs &amp; Consultation</p> <p><b>30</b> Moving Services</p> <p><b>31</b> Personnel, Temporary</p> <p><b>32</b> Photography Services (includes aerial)</p> <p><b>33</b> Property Maintenance &amp; Renovation—Interior &amp; Exterior: Painting, Restoration, Carpentry Services, Snow Removal, General Landscaping (Mowing, Tree Pruning &amp; Planting, etc.)</p> <p><b>34</b> Railroad/Airline Related Services, Equipment &amp; Repair</p> <p><b>35</b> Real Estate Services—Appraisals &amp; Rentals</p> <p><b>36</b> Sanitation—Non-Hazardous Removal, Disposal &amp; Transportation (Includes Chemical Toilets)</p> <p><b>37</b> Security Services &amp; Equipment—Armed Guards, Investigative Services &amp; Security Systems</p> <p><b>38</b> Vehicle, Heavy Equipment &amp; Powered Machinery Services, Maintenance, Rental, Repair &amp; Renovation (Includes ADA Improvements)</p> <p><b>39</b> Miscellaneous: This category is intended for listing all bids, announcements not applicable to the above categories</p> |
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GARY E. CROWELL,  
*Secretary*

## STATE CONTRACTS INFORMATION

## Contract Awards

The following awards have been made by the Department of General Services, Bureau of Purchases:

Requisition or Contract #	Awarded On	To	In the Amount Of
1016187-01	08/05/97	Mozip Sign Company	2,927.25
1049157-01	07/30/97	Adolph Sufrin, Inc.	280,691.97
1071227-01	07/30/97	K-B Offset Printing	36,482.50
1127157-01	08/04/97	Fox Electric Supply Co.	2,665.00
6505-10	08/01/97	Bellco Drug Corp.	675,312.00
6505-10	08/01/97	Owens & Mi- nor, Inc.	113,421.00
6505-10	08/01/97	Scientific Hos- pital Supply	266,991.00
6505-10	08/01/97	Red Medical Supply	5,208.60
6505-10	08/01/97	Ross Products Div.	51,030.00
6530-09	08/01/97	AOA/Div. of EBI	8,000.00
6530-09	08/01/97	Jordan-Reses Home Health Care	13,000.00

Requisition or Contract #	Awarded On	To	In the Amount Of
6530-09	08/01/97	Neurological Res. and Dev. Group, Inc.	230,000.00
7920-05 (Supplement No. 1)	08/01/97	Customized Environmen- tal Systems, Inc.	9,000.00
8126970-01	07/31/97	Calcium Chlo- ride Sales, Inc.	57,360.00
8177510-01	07/30/97	Silver Hill Quarry	110,937.81
8177520-01	08/04/97	McMinns As- phalt Co., Inc.	94,017.84
8503890-01	07/30/97	PWI, Inc.	144,425.00
8970150-01	07/30/97	L. B. Smith, Inc.	216,790.00
8970340-01	08/04/97	Manheim Chrysler Plymouth GMC Truck	41,528.00
8970340-02	08/04/97	E-Town Dodge	18,759.00

GARY E. CROWELL,  
*Secretary*

[Pa.B. Doc. No. 97-1339. Filed for public inspection August 15, 1997, 9:00 a.m.]

# RULES AND REGULATIONS

## Title 25—ENVIRONMENTAL PROTECTION

### ENVIRONMENTAL QUALITY BOARD

[25 PA. CODE CH. 250]

#### Administration of the Land Recycling Program (Act 2)

The Environmental Quality Board (Board) by this order adopts Chapter 250 (relating to the administration of the Land Recycling Program). The regulations implement the Land Recycling and Environmental Remediation Standards Act (Act 2) (35 P. S. §§ 6026.101—6026.909) by creating subchapters to establish general provisions, cleanup standards, requirements for special industrial areas, risk assessment requirements and requirements for demonstrating attainment of cleanup standards.

This order was adopted by the Board at its meeting of June 17, 1997.

#### A. Effective Date

These regulations will go into effect upon publication in the *Pennsylvania Bulletin* as final rulemaking.

#### B. Contact Persons

For further information, contact Thomas K. Fidler, Chief, Division of Land Recycling and Cleanup Program, Rachel Carson State Office Building, P.O. Box 8471, Harrisburg, PA 17105-8471, (717) 783-7816; or Michelle M. Moses, Assistant Counsel, Bureau of Regulatory Counsel, Rachel Carson State Office Building, P.O. Box 8464, Harrisburg, PA 17105-8464, (717) 787-7060. Persons with a disability may use the AT&T Relay Service by calling (800) 654-5984 (TDD users) or (800) 654-5988 (voice users). This rulemaking is available electronically through the Department of Environmental Protection's (Department) rulemaking Web site (<http://www.dep.state.pa.us>).

#### C. Statutory Authority

This final rulemaking is being made under the authority of sections 104(a), 301(c) and 303(a) of Act 2 (35 P. S. §§ 6026.104(a), 6026.301(c) and 303(a)). Section 104(a) of Act 2 authorizes the Board to adopt Statewide health standards, appropriate mathematically valid statistical tests to define compliance with Act 2 and other regulations that may be needed to implement Act 2. Section 301(c) of Act 2 authorizes the Department to establish by regulation procedures for determining attainment of remediation standards when practical quantitation limits set by the United States Environmental Protection Agency (EPA) have a health risk that is greater than the risk levels established in Act 2. Section 303(a) of Act 2 authorizes the Board to promulgate Statewide health standards for regulated substances for each environmental medium and methods used to calculate the Statewide health standards. This rulemaking also is being made under the authority of section 105(a) of the Solid Waste Management Act (SWMA) (35 P. S. § 6018.105(a)). Section 105(a) grants the Board the power and duty to adopt the rules and regulations of the Department to carry out the provisions of SWMA. In addition, this rulemaking is

being made under the authority of section 1917-A of The Administrative Code of 1929 (71 P. S. § 510-17). Section 1917-A of The Administrative Code of 1929 authorizes the Department to protect the public from nuisances.

#### D. Background and Summary

The final-form regulations were developed to implement Act 2, which became effective July 18, 1995. Act 2 establishes a framework for developing remediation standards that can be applied to any release of regulated substances. Regulated substances include hazardous substances and contaminants regulated under the SWMA (35 P. S. §§ 6018.101—6018.1003), the Hazardous Sites Cleanup Act (HSCA) (35 P. S. §§6020.101—6020.1305), the Air Pollution Control Act (APCA) (35 P. S. §§ 4001—4005), The Clean Streams Law (CSL) (35 P. S. §§ 691.1—691.1001), the Storage Tank and Spill Prevention Act (STSPA) (35 P. S. §§ 6020.101—6020.2105) and the Infectious and Chemotherapeutic Waste Act (ICWA) (35 P. S. §§ 6019.1—6019.6). The environmental remediation standards established under Act 2 must be used whenever a site remediation is voluntarily conducted or is required to be conducted under one of the laws stated in this paragraph, to qualify for a release of liability. The final-form regulations encourage the recycling and redevelopment of industrial sites, preserving existing uses of land, and encourage persons to perform cleanups by providing the opportunity for a release of liability.

A person who intends to perform a remediation in accordance with Act 2 should consult the statute, these regulations and the *Land Recycling Technical Guidance Manual (Manual)* developed by the Department. The regulations are not repetitive of the statute. For example, procedural requirements such as deed notices or notices of intent to remediate are addressed more directly in the statute or the *Manual*. The regulations do address limited issues concerning procedures, such as what must be contained in plans and reports that are submitted to the Department. Compliance with all procedural requirements in the statute and these final-form regulations is required in order to meet a remediation standard. Appropriate uses of engineering or institutional controls with regard to the specific remediation standards and permit waivers are addressed in the statute, not the regulations.

Chapter 5 of Act 2 (35 P. S. §§ 6026.501—6026.506) affords liability protection from further cleanup obligations if a person demonstrates compliance with any, or a combination, of the three environmental remediation standards: the background standard; Statewide health standard; and site-specific standard. Act 2 also affords liability protection for the remediation of special industrial areas. To receive the liability protection, a person must comply with the requirements of Act 2 and this chapter, including the administrative requirements, unless the site is placed on the Pennsylvania Priority List under the HSCA or the release is subject to the corrective action regulations of the STSPA. In these two cases, a person shall use the cleanup levels as described in Act 2 and Chapter 250 and should use the administrative requirements of the HSCA or the STSPA to qualify for liability protection. A person who is eligible for cleanup liability protection will have no further liability for remediation of the site for contamination identified in the required reports and will not be subject to citizen suits or contribution actions brought by responsible parties.

An important element of any remediation is the site characterization or remedial investigation. A thorough investigation of the site is necessary to identify specific contaminant concentrations, the extent of contamination throughout soil and groundwater media, discharges to surface water and site conditions that may pose an unacceptable human health or environmental risk. It is important to perform a thorough investigation because the liability protection only applies to contamination identified in reports submitted to and approved by the Department to demonstrate compliance with a standard. In the case of a special industrial area, the liability protection applies to any contamination identified in the baseline environmental report, other than immediate, direct and imminent threats to public health and the environment. The final-form regulations provide some performance standards that must be met to properly characterize the site. A detailed explanation of how to perform a remedial investigation, however, may be found in the *Manual*.

Act 2 created the Cleanup Standards Scientific Advisory Board (SAB) for the purpose of assisting the Department in developing Statewide health standards, determining the appropriate statistically and scientifically valid procedures to be used, determining the appropriate risk factors and providing other technical and scientific advice as needed to implement the act. Throughout the development of these regulations, the SAB and its subcommittees provided many significant technical recommendations. In addition, the SAB reviewed drafts of the proposed and final-form regulations and provided comments to the Department on the drafts.

#### *E. Summary of Comments and Responses on the Proposed Rulemaking*

Notice of proposed rulemaking was published at 26 Pa.B. 3985 (August 17, 1996). The proposal set forth a 60-day public comment period. The Board held three public hearings (Whitehall, Mars and York).

During the public comment period, the Board and the Department received written comments from 46 individuals or groups and 8 individuals or groups presented testimony at the public hearings.

The Board and the Department considered the comments received at the public hearings and the written comments in formulating the final-form regulations. The Department has completed a review of the comments and has prepared a comment and response document that addresses each comment on the proposed regulations.

The following is a summary of major comments received and changes which have been made to the proposed rulemaking. The summary is listed in the same order as the final-form regulations.

#### *Subchapter A. General Provisions*

On final rulemaking, three proposed sections in this subchapter were deleted. The proposed § 250.4 (relating to groundwater determinations) was deleted based on comments received. On proposed, this section was included to explain when a regulated substance that is in contact with groundwater is considered contaminated media subject to the cleanup standards of Act 2, and when it is considered waste subject to regulation under the applicable waste laws and regulations.

Commentators indicated that they believe it is beyond the statutory authority and improper to regulate nonaqueous phase liquids as waste. In addition, concern was raised about the lack of guidance in the regulations

to assist in the determination of when removal would be required. The Board has deleted the section relating to groundwater determinations on final rulemaking and has incorporated information that pertains to cleanup of separate phase liquids into the Statewide health and site-specific standards. The final-form regulations treat the regulated substances that are found in separate phase liquids the same as any other regulated substance. Information regarding the feasibility of removal of separate phase liquids in a site-specific cleanup will be included in the *Manual*.

With regard to the final rulemaking, the regulated substances contained in separate phase liquids will be required to meet the applicable Statewide health standards in soil and groundwater, including the saturation and solubility limits, if that standard is chosen. If engineering controls are required to maintain a remediation standard, a postremediation care plan must be implemented.

Proposed § 250.5 (relating to aquifer determinations) was moved to Subchapter C, § 250.303 (relating to aquifer determination; current use and currently planned use of aquifer groundwater). On final rulemaking, this regulation was made applicable only to the Statewide health standards. Further discussion of aquifer determinations can be found under § 250.303.

The proposed § 250.6 (relating to current use and future use of aquifer groundwater) was deleted from Subchapter A and added to Subchapter C. This change was made because the section no longer discusses "probable future use," a term that applies to the site-specific standard. The new section only applies to the Statewide health standard. Changes to this section are discussed in this Preamble under Subchapter C.

#### *Section 250.1. Definitions.*

This section includes definitions for terms that are not found in the statute but were needed to clarify language in the statute and the regulations. The terms included in the proposal were as follows: "anisotropy," "ASTM," "enterprise zone," "heterogeneity," "property," "risk assessment," "saturated soils," "special industrial area" and "volatile compound." The term "volatile compound" was defined to limit the universe of regulated substances that have to be evaluated for human exposure from inhalation and volatilization of regulated substances in soil and groundwater.

The Board received several comments regarding the definitions section. The comments and the Department's responses are as follows:

Commentators indicated that all statutory definitions should be included in the rulemaking for purposes of ease of understanding and compliance. The Department believes that the addition of statutory definitions is unnecessary because they are already in Act 2.

Commentators stated that with regard to the definition of "property," some sites have many parcels combined from former parcels comprising a single industrial site and would be forced to target remediation at a number of different points of compliance. Act 2 uses the term "property" in the definition of "point of compliance" and it is the Department's interpretation that the intention of Act 2 was to prevent persons from purchasing tracts of land after contamination was discovered in order to move the point of compliance. However, for situations where these large tracts existed prior to the discovery of a release and were owned by the same party, the regulations will allow movement of the point of compliance

under §§ 250.302 and 250.407 (relating to point of compliance; and relationship to surface water quality requirements).

One commentator suggested that the regulations should define the term "contaminated media." The Department does not believe a definition for this term is necessary because several environmental statutes are affected by Act 2 and it would be difficult to capture the various materials and activities that would be included in this broad term. For example, contaminated soil that is managed at the site of remediation is considered contaminated media and subject to Act 2 while it is being managed onsite. However, if the same material is removed for off-site disposal, it is considered "waste."

Commentators indicated that the following terms need clarification: "minimum threshold standards," "minimum threshold values," "exceptional value wetlands," "important habitats," "nonparametric upper tolerance limit," "prediction limit" and "nondetect." It is the Department's intention to minimize the number of terms that must be defined in the regulations. These concepts will be discussed further in the *Manual*. With regard to exceptional value wetlands, a description of these wetlands can be found in § 105.17 (relating to wetlands). The term "important habitats" was not used in the proposed or final-form regulations.

On final rulemaking, changes were made to the definitions of "VOC—volatile compound" and "special industrial area." The definition for "VOC—volatile compound" was changed to be consistent with the distinction made between volatile and semivolatile compounds by the analytical methodologies used in EPA's Resource Conservation and Recovery Act (RCRA) program (SW-846 methodologies). Typographical errors were corrected in the definition of "special industrial area." On final rulemaking, definitions for the following terms were added for further clarification of the regulations: "community water system," "environmental protection acts," "EQL," "habitats of concern," "regulated discharge," "secondary contaminants" and "species of concern."

#### *Section 250.2. Application of remediation standards.*

This section explains the requirement that remediations performed under an enforcement action meet one of the standards—background, Statewide health or site-specific. It also states that requirements and procedures under Act 2 and this chapter must be met to qualify for liability protection.

The Board received several comments regarding this section. The comments and the Department's responses are as follows:

Commentators stated that sections 102 and 301 of Act 2 (35 P. S. §§ 6026.102 and 6026.301) clearly indicate that the General Assembly intended that individuals who voluntarily remediate a site are eligible for the release from liability. The section lacks the necessary clarity to indicate this intent and it was recommended that the section be amended. The Department has incorporated the following language into a new subsection: "This chapter provides remediation standards which shall be used whenever site remediation is voluntarily conducted or is required under environmental statutes listed in section 106 of the act." This language reiterates what is contained in section 106 of Act 2 (35 P. S. § 6026.106).

Commentators recommended that the Department establish procedures to allow individuals who have previously remediated a site to obtain liability protection under Act 2. The Department believes that the regula-

tions do not prohibit any person from seeking liability protection from environmental releases which occurred in the past by complying with Act 2 and the land recycling regulations.

On final rulemaking, a cross reference in new subsection (c) was changed to reflect numbering changes in § 250.2. Also, a reference to Chapter 245, Subchapter D (relating to the corrective action process in the storage tanks program) was deleted to allow corrective actions that began prior to the effective date of Chapter 245, Subchapter D regulations to continue to use the process that was in place prior to those regulations and still qualify for a release of liability under Act 2.

#### *Section 250.4. Limits relating to practical quantitation limits.*

This section establishes the sources for identification of the practical quantitation limits (PQLs) for regulated substances in soil and groundwater. Also, PQLs are considered threshold concentration levels for establishing attainment of remediation standards. On proposed, the regulations indicated that PQLs may not be used for attainment purposes in the following instances: 1) PQLs that fall outside the maximum allowable health risk levels identified in sections 303(c) and 304(b) and (c) of Act 2 (35 P. S. §§ 6026.303(c) and 6026.304(b) and (c)) may not be used; 2) if a maximum contaminant level (MCL) has been promulgated under the Safe Drinking Water Act for the regulated substance; and 3) if a lifetime health advisory level (HAL) has been established under the Safe Drinking Water program. Under each of these circumstances, a person was required to demonstrate attainment with the MSC.

Commentators suggested that the PQL should be the floor for measurements for attainment, even when the PQL exceeds the risk range or the MCL or HAL. One commentator indicated that the Board must demonstrate a compelling public need for the establishment of quantitation limits where EPA's PQLs exceed the statutorily established maximum allowable health risk levels. It is the Board's position that the goal of any remediation is always to demonstrate attainment of the selected standard. If the limits imposed by the selected standard prevent this, then attainment may be demonstrated by attaining the limit relating to the PQL. Section 301 of Act 2 authorizes the Department to establish, by regulation, procedures for determining attainment of remediation standards when PQLs set by the EPA have a health risk that is greater than the risk levels set in sections 303(c) and 304(b) and (c) of Act 2. Commentators requested that a list of the PQLs be published in the final-form regulations. The Department intends to publish the numeric values in its update to the *Manual*. By publishing the numbers in the *Manual*, the numbers can be updated regularly, as PQLs are developed.

On final rulemaking, the title to this section was changed from "standards" to "limits" related to the PQLs because the Board wants to avoid confusion between the meaning of a cleanup standard and the use of a quantitation limit for purposes of attainment of a standard. The final-form regulations no longer provide for the use of the PQL value as a default value to meet the background standard. Also, for attainment purposes, the final-form regulations do not allow the use of a PQL if it falls outside the maximum allowable health risk levels identified in sections 303(c) and 304(b) and (c) of Act 2. Procedures to develop limits related to a PQL have been established by the Department to ensure that quantitation limits fall within the risk range.



No changes were made to subsection (a) on final rulemaking. A new subsection (b) was added on final rulemaking to ensure that for substances which have MCLs or HALs, the PQLs fall at or below the respective MCLs or HALs. The Board decided to use the same methodology for establishing PQLs for substances with an MCL or HAL as for other regulated substances, except that if the MCL or HAL is below the level of the PQL established by EPA's SW-846 methodologies, the PQL methodologies published under EPA's drinking water program must be used for those substances. Also, if a PQL determined under the drinking water program is not below a HAL, the methodologies in subsection (c)(1) or (2) must be used unless those quantitation limits are higher than the PQL determined under the drinking water program.

The use of PQLs for these substances, instead of the MCLs or HALs themselves, is important for the background standard because the PQLs may more closely represent the true site conditions than the higher MCL or HAL. For example, for xylene, the MCL is 10,000 micrograms per liter ( $\mu\text{g}/\text{l}$ ). The PQL is 5  $\mu\text{g}/\text{l}$ , which is a closer sensing level for determining the background conditions. By developing PQLs for substances with MCLs and HALs in this manner, the need for proposed subsection (c) was eliminated and it was deleted.

On proposed, subsection (b) required the use of the Statewide health standard, itself, if the estimated quantitation limits (EQLs established by the EPA) fell outside the risk range established in Act 2. On final rulemaking, in subsection (c), a methodology was established for developing a quantitation limit that always falls within the risk range, so the default to the Statewide health standard was eliminated. A new subsection (d) was added to indicate that if a limit related to a PQL is not available for regulated substances under the methodologies in subsection (c), the site-specific or background standard must be used to demonstrate attainment. New subsection (e) was added to clarify that quantitation limits are not applicable in the demonstration of attainment of minimum threshold medium-specific concentrations (MSCs). The minimum threshold MSCs are used because it is not known, due to the lack of toxicological data, whether the quantitation limits fall within the risk range identified in Act 2.

#### *Section 250.5. Public notice by applicant*

This section explains when the opportunity to request public participation is initiated. For cleanups under the site-specific standard and special industrial areas, the notice of intent to remediate (NIR) must include a 30-day period in which the municipality, where the remediation site is located, may request to be involved in the development of the remediation and reuse plans for the site. No plans and reports associated with the remediation may be submitted to the Department prior to the end of that 30-day period.

Commentators stated that public notice in the proposed regulations was inadequate because the method of publication in the newspaper was lacking. The Department will address procedures for notification, including publication in a newspaper of general circulation, in the *Manual*.

Commentators suggested that public notice requirements that cross program boundaries (that is, public notice requirements required by acts other than Act 2) should be consolidated with this rulemaking. It is the Department's position that notice requirements under Act 2 are only applicable to activities undertaken to comply

with Act 2. The notice requirements under Act 2 may not be adequate to meet the requirements under other laws and regulations. For example, § 101.2 (relating to incidents causing or threatening pollution) require reporting in many circumstances, including reporting at the time of an accident. Accordingly, submitting an NIR under Act 2 when remediation is undertaken may not satisfy the requirements of § 101.2.

Commentators recommended that the regulations require the preparation of notices in plain language. Section 901 of Act 2 (35 P. S. § 6026.901) requires that notices and reports submitted to implement Act 2 contain a summary or special section that includes a plain language description of the information. The Department believes it is not necessary to repeat this requirement in the regulations.

#### *Section 250.6. Public participation.*

This section establishes the starting date for the commencement of the 30-day public and municipal comment period during which a municipality may request to be involved in the development of the remediation and reuse plans. The comment period will begin on the publication date of the summary of the NIR in a newspaper of general circulation. This section also provides minimum contents for a public involvement plan and requires submission of the plan with the first report due to the Department for either a site-specific standard or special industrial area cleanup.

Commentators suggested that the regulations clarify that an NIR is required for all cleanups under Act 2. Language has been added to subsection (a) that indicates an NIR is required for cleanups to the background, Statewide health and site-specific standards and under a special industrial area cleanup.

One commentator recommended that the regulations provide an opportunity for a community veto of a remediation measure based on various criteria. It is the Board's position that matters relating to the public's involvement are better addressed in a public involvement plan that is developed by the person performing remediation and the public. A public involvement plan can be tailored to meet the needs of the parties.

Commentators indicated the Board should clarify that subsection (b)(1) and (2) must be satisfied before a public involvement plan is necessary. The words "both of" have been added to the language in subsection (b).

#### *Section 250.7. Fees.*

On proposed, this section provided that resubmissions of reports and plans, except for a site-specific standard final report, require payments of the appropriate fee identified in Act 2. On final rulemaking, there are no exceptions for payments on resubmissions. The statute does not require the exception proposed.

#### *Section 250.9. Interaction with other environmental statutes.*

This section was titled "applicability to solid waste facilities" in the proposed regulations and was located under proposed § 250.12. The title was changed because the section is no longer limited to the application of land recycling regulations to solid waste facilities.

The proposed regulations identified several trigger dates for deciding when releases at municipal, residual and hazardous waste facilities were completely subject to Chapter 250 and Act 2 and when releases were only subject to certain elements of the cleanup standards.

Commentators indicated that proposed § 250.12(b) exceeded statutory authority since it restricted how cleanup standards and points of compliance under Act 2 would be used to address releases of regulated substances at solid waste facilities. In addition, concern was expressed that requiring cleanups to satisfy the background standard was expensive and beyond what is required to protect human health and the environment. The final-form regulations provide more flexibility than the proposed regulations by providing the option of either the Statewide health or background standard, including the points of compliance under Subchapters B and C (relating to background standards; and Statewide health standards), for abatement of releases during the operational life of the solid waste facility. In addition, the final-form regulations include the use of the site-specific standard as an option for remediations of spills or releases at closure for solid waste facilities.

Commentators recommended adding a definition of "solid waste facility" to the regulations. A new definition for this term is not necessary because a "facility" is defined within each of the municipal waste, residual waste and hazardous waste regulations. In addition, the final-form regulations clarify that if a release occurs outside a disposal or processing unit, then any of the remediation standards may be used for the remediation in accordance with this chapter and Act 2.

Commentators indicated that subsections (b) and (c) of proposed § 250.12 were inconsistent with existing regulations because solid waste monitoring points were considered the points of compliance, instead of the points of compliance under Act 2. Further, it was stated that the EPA recognizes that it may not be appropriate to set a point of compliance at a monitoring well. Since the SWMA addresses the management of wastes that would not be present but for the operation of a permitted facility, it is the intention of the Department to minimize impacts caused by an unregulated release from these facilities and to abate pollution on the property where the site is located. On final rulemaking, a release at a solid waste facility during its operational life is subject to the points of compliance under Subchapters B and C of the land recycling regulations. In limited circumstances, the point of compliance for groundwater may be extended beyond the property boundary. This position is consistent with the best available technology philosophy embodied in the Department's permitting and groundwater protection requirements. The monitoring wells required under the solid waste regulations will continue to apply as a tool to monitor compliance with performance, design and operational standards required under the solid waste regulations. At closure, a release is subject to the points of compliance under Subchapters B—D (relating to background Statewide health and site-specific standards).

On final rulemaking, subsection (a) states that facilities that did not receive waste after September 7, 1980, are subject to Chapter 250 and Act 2 in its entirety. The proposed waste-specific trigger dates were deleted on final rulemaking. New subsection (b) indicates that the permitting, performance, operation, design and closure requirements under the environmental protection acts are not affected by Chapter 250 and Act 2. The groundwater standards in Subchapters B and C apply as part of a Department-approved assessment and abatement plan that is implemented prior to closure of a solid waste facility and apply as the standards that must be demonstrated to qualify for liner and leachate system waivers or modifications as specified in Chapter 287 (relating to residual waste management—general provisions). The

groundwater standards in Subchapters B—D apply to the remediation of a release at closure but may not be substituted for design and performance standards required under the solid waste management regulations. Remediations performed at hazardous waste facilities must comply with the requirements of the Federal Resource Conservation and Recovery Act (42 U.S.C.A. §§ 6091—6986). For residual waste facilities, groundwater parameters and human health environmental protection levels no longer apply to groundwater remediations.

Subsection (c) was replaced with new language that addresses unpermitted releases or spills at a permitted solid waste facility. If the release is outside a disposal or processing unit, including surface impoundments, waste storage areas, associated piping and underlying containment systems, then it must be remediated in accordance with Chapter 250 and Act 2.

#### *Section 250.10. Measurement of regulated substances in media.*

This section sets out procedures for sampling of regulated substances. To eliminate differences based on moisture content, it provides that analyses of soils and sediments be done on a dry weight basis. The proposed regulations required total metals analysis for most substances, and required field filtering and field acidification of groundwater samples for metals analysis.

Commentators supported the requirement that groundwater samples for metals analyses be field filtered. The final-form regulations establish separate requirements for groundwater when monitoring is being performed at a drinking water well. At these wells, samples for metals analyses must be unfiltered. This change was made because in a drinking water well, an unfiltered sample best represents the actual exposure of the regulated substances to humans.

Commentators requested that appropriate methodologies for surface water be added to this section. The final-form regulations include a requirement that will provide consistency in the sampling of surface water.

Subsection (f) of the final-form regulations includes a cross reference to a sampling methodology for air samples in this section.

#### *Subchapter B. Background Standard*

The background standard is one of the three cleanup standards available under Act 2. Background is defined by Act 2 as the concentration of a regulated substance determined by appropriate statistical methods that is present at the site, but is not related to the release of regulated substances at the site. The determination of a background concentration must be based on levels of naturally occurring substances and concentrations of regulated substances originating from sources on other properties. Under Act 2, persons are not responsible for abating releases originating from other properties.

#### *Section 250.202. Establishing background concentrations.*

On proposed, this section created two methods for determining background standards: the use of practical quantitation limits as the default background standard or the use of a remedial investigation to establish background. If a person is using a remedial investigation to establish background, samples must be taken in an area unaffected by a release on the property. In some cases, this may require off-property sampling. Criteria are included to determine the number of samples necessary to determine background levels in groundwater.

Commentators indicated that the word "determined" should be replaced with "established" throughout the section. This language is changed on final rulemaking.

Commentators stated that sampling and statistical methodologies should be included in this section. This information is already described in Subchapter G (relating to demonstration of attainment).

On final rulemaking, the default background concentrations were eliminated. The default background concentrations were developed for use during the interim period prior to final rulemaking. With this final rulemaking, the availability of the Statewide health numerical standards eliminates the need for default values. An additional change to this section is the replacement of the words "a remedial investigation" with the words "a site characterization." The words "remedial investigation" are used as a term of art in the site-specific standards section of Act 2. To avoid confusion, the language was changed in this section of the background standard. Other minor revisions were made to this section.

#### *Section 250.203. Points of compliance.*

The point of compliance is the location in the environmental media where attainment of the standard must be met. In surface water, the proposed points of compliance for point source discharges are the points of discharge in accordance with the limits specified in a National Pollutant Discharge Elimination System (NPDES) permit. The proposed regulations also indicated that the following points of compliance apply to surface water: 1) nonpoint source or diffuse groundwater discharges to surface water were required to meet instream surface water quality standards through the use of mass balance techniques; and 2) when groundwater discharges to the surface, thus creating a spring, the point of discharge to the surface was the point of compliance. For outdoor air quality, the proposed point of compliance was cross referenced to the applicable air quality regulations.

To attain the background standard for groundwater, the point of compliance is throughout the contaminant plume, including areas of the plume that are outside the property boundary. For soil, the point of compliance is throughout the area of the soil that has become contaminated as a result of releases on the property. The final rulemaking has not changed these requirements.

Commentators indicated that the point of compliance for groundwater cannot, under Act 2, be brought inside the property boundary. They point to the definition of "point of compliance" in the statute which provides that the point of compliance for groundwater is at the property boundary or a point beyond the property boundary that the Department may determine to be appropriate. Section 302 of Act 2 (35 P. S. § 6026.302) states that "attainment of the background standard shall be demonstrated . . . in the area where the contamination occurs . . ." It is the Department's interpretation that the area where groundwater contamination occurs is throughout the plume, including areas of the plume that are outside the property boundary. Another commentator supported the application of the point of compliance throughout the plume because the landowner should be responsible for remediation of all of the contaminant plume under the background standard.

On final rulemaking, the Department deleted the points of compliance for diffuse groundwater discharges and for springs. The reason for this change is that under the definition of "background," if the groundwater meets the background standard, remedial obligations to address the

groundwater are satisfied under Act 2, even if surface water quality standards are not met. In addition, minor revisions were made to this section.

#### *Section 250.204. Final report.*

Under the background standard, the final report is the only report that must be submitted to and approved by the Department. The final report must document the following: site investigation activities including all laboratory results; the means for establishing background concentrations; the remediation activities; the demonstration of attainment with the standard; and any postremediation activities, such as engineering or institutional controls, that are necessary to maintain attainment.

Commentators have stated that documentation in § 250.204(f)(6) and (7) requires that the background area shall be free of contamination from any release at the site. It has been suggested that this language does not take historical releases into consideration. Act 2 defines background as the concentration that is "not related to the release of regulated substances at the site." Historical contamination at the site is related to releases at the site, and cannot be considered background. The regulations do not require that background areas be free of any release, but they do require that background comparison areas be free from the effects of the releases on the subject property. No change to the section is needed in response to the comment.

A commentator has suggested the use of side-gradient locations, where no hydrogeologically upgradient points are available for determining background. If there is not a hydrogeologically upgradient release of a regulated substance, then it is not possible for a property owner to obtain a background standard release for groundwater. A person demonstrates background by showing that contamination is migrating onto their property or that levels of contaminants on the property are naturally occurring. A side-gradient concentration does not demonstrate that the contamination is migrating onto the subject property. If there are no conditions that cause contamination from an adjacent site to move onto the property or the regulated substances are naturally occurring then the background standard is not available.

On final rulemaking, changes were made in subsection (a) to provide more direction in a site investigation to the characterization of the rate of movement, extent and fate of contaminants, as required by Act 2 in a final report. A fate and transport analysis should delineate the extent of contamination over the period of its transport to ensure continued attainment of the remediation standard. In subsection (b), the words "above the selected standard" were deleted in paragraph (2) because it is more important to know this information at the attainment stage. A complete site characterization, prior to remediation, should include all areas where the regulated substance is present. In subsection (b)(3), the words "and fate and transport of all contaminants" were added to more fully describe what information is expected to be submitted for the site characterization.

In subsection (f), clarifications were made to the requirement for additional information. The methodology and analytical results used during remediation must be documented. The determination that the remediation met the cleanup standard and can be maintained must be justified with this data. Also, the types of information required to be submitted when a fate and transport analysis is used were added. The word "reference" was inserted in several locations within this subsection to

distinguish between requirements that relate to the identification of a background "reference" area and requirements that apply to the area where the background standard is being implemented.

In subsection (g), additional criteria were established to determine when a postremediation care plan is required. Also, additional requirements were added to the postremediation care plan. These requirements include the following: the performance of monitoring that demonstrates the effectiveness of the remedy and periodic reporting of monitoring results and analysis; and documentation of financial ability, if requested by the Department, to implement the remedy and the postremediation care plan.

#### *Subchapter C. Statewide health standards*

The Statewide health standard is one of the three cleanup standards available under Act 2. The Statewide health standards were developed in consultation with SAB, established by Act 2. Act 2 mandates the use of MCLs and HALs adopted by the Department and by the Federal Government by regulation or statute and mandates the development of health-based concentrations for Statewide health standards that eliminate any substantial present or probable future risk to human health and the environment. This rulemaking finalizes the health-based concentrations adopted by the Department. The MSCs included in Tables 1—4 and 6 are the concentrations that must be met in order to demonstrate attainment of a Statewide health standard, along with a screening protocol for the protection of ecological receptors.

To select the appropriate concentration from Tables 1—4, determinations must be made concerning the land use of the property, the background groundwater quality of the aquifer for total dissolved solids, depth of the soil contamination and the use or planned use of the aquifer.

On final rulemaking, the Board has chosen the use of a cancer risk factor of  $1 \times 10^{-5}$  for the development of soil and groundwater medium-specific concentrations.  $1 \times 10^{-5}$  means there is risk of one excess cancer in 100,000 in the human population. This risk factor was chosen because it falls within the risk range identified in Act 2, and it has been adopted by several other states, including California, Indiana, Massachusetts and Michigan, for use in the development of cleanup standards. Although the Statewide health standard does not take into account cumulative effects, one could have up to 10 regulated substances at a given site and, if the Statewide health standards are used, the cumulative excess cancer risk level would still not exceed the 1 in 10,000 limit of the acceptable risk range in Act 2.

The Board has not included soil and groundwater standards based on the dermal absorption route of exposure. Soils contaminated by regulated substances that meet ingestion and inhalation based standards would not pose a substantive dermal risk because of low bioavailability, low moisture content of surface soils, and short exposure periods for actual adherence of soil to the skin. For sediments, exposure is less frequent and of shorter duration than soils. For groundwater, the ingestion and inhalation standards provide adequate protection from the dermal contact route of exposure.

It cannot always be assumed that the Statewide health standards that are protective for humans will also be protective of ecological receptors. The complexity of how different substances interact with different species makes it very difficult to establish Statewide health standards

protective of ecosystems in general. Therefore, an ecological screening procedure has been included to evaluate the effects of regulated substances on ecological receptors.

On final rulemaking, the section titled "radionuclide numeric values" and the MSCs for radionuclides in soil were deleted because the Board decided that the substances addressed by this section have not been commonly encountered in remediations in this Commonwealth. If a remediation is necessary with regard to these substances, the background or site-specific standards are available. Deletion of this section will avoid confusion with regard to the Nuclear Regulatory Commission's jurisdiction over the management of these materials.

Two new sections were added to this subchapter: "current use and currently planned use of aquifer groundwater," which is located in § 250.303 (relating to aquifer determinations; current use and currently planned use of aquifer groundwater); and "MSCs for surface water," which is located in § 250.309 (relating to MSCs for surface water). The subchapter was renumbered on final rulemaking and the summary which follows is based on the renumbered and retitled sections.

#### *Section 250.301. Scope.*

This section explains that the Statewide health standards are addressed in Subchapter C. References to the appropriate Tables for choosing a Statewide health standard are included. On final rulemaking, subsection (c) was added to this section to clarify that for regulated substances which do not have an MSC for the relevant medium listed on a Table, the background standard or site-specific standard must be met to qualify for a release of liability under Act 2.

#### *Section 250.302. Point of compliance.*

The points of compliance for surface water have been deleted on final rulemaking. Regulations concerning surface water have been established in a new section, § 250.309. This new section was added to implement Section 303(b)(1) of Act 2, which discusses the establishment of MSCs for any regulated discharge into surface water.

For groundwater MSCs, the point of compliance is the property boundary that existed at the time the contamination was discovered. The Statewide health standard must be attained at and beyond the point of compliance. The Department may determine, in writing, a point of compliance beyond the property boundary to be appropriate under certain specific situations. The point of compliance for soil MSCs is the concentration of the medium specific value at the depth specified in § 250.305 (relating to MSCs of soil). On final rulemaking, minor word changes were made to this section for clarification. In addition, subsection (a)(1) was deleted on final rulemaking because technology exists to meet a remediation standard at the property boundary even if the source of the contamination is at the property boundary. With the exception of the presence of secondary contaminants, the point of compliance can only be moved based on physical obstructions that prevent attainment at the property boundary.

Commentators indicated that the points of compliance should be uniform, regardless of which standard is used. It complicates the monitoring and remediation process to have different points of compliance apply to different parameters at a single site. Act 2 specifically creates a different point of compliance for the background standard by using the words "in the area where the contamination occurs" when describing the demonstration of attainment

in section 302(b)(1) of Act 2. For the Statewide health standard and the site-specific standard, Act 2 states that a demonstration of attainment takes place at "the point of compliance," which is a statutorily defined term. The differences in the points of compliance are based on the language of Act 2.

Commentators were concerned that the proposed language allowed the adjustment of the point of compliance only when SMCLs exist without the presence of other contaminants. On final rulemaking, subsection (a)(5) was modified to state that the point of compliance may be moved for measuring compliance with the groundwater MSCs that apply to secondary contaminants. "Secondary contaminants" is now a defined term in § 250.1.

Comments concerning the points of compliance for surface water are addressed under § 250.309.

*Section 250.303. Aquifer determinations; current use and currently planned use of aquifer groundwater.*

The aquifer determination section of the proposed regulations (§ 250.4), which was relocated to subsection (a) of this section, was changed substantially on final rulemaking. The proposed regulations referred to a yield of 200 gallons/day. Remediation standards applied only if a well had the specified yield and the groundwater was in an aquifer used or currently planned to be used. An inhalation exposure screen, however, was applied to groundwater that was not subject to remediation standards. On proposed, all drinking water and agricultural uses of water that existed as of the effective date of the rulemaking would have continued to be protected as "currently used" aquifer groundwater, regardless of the yield.

Commentators stated that the proposed yield was so low that performance of attainment in low permeability zones would be prolonged and costs associated with the cleanup would be too high with no benefit. The Department has reevaluated how to classify aquifers. The Department reviewed a United States Geological Survey field-verified groundwater site inventory and the water well inventory of the Pennsylvania Topographic and Geologic Survey. It is the Department's opinion that this Commonwealth is hydrogeologically best described as underlain by saturated unconsolidated or consolidated geologic formations, or both, or groups of formations which have the potential to yield sustainable, significant supplies of water to wells anywhere. Because of the local variability in well yield that can occur over short horizontal and vertical distances, attempting to assign a nonaquifer status to a geologic formation or subsurface interval based on the yield of one or more wells at a single site would very likely not be a valid indication of the hydrogeologic potential of the underlying formation nearby that site or well as a whole.

Commentators stated that the proposed yield was so low that it cannot be field tested and raised issues as to its potential enforceability. Demonstration of attainment will be required in all low yielding subsurface saturated intervals where they can be shown to have significant impact on the usability of the resource as a whole. The *Manual* will address the details for demonstrating attainment, such as placement of monitoring intervals, with the objective of providing protection to drinking water and agricultural uses of water.

Commentators indicated that water quality requirements for drinking water and for agricultural uses may be different and these differences should be recognized by the regulations. Section 303(b)(3) of Act 2 states that the

MSCs for regulated substances in groundwater in aquifers used or currently planned to be used for drinking water or for agricultural purposes shall meet the MCLs or HALs established for drinking water.

The Board has decided to base the application of groundwater standards on whether the groundwater is currently used or planned to be used for drinking water or agricultural purposes, rather than on the yield of one or more wells at a specific location.

The new language for aquifer determination, in § 250.303(a), states that all geologic formations or parts of or groups of formations which are saturated are presumed to be aquifers for the purpose of applying the Statewide health standards. Geologic deposits overlying the bedrock formations which are hydrologically connected to the bedrock formations are also considered aquifers. The only groundwater that is not subject to remediation standards is seasonal, localized and hydrologically isolated perched systems under a property.

Subsections (b)—(e) replace the proposed regulation in § 250.6. On final rulemaking, the regulations were changed to indicate that groundwater in aquifers is presumed to be used or currently planned for use. In subsection (b), a person may request a determination be made by the Department that the aquifer is not used or currently planned to be used. If an aquifer is not used or currently planned for use, higher MSCs ranging from 1x to a 1,000x the MSCs may be used as alternatives to those that apply in aquifers used or currently planned for use. The methodology for these alternative MSCs and the standards can be found in § 250.304(d) and in Appendix A, Tables 1 and 2.

To qualify to use the higher MSCs for groundwater, a demonstration must be made that an aquifer is not used or currently planned to be used within the area defined as the property and a radius of 1,000 feet downgradient of the points of compliance plus any additional areas to which the contamination has migrated and might reasonably migrate at concentrations that exceed the MSC for an aquifer used or currently planned to be used. The Board recognized that an attenuation zone was needed between areas where higher nonuse aquifer MSCs would be applied and lower MSCs where aquifers are used or planned to be used would be applied. The primary purpose of the attenuation zone is to allow for time and distance before the substance reaches an area where the MSC for groundwater in an aquifer used or currently planned to be used applies. The exposure assumptions for the area defined by subsection (b) are no human ingestion and agricultural use of groundwater within the area.

To demonstrate that the aquifer is not used or currently planned to be used, subsection (c) requires that the following must be met within the area described above: 1) no groundwater derived from wells or springs is used or currently planned to be used for drinking water or agricultural purposes; 2) all downgradient properties are connected to a community water system; 3) the area described does not intersect a radius of 1/2 mile from a community water supply well source or does not intersect an area designated by the Department as a Zone 2 wellhead protection area in accordance with § 109.1. If any of the criteria is not met within the defined area, the MSC for groundwater in an aquifer used or currently planned to be used applies.

*Section 250.304. MSCs for groundwater.*

For groundwater in aquifers used or currently planned to be used, the MSCs are developed on the basis of the following hierarchy: 1) the use of MCLs; 2) when no MCL has been established, the use of lifetime HALs; 3) when no MCL or HAL exists, the use of the lowest concentration calculated by the equations in §§ 250.306 and 250.307 (relating to ingestion numeric values; and inhalation numeric values). Sites with groundwater that naturally exceeds 2,500 milligrams per liter for total dissolved solids may use an adjusted Statewide health standard. If this situation is occurring at a given site, the adjusted Statewide health standard shall be used as the basis for the development of a soil standard that is protective of groundwater.

A commentator stated that it is not clear what MSCs for groundwater apply if groundwater is not currently used and is restricted from future use. The final-form regulations establish MSCs for all groundwater, with a very limited exception for localized and hydrologically isolated perched systems under a property. The aquifer determination has been broadened significantly to include virtually all groundwater based upon information obtained on formations from the United States Geological Survey. Under the final-form regulations, a distinction between the use or nonuse of an aquifer and land use in the area of the release will determine which MSC for groundwater applies.

A commentator indicated that there should be residential and nonresidential MSCs where the numbers are based on MCLs or HALs, rather than just one number that applies to both. Section 303(b)(3) of Act 2 specifically states that the MSC of a regulated substance in groundwater in aquifers used or currently planned to be used for drinking water or for agricultural purposes shall comply with the MCL or HAL established for drinking water.

Commentators suggested that the vapor intrusion evaluation requirements are overly stringent because they are not limited to circumstances where vapor intrusion poses an actual risk to human health. The Board has deleted the screen from the final-form regulations, but the final-form regulations continue to protect against vapor intrusion by applying MSCs to all groundwater. Also, a solubility cap has been applied to the MSCs that will limit the formation of separate phase liquids, which are believed to be the primary cause of vapor intrusion problems.

Several changes were made to this section on final rulemaking. In subsections (b) and (e), references to a solubility limit for all groundwater MSCs were added to the text of the regulations. These references were inadvertently omitted from the proposed regulations. The numbers in Table 2 of the proposed regulations included the numerical limits.

In subsection (c), the words "by the EPA" were deleted because the Department may also establish MCLs under the State Safe Drinking Water Act.

A new subsection (d) was added to establish MSCs for groundwater in aquifers not used or currently planned to be used. Upon a determination under § 250.303 that an aquifer is not used or currently planned to be used, the MSCs in subsection (d) of § 250.304 may be used. In general, a natural attenuation factor was relied upon for developing the MSCs which was based on the adsorption and biodegradation processes. The MSCs are based on consideration of the organic carbon partitioning coefficient (Koc) and the first order decay coefficient (lambda). Koc

and lambda were multiplied together (where data was available) to yield an attenuation factor. The product of these two factors gives an estimation of the mobility of the substances in groundwater. In the case of certain chlorinated volatile organic substances, which degrade into undesirable byproducts, the lambda was adjusted by dividing by 10. If the attenuation factor was less than 20, the MSC for groundwater in aquifers used or currently planned to be used was multiplied by 10 to yield the MSC for groundwater in aquifers not used or currently planned to be used. The attenuation factor of 20 is a reasonable cutoff to define mobility of volatile materials because it approximates where differences can be observed between categories of volatiles.

In subsection (d)(1), for volatile organic regulated substances with an attenuation factor of less than 20, the appropriate residential or nonresidential MSC is ten times the MSC for groundwater in aquifers used or currently planned to be used. In paragraph (2), for volatile organic regulated substances with an attenuation factor of greater than or equal to 20, the MSC is 100 times the appropriate residential or nonresidential MSC for groundwater in aquifers used or currently planned to be used. In paragraph (3), for semivolatile organic and inorganic regulated substances, the MSC is 1,000 times the appropriate residential or nonresidential MSC for groundwater in aquifers used or currently planned to be used, regardless of the attenuation factor. In general, the multipliers are an order of magnitude difference between categories of substances that must be supported on a site-specific basis, based on factors as soil type and groundwater flow and velocity. The multiplier for semivolatiles was based on the adsorptive potential of the substance to soil. For benzene, the calculated attenuation factor was 19.8 and rounded off at 20, allowing a multiplier of 100. The higher multiplier is further substantiated by studies conducted by the University of Texas (R.E. Mace, et al., "Extent, Mass and Duration of Hydrocarbon Plumes from Leaking Petroleum Storage Tank Sites in Texas," Geological Circular 97-1) and the California Environmental Protection Department (D.W. Rice, et al., "California Leaking Underground Fuel Tank (LUFT) Historical Case Analyses," November 16, 1995), which show attenuation of benzene in plumes of petroleum releases in most cases at less than 1,000 feet. In paragraph (6), a statement was added that 5 micrograms per liter in groundwater must be used as the minimum threshold MSC for groundwater in an aquifer that is not used or currently planned for use.

The calculated MSC for groundwater in an aquifer not used or currently planned to be used is within the statutory risk range since there is no risk to humans if there are no exposure pathways (that is, no one uses the water).

*Section 250.305. MSCs for soil.*

Standards for soil are developed based on residential and nonresidential land uses. Along with changes in exposure factors, the depth to which the human health standards will apply varies based on land use. The standards are protective of human health through the ingestion, inhalation and volatilization routes of exposure. The standards are developed to ensure that future leaching of contaminants through soil will not exceed the groundwater standard as established in § 250.304.

To determine the depth at which the ingestion and inhalation standards apply, the Board decided that the depth should vary based on land use patterns and deed notice provisions. For residential land uses, one must

remediate to the full depth of 15 feet from the existing ground surface. For nonresidential land uses, one must remediate to a depth of 2 feet from the existing ground surface, based on the lower of the ingestion or inhalation numeric value. Only the inhalation numeric value applies to the 2—15 foot depth interval.

Commentators suggested that in cases where soil contamination is located beneath a building, inhalation numeric values which consider volatilization to the indoor air should be established. In lieu of meeting a standard, indoor air sampling could be performed. The direct contact soil numbers consider inhalation health threats to a depth of 15 feet under both the residential and nonresidential standard. In addition to having the standards be protective of inhalation, the final-form regulations include a saturation cap which provides additional protection against vapor problems. The final-form regulations also include soil-to-groundwater pathway standards that apply below 15 feet and include the same saturation cap.

Commentators indicated that the proposed regulations did not provide for the severability of the soil-to-groundwater pathway numeric values from the direct contact soil standards if the person has selected to use a combination of cleanup standards. According to the commentators, current wording precludes a person from selecting the Statewide health standard for direct contact soils and a site-specific standard for soil-to-groundwater. Commentators also recommended that in cases where groundwater is not an issue, the regulations should allow persons to eliminate the application of the soil-to-groundwater pathway numeric value. Under the Statewide health standard, the soil standard includes both the direct contact and the soil-to-groundwater pathway. Section 303(b)(4) and (5) of Act 2 requires that the soil MSC not exceed either the soil-to-groundwater pathway numeric value or the direct contact value. They are not severable. However, the revisions to the soil-to-groundwater numeric values in the final-form regulations allow for greater flexibility in their application.

In subsection (b), the proposed saturation limit, which designated the physical capacity of the soil to contain a regulated substance, was retained on final rulemaking for regulated substances other than those which are organics and liquids. This limitation results in a dry soil concentration limit of 190,000 mg/kg. In effect, this physical limitation on the concentration of a regulated substance that could occur in soil was calculated to serve as an upper limit for direct contact MSCs in soil. On final rulemaking, a new saturation limit was included for regulated substances which are organics and liquids at standard temperature and pressure. For organic liquids, further limitation of the concentration beyond the 190,000 mg/kg was necessary to prevent liquids from coming out of the soil matrix, thereby causing additional exposure and risk to human health not considered by the generic assumptions used to derive the MSCs for soil. This physical limitation is based on an assumed porosity for the soil equal to 0.35, an assumed dry bulk density of soil equal to 1.8 kg/L, an assumed regulated substance density of 1.0 kg/L and an assumption of a residual saturation ratio of substance volume to soil void volume of 0.051.

In subsection (c), the word "within" was deleted and replaced with "throughout the soil column" to clarify the application of the standard. Also, the option to demonstrate a soil-to-groundwater pathway soil buffer or show a soil-to-groundwater pathway equivalency demonstration are included as alternatives to meeting the soil-to-groundwater pathway numeric value.

In subsection (d), the soil-to-groundwater pathway numeric value was inadvertently omitted on proposed for determining the nonresidential soil MSC for surface soils. On final rulemaking, this numeric pathway is included and, in addition, the option to demonstrate a soil-to-groundwater pathway soil buffer or show a soil-to-groundwater pathway equivalency demonstration are included as alternatives to meeting the soil-to-groundwater pathway numeric value. In subsection (e), the alternatives to the soil-to-groundwater pathway numeric value are also included.

A new subsection (f) is added to clarify that in all cases one of the following applies as the MSC for a regulated substance in soil at a depth greater than 15 feet: 1) the soil-to-groundwater pathway numeric value as determined by § 250.308(a); 2) the soil-to-groundwater pathway soil buffer; and 3) the soil-to-groundwater pathway equivalency demonstration.

*Sections 250.306 and 250.307. Ingestion Numeric Values and Inhalation Numeric Values.*

The algorithms or equations in §§ 250.306 and 250.307 are based on those presented in EPA's risk assessment guidance for the "Superfund" program, under the Comprehensive Environmental Response, Compensation and Liability Act, 42 United StatesC.A. §§ 9601—9675. The equations attempt to replicate how the average person is expected to come into contact with regulated substances in soil or groundwater and how the contact will impact human health. The equations include consideration of assumptions as to body weight, exposure frequency and duration, inhalation and ingestion rates and toxicity data. The protection goals of section 303 of Act 2 are built into the equations. Further discussion of the exposure assumptions used for the development of the numeric values can be found in the Preamble to the proposed regulations at 26 Pa.B. 3985. On final rulemaking, the only change to these sections is the deletion of § 250.306(d). This change was made because based on the Statewide health standards in the final-form regulations, nonaqueous phase liquids should not be present due to the saturation and solubility caps applied to the soil and groundwater standards.

A commentator indicated that the absorption rate of 1.0 in the default exposure assumptions should be modified to include actual absorption values readily available for regulated substances. For the purpose of developing generic assumptions, the absorption value of 1 was chosen. Values are currently not available for all compounds.

A commentator stated that the Department used invalid models to derive the soil MSC for lead since EPA's IEUBK model has been updated several times and the Department has not used the most updated model. In addition, the Department should adopt a preliminarily promulgated standard by EPA under the Toxic Substances Control Act (TSCA) or adopt a standard not less than 5,000 mg/kg. The final-form regulations are based on two state-of-the-art models for estimation of MSCs for lead in residential and nonresidential soils. Although more recent versions of EPA's IEUBK model have been developed, the use of the most recent version would result in a residential MSC for lead that is lower than the 500 mg/kg level. The TSCA notice in the *Federal Register*, September 11, 1995, recommends a range of lead concentrations in soil of 400 mg/kg to 5,000 mg/kg. The notice also includes recommendations for interim controls to reduce exposure of children to contaminated soil within that range. Under the final-form regulations, the Statewide health standards fall within the range identified in the EPA notice.

In addition, exceedance of the 500 mg/kg residential soil MSC is not precluded under the site-specific standard. The interim controls identified in the EPA notice could be used under the site-specific standard in conjunction with a lead concentration in soil that is higher than 500 mg/kg.

*Section 250.308. Soil-to-groundwater pathway numeric values.*

The statute provides three options for the development of soil-to-groundwater pathway numeric values. Values in Appendix A, Tables 3 and 4, include concentrations developed using the following: 1) a concentration which is 100 times the MSC for groundwater; and 2) a concentration developed using an equilibrium partitioning method which would be protective of the MSC for groundwater. As a third option, the person remediating may use the Synthetic Precipitation Leaching Procedure in order to determine a level which would not produce a leachate in excess of the MSC for groundwater.

Commentators stated that the proposed soil-to-groundwater numeric values were too stringent, that the values should not apply when groundwater is not a medium of concern and that the methods used to calculate them are inappropriate. Based upon the many comments received, the method of calculating the soil-to-groundwater numeric values has been revised to provide for more achievable standards. The default dilution factor for unsaturated soils has been increased to 100 for all regulated substances. This value is less stringent than the EPA's default value of 10 in its Soil Screening Guidance. In addition, the calculation of these numeric values is linked to the appropriate residential or nonresidential groundwater MSC. To provide additional flexibility for meeting the soil-to-groundwater pathway requirement, the final-form regulations include a soil buffer option and an equivalency demonstration option as alternatives to meeting the numeric value.

Commentators also suggested that the soil-to-groundwater numeric values may be calculated for metals by substituting  $K_d$  values, as calculated in the EPA Soil Screening Guidance, for the  $K_{oc} \cdot f_{oc}$  term in the soil-to-groundwater equation. This suggestion has been incorporated into the final-form regulations.

In subsection (a)(3), the dilution factor was changed from one that varied based on the organic carbon partition coefficient for that substance and based on whether the soils were saturated or unsaturated to a default value of 100 for all substances. This change was made because it is more relevant to use the same dilution factor for all compounds.

In subsection (a)(4), the equilibrium partitioning coefficient method is applied to inorganic compounds. This methodology is used by the EPA in its Soil Screening Guidance. The difference between the application of this method to organic and inorganic compounds is that the fraction of organic carbon does not control the partitioning of inorganic compounds.

In subsections (b)–(d), demonstrations of equivalency can be made to show that groundwater will be protected. The demonstrations are available as substitutions for meeting the protectiveness of the soil-to-groundwater numeric values.

Subsections (b) and (c) provide a method for determining soil buffer zone thicknesses for some regulated substances which would ensure protection of groundwater even for levels in soil that exceed the soil-to-groundwater pathway numeric values for these regulated substances.

The estimation of buffer zone thicknesses is based on the same equations and coefficients used for the development of the soil-to-groundwater numeric values. In the estimation of the buffer zone thicknesses, five different partition coefficients have been used. Each coefficient is used to represent the lower end of a range of coefficients. Regulated substances which possess partition coefficients which fall within a given range are assigned the buffer distance estimated from the coefficient used to represent that range. This accounts for five different buffer zone thicknesses: 30 feet for each regulated substance with a partition coefficient between 2.5 and 5; 20 feet for each regulated substance with a partition coefficient between 5 and 10; 15 feet for each regulated substance with a partition coefficient between 10 and 100; 10 feet for each regulated substance with a partition coefficient between 100 and 1,000; and 5 feet for each regulated substance with a partition coefficient exceeding 1,000. In determining the buffer zone thicknesses, the distance that the regulated substance travels over a period of 30 years in the soil column at a concentration of 1 part per billion or greater in soil pore water has been estimated. This estimation was then determined to be the approximate buffer zone thickness.

Subsection (d) provides the option of an equivalency demonstration to meet the protectiveness of the soil-to-groundwater pathway numeric value. To qualify to use this option, a person must first demonstrate that groundwater directly beneath the area of soil contamination does not exceed background or Statewide health MSCs prior to remediation. If a person demonstrates attainment with the direct contact soil standard, a demonstration may be made, by use of a fate and transport analysis, that groundwater is protected. Site specific data collected during the site characterization must be applied to the analysis. In addition, the analysis must demonstrate that the residual contamination will attenuate or stabilize over a period of 30 years and not cause an elevation of contaminant concentration in the groundwater above the MSC or the background standard, whichever is highest. Reporting and monitoring for eight quarters is required to show no exceedances of groundwater MSCs or the background standard for groundwater beneath the contaminated soil and to show no indications of an increasing trend of concentration over time that may exceed the standard.

*Section 250.309. MSCs for surface water.*

The proposed regulations identified points of compliance for surface water in § 250.302. Act 2 provides that for any regulated discharge into surface water, compliance with applicable laws and regulations relating to surface water discharges must be used to establish the MSCs for surface water. Therefore, a new section was developed on final rulemaking for MSCs for surface water.

A commentator stated that the potential for diffuse groundwater discharges to impact surface water bodies should be assessed using concentrations of regulated substances attributable solely to the site. The final-form regulations have been revised to include language that limits the determination of the expected instream concentrations of regulated substances to the concentrations attributable to releases at the site.

A commentator questioned the appropriateness of establishing the point of compliance for a spring where it is discharged from the ground. On final rulemaking, except where an NPDES permit is required, compliance with surface water quality standards in a spring must be



measured at the point of first designated or existing use, as defined in §§ 93.1, 93.4 and 93.9 (relating to scope; Statewide water uses; and designated water uses and water quality criteria). When the point of first designated or existing use occurs in a surface water into which a spring flows, compliance with surface water quality standards must be determined in the same manner as required for diffuse discharges.

Commentators indicated that proposed § 250.302(b)(3) was too restrictive by not allowing the point of compliance to be moved if a site involves contaminants other than those identified as secondary contaminants. On final rulemaking, the word "only" was deleted in subsection (b)(5). While other contaminants may be present at a site, the point of compliance may be moved for substances that are secondary contaminants.

The final-form regulations, in subsection (a), require that any regulated discharge to surface water must comply with the applicable provisions of Chapters 91—105, including the antidegradation requirements.

Subsection (b) requires compliance with an NPDES permit for point source discharges to surface water. This requirement was in the proposed rulemaking in § 250.302(d)(1).

Subsection (c) is similar to the requirement proposed in § 250.302(d)(2). On final rulemaking, the regulations require a person to determine the expected instream regulated substance concentrations that are attributable to the site. If mass balance techniques indicate that instream surface water quality standards are not met, then the person has an opportunity to conduct sampling. If sampling indicates that the standards are being met, there is no requirement for further remediation. If the results of the modeling, and sampling if any, indicate that surface water quality standards are not being met, further remediation will be required.

In subsection (d), except where an NPDES is required, compliance with surface water quality standards in a spring must be measured at the point of first designated or existing use, as defined in §§ 93.1, 93.4 and 93.9.

#### *Section 250.310. Minimum threshold MSCs.*

This section provides cleanup standards for regulated substances where no toxicological data is available for the substances. The numbers are based solely on ingestion. After considering the United States Food and Drug Administration's final rule, Threshold of Regulation for Substances Used in Food-Contact Articles (*Federal Register*, Vol. 60, No. 136, July 17, 1995, pp. 36582-36596) and back-calculating the threshold numbers derived from the regulations to cleanup standards at  $1 \times 10^{-5}$  risk level, Statewide health standards were developed for regulated substances where no toxicological data exists. Further information regarding the development of the minimum threshold MSCs can be found at 26 Pa.B. 3991.

The minimum threshold MSCs may be used only when no toxicological data is available for the regulated substance. Under Act 2, the Department may require additional remediation for the regulated substances that meet a minimum threshold MSC if new chemical-specific toxicological information is obtained which revises the exposure assumptions beyond the acceptable risk.

Commentators indicated that by requiring the use of the lowest of the ingestion numeric value or the soil-to-groundwater pathway numeric value, the minimum threshold numeric value would not be used because the soil-to-groundwater value is significantly more restrictive.

Section 303(b)(4) of Act 2 states that an MSC for soil shall not exceed either the direct contact soil MSC or the soil-to-groundwater pathway numeric value. Alternatives to the numeric value for protecting groundwater through the soil-to-groundwater pathway, which are not as restrictive, have been included in the final rulemaking at § 250.308.

On final rulemaking, language was added to subsection (c)(1) that requires the soil-to-groundwater pathway value to be calculated by either using a concentration in soil at the site which does not produce a leachate in excess of the MSC for groundwater or by using a value which is 100 times the MSC for groundwater, expressed in milligrams per kilogram of soil. An equivalency demonstration under § 250.308(d) may be substituted for the soil-to-groundwater numeric value. This new language was added to explain which soil-to-groundwater protection methodologies can be used for regulated substances which have no KOC values. Also, proposed subsection (c) was deleted. Since the ecological screen applies to all MSCs, it was not necessary to repeat that requirement here.

#### *Section 250.311. Evaluation of ecological receptors.*

SAB and the Department were unable to identify a method to develop generic Statewide health standards that are protective of ecological receptors to cover the effects of all combinations of species and substances. On final rulemaking, the Board adopted a screening protocol for identification of ecological receptors of concern. A person conducting a remediation under the Statewide health standard must address those receptors that are identified for protection at the end of the screening process.

Commentators stated that Act 2 does not authorize the Department to require the evaluation of ecological receptors, or if it does, the evaluation should only apply to sites remediated under the site-specific standard. Section 301(a)(2) of Act 2 requires that a Statewide health standard be adopted by the Board which achieves a uniform Statewide health-based level so that any substantial present or future risk to human health and the environment is eliminated.

Commentators recommended that the identification of receptors should be better defined. The final-form regulations include new definitions for "species of concern" and "habitats of concern."

Commentators suggested that the requirements of the screening process are complex, burdensome and costly. The screen takes into account several circumstances that will not require an ecological evaluation. Therefore, the number of sites that will require more thorough evaluation and some type of activity to address impacts will be minimal. In addition, the cost of collecting appropriate data for the screen should be minimal, as most of the necessary data will be collected as part of the site characterization activities. On final rulemaking, the screen has been substantially modified to identify only the most important steps of the screening process. Any additional explanatory details needed will be included in the *Manual*.

Commentators stated that the first step of the screen, the exemption for sites contaminated only with certain types of petroleum products, is inappropriate. This step was included based on the SAB's recommendation that a cleanup to the Statewide health standards identified for those regulated substances would be protective of the environment. The substances listed in this step of the

screen are limited to a subset of petroleum products for which the chemical makeup and concentrations can be reliably predicted.

Commentators indicated that sites without constituents of potential ecological concern (CPECs) should not be required to undergo further evaluation. Sites contaminated with substances other than CPECs, such as petroleum hydrocarbons, may cause direct impacts from physical stress.

The ecological receptors screening procedure was substantially revised on final rulemaking. Many of the screening steps have been renumbered. In some cases, small word changes were made to clarify or simplify a concept.

In subsection (a), the list of ecological receptors to be evaluated was revised to delete paragraph (2), individuals of species of special concern as identified by the Game Commission and the Fish and Boat Commission, because these species are now included within the definition of "species of concern."

In subsection (b), the procedures were revised to include an additional circumstance for determining that no ecological evaluation is required. The final-form regulations state that no additional evaluation is required if the remediation attains a level equal to 1/10 of the value in Tables 3 and 4, if the regulated substance in question is not a CPEC. (This value is equal to the  $1 \times 10^{-6}$  cancer risk level for humans.) It is the expectation of the Department that the lower human cancer risk level will temporarily serve as a margin of safety to protect ecological receptors until SAB is able to study ecological protection more thoroughly and recommend appropriate standards that are protective of ecological receptors. In subsection (b)(1), the reference to "no nonaqueous phase liquids are present" was deleted because based on the the soil saturation limit in the Statewide health standards, nonaqueous phase liquids are not expected to be present at those levels.

In subsection (e), if ecological impacts are identified from the screening process that must be addressed, a person must do one of the following: 1) demonstrate that attainment of the Statewide health standard MSCs are protective of the ecological receptors; 2) if it cannot be shown that the Statewide health standard MSCs are protective, demonstrate that the postremedy use will eliminate complete exposure pathways at the time of the final report or in accordance with a postremediation care plan, or that mitigative measures have been instituted and are subject to postremediation care plan requirements; 3) demonstrate attainment of the background standard; or 4) follow the procedures in §§ 250.402(c) and 250.409 (relating to human health and environmental protection goals; and risk assessment report) and demonstrate attainment with the site-specific standard. On final rulemaking, subsection (f) specifies the requirements that must be met if a person performs mitigation to address the ecological impacts.

#### *Section 250.312. Final report.*

Under the Statewide health standard, the final report is the only report that must be submitted to and approved by the Department. The final report must document the site investigation activities including all laboratory results, the remediation activities, the demonstration of attainment of the standard and any postremediation activities, such as engineering or institutional controls, that are necessary to maintain attainment. The final report must also include information supporting the use of residential or nonresidential standards.

The final-form regulations contain several revisions. Subsection (a) contains a number of revisions for clarification. In subsection (b), there are new final report requirements where mitigation measures are used for protection of ecological receptors. There is a new subsection (d) which explains the types of information that must be submitted in a final report with respect to a demonstration of attainment. Subsection (e) identifies additional circumstances where a postremediation care plan must be documented in a final report. New subsections (f) and (g) contain additional final report requirements where soil-to-groundwater pathway buffer distances or an equivalency demonstration is used. New subsection (h) provides that documentation of access to property owned by a third party must be included as part of a final report when needed for remediation or monitoring.

#### *Subchapter D. Site-Specific Standard*

Certain sections under this subchapter, Subchapter F and Subchapter G (relating to exposure and risk determinations; and demonstration of attainment) of the final-form regulations refer to Department-approved guidance documents or references. The Department intends to list guidance documents that it approves in the *Manual*. The Department also may approve the use of other documents on a case-by-case basis. The Department will work with the SAB to identify guidance documents or references for the *Manual*.

#### *Section 250.402. Human health and environmental protection goals.*

This section defines the level of protection that is afforded to humans from threats posed by soil and groundwater contaminated with regulated substances which are known or suspected carcinogens or systemic toxicants. This section also includes a process to address risks to ecological receptors.

Commentators indicated a concern with doing a risk assessment if pathways will be eliminated in the future. Section 304(l) of Act 2 requires a risk assessment report if exposure pathways exist. The Department intends to allow an abbreviated risk assessment if the proposed remedy will eliminate pathways.

On final rulemaking, an ecological risk assessment and use of Department-approved EPA or ASTM guidance documents to quantify the risk to ecological receptors are required. Subsections (c) and (d) no longer require an evaluation to be performed under the ecological screening protocol in § 250.311. New language was added to subsection (d)(3) to allow for mitigation measures to be implemented for environmental protection. In addition, subsection (e), which contained specific EPA and ASTM referenced documents, was deleted. This change was made in response to comments that the list of references was too limited. The Department intends to publish Department-approved guidance documents in the *Manual*.

#### *Section 250.403. Use of groundwater.*

This section requires compliance with MCLs at all points of exposure, at a minimum, to protect the use of groundwater for drinking water purposes. Groundwater that has naturally occurring total dissolved solids above 2,500 parts per million (ppm) will not be considered a drinking water source in accordance with Act 2.

Commentators suggested that the requirement to meet SMCLs would complicate and increase costs of cleanups. Water is typically treated to achieve SMCLs before delivery at the tap. The final-form regulations allow the

SMCLs to be met up to a point of use, rather than at the property boundary, if approved by the Department.

This section was changed on final rulemaking to refer to use of all groundwater, not just groundwater in aquifers. Section 304(d) of Act 2 establishes standards for both groundwater in aquifers and groundwater not in aquifers. On final rulemaking, this section focuses on current and probable future uses of the groundwater for determining cleanup standards. Subsection (b) was changed to delete the reference to § 250.6 for determining "current and probable future use" of aquifer groundwater, since that section was deleted on final rulemaking. New language in this subsection requires a determination of current and probable future use on a case-by-case basis. In addition, subsection (d) was added on final rulemaking to require the protection of current drinking water or agricultural uses of groundwater.

*Section 250.404. Pathway identification and elimination.*

On proposed, subsection (a) required the use of the most recent EPA or ASTM guidance in order to identify potential current and future exposure pathways to humans and ecological receptors. Commentators suggested that the Department should allow the use of EPA or ASTM guidance that becomes available after the effective date of the regulations. On final rulemaking, the language was changed to require the use of "Department approved" EPA or ASTM guidance. The list of references in subsection (d) was deleted. It is the Department's intention to provide a list of approved guidance documents in its *Manual*.

New subsection (c) was added to identify a streamlined process for the site-specific reporting requirements where no exposure pathway exists and no remedy is required to be proposed and completed.

*Section 250.405. When to perform a risk assessment.*

Persons who choose to develop a site-specific standard, or concentration level, must do so by conducting a risk assessment under Subchapter F (relating to exposure and risk determinations). Submission of a baseline risk assessment report is not required where it can be demonstrated in the remedial investigation report or cleanup plan that there are no current or future exposure pathways or where identified current or future pathways are eliminated through the implementation of a specific remediation measure. These remediation measures must be proposed to the Department in a cleanup plan prior to implementation.

Commentators stated that the phrase "future exposure pathways" is too broad. The Department's risk assessment guidance will clarify "future exposure pathways" to address this concern. No changes were made to the proposed regulations.

*Section 250.406. Relationship to surface water quality requirements.*

This section was added on final rulemaking to clarify the relationship between the surface water quality standards and Act 2. The final-form regulations, in subsection (a), require that any regulated discharge to surface water must comply with the applicable provisions of Chapters 91—105, including the antidegradation requirements. Subsection (b) requires compliance with an NPDES permit for point source discharges to surface water. This requirement was in the proposed rulemaking at § 250.406(a).

Subsection (c) is similar to the requirement proposed in § 250.406(b). On final rulemaking, the regulations require a person to determine the expected instream regulated substance concentrations that are attributable to the site. If mass balance techniques indicate that instream surface water quality standards are not met, then the person has an opportunity to conduct sampling. If sampling indicates that the standards are being met, there is no requirement for further remediation. If the results of the modeling, and sampling if any, indicate that surface water quality standards are not being met, further remediation will be required unless a waiver of the surface water quality standards under section 902(b) of Act 2 is obtained. Section 902(b) of Act 2 authorizes the Department to waive applicable requirements where responsible persons can demonstrate, among other things, that the proposed remedial action will attain a standard of performance that is equivalent to that required under the otherwise applicable requirement through the use of an alternative method or approach. In the case of surface water standards, the final-form regulations allow for a waiver if it is demonstrated that the proposed remedial action will result in attainment of a concentration in the stream that does not exceed human health criteria and aquatic life criteria in accordance with the requirements set forth in Chapter 93 (relating to water quality standards). Alternative site-specific exposure factors or design conditions may be proposed that will demonstrate attainment of the human health criteria.

In subsection (d), except where an NPDES permit is required, compliance with surface water quality standards in a spring must be measured at the point of first designated or existing use, as defined in §§ 93.1, 93.4 and 93.9. When the point of first designated use occurs in a surface water into which a spring flows, compliance with surface water quality standards must be determined in the same manner as that which applies to diffuse discharges.

*Section 250.407. Point of compliance.*

Commentators were concerned that the proposed language allowed the adjustment of the point of compliance only when SMCLs exist without the presence of other contaminants. On final rulemaking, § 250.407(a)(5) was modified to state that the point of compliance may be moved for measuring compliance with the groundwater MSCs that apply to secondary contaminants. "Secondary contaminants" is now a defined term in § 250.1.

A commentator suggested that it is not necessary to investigate soil quality down to 15 feet if it can be shown by sampling, and by the absence of releases, that groundwater is not impacted. Once the groundwater is found to be uncontaminated, and proper controls are applied to the soil to eliminate any ingestion and inhalation pathway, then it should not be necessary to investigate soil anymore. It was further stated that what the proposed regulations are indicating is that while it may be safe to drink water with these compounds at or below MCLs, a person can't breathe the vapors from the water you are drinking. The regulations indicate that if the inhalation pathway has not been eliminated, then a person must provide protection for the inhalation route of exposure.

A commentator recommended that the final-form regulations include a reference for the air quality regulations that apply to air quality standards. In subsection (f), the reference to Chapters 121—143 is included.

On final rulemaking, proposed subsections (a)—(c) were deleted and requirements relating to surface water were placed in § 250.406. In new subsection (a), the words “for ingestion and inhalation exposures” were deleted for purposes of simplicity and clarity. The language relating to measuring compliance at intervals was deleted and will be discussed in the *Manual*. New subsection (a) was further changed to clarify that the point of compliance is the property boundary that existed at the time the contamination was discovered. The site-specific standard must be attained at and beyond the point of compliance. Subsection (a)(1) was deleted on final rulemaking because technology exists to meet a remediation standard at the property boundary even if the source of the contamination is at the property boundary. With the exception of the presence of secondary contaminants, the point of compliance can only be moved based on physical obstructions that prevent attainment at the property boundary.

*Section 250.408. Remedial investigation report.*

Persons electing to remediate a site to the site-specific standard must submit a remedial investigation report to the Department for review and approval. On final rulemaking, changes were made in subsection (a) to provide more direction in a site investigation to the characterization of the rate of movement, extent, and fate of contaminants, as required by Act 2 in a final report. A fate and transport analysis should delineate the extent of contamination over the period of its transport to ensure continued attainment of the remediation standard.

Commentators stated that they did not believe Act 2 required a determination of appropriate technology for each media of concern in the remedial investigation report. In subsection (b), the word “determination” was deleted and replaced with the word “identification.” The Board believes it is a good idea to evaluate remediation technology options during the investigation stage.

*Section 250.410. Cleanup plan.*

The site-specific standard is the only one of the three standards which requires Department approval of the cleanup plan prior to implementation. On proposed, the plan was required to describe those alternatives which were evaluated and the alternative which the remediator is proposing to implement, along with an analysis of how these alternatives were evaluated using the remedy selection criteria of section 304(j) of Act 2.

Commentators indicated that the Department's approval of a cleanup plan should be based solely on its concurrence that the plan will attain the site-specific standard. They suggest that the Department should not have the ability to require a person preparing a cleanup plan to evaluate additional alternatives requested by the Department. Section 304(l) of Act 2 authorizes the Department to require further evaluation of the selected remedy or an evaluation of one or more additional remedies in response to comments received from the community through the community involvement plan or as a result of its own analysis.

On final rulemaking, subsection (b) was deleted to indicate that an indepth analysis of alternative remedies is not automatically required with the submission of a cleanup plan. The Department will evaluate the proposed remedial measure in the cleanup plan based on the criteria in section 304(j) of Act 2. If the Department requests further evaluation of alternatives, based on section 304(l) of Act 2, then the evaluation will also be reviewed in accordance with the same criteria as the proposed remedial measure.

Under new subsection (b), paragraph (3) was deleted and replaced with a requirement for submission of adequate design plans and specifications sufficient to evaluate the proposed remedy.

Subsection (d) was renumbered as subsection (c) and the language was slightly revised to state that when a person proposes a remedy that relies on access for remediation or monitoring on properties owned by third parties, documentation of that cooperation or agreement must be submitted as part of the cleanup plan. This provision would be relevant in cases including extension of water supplies, installation of home treatment units for water supply wells and water use restrictions on other properties.

*Section 250.411. Final report.*

Final reports submitted under the site-specific standard must contain the information necessary to document that the remedy, as approved by the Department in the cleanup plan, was implemented. In subsection (c), a cross reference to § 250.204 was expanded to include a new subsection.

In subsection (d), additional criteria were established to determine when a postremediation care plan is required. Also, additional requirements were added to the postremediation care plan through the cross reference to § 250.204(g).

Subsection (f) was added on final rulemaking to allow for mitigation measures to be implemented to protect ecological receptors identified by the environmental risk assessment. A postremediation monitoring plan must be documented in the final report that includes a plan to maintain the mitigated ecological resource and reporting of the ongoing success or failure of the mitigation measure implemented.

*Subchapter E. Special Industrial Areas.*

Special incentives were provided by Act 2 to encourage the cleanup and reuse of orphan sites and sites located in an enterprise zone. These incentives include streamlined cleanup requirements that apply only to the portions of the property that would prevent the property from being occupied for its intended purpose. While off-property releases must be investigated, the threats posed from these off-property areas are not required to be addressed by persons entering into special industrial area agreements. These incentives are only available to persons who did not cause or contribute to the contamination at the site and are only available for certain sites that have been used for industrial purposes.

On final rulemaking, there were only minor revisions made to this subchapter. In § 250.503 (relating to remediation requirements), the words “and other media” were added and the words “migration of” were deleted in subsection (c)(4).

Commentators were concerned that § 250.503(c)(1) was too broad in its requirement to include interviews with any person knowledgeable of the site. The Board believes that the language adequately reflects the need to consult persons who have knowledge of the property during the baseline remedial investigation.

A commentator recommended that § 250.503(e) be revised to more broadly reflect protection from liability afforded under Act 2, rather than be limited to protection from cleanup liability. This subsection was deleted on final rulemaking to avoid confusion about the liability protection.

Commentators stated that Act 2 identifies drummed waste as the only immediate, direct or imminent threat that must be addressed. In addition, it is recommended that "direct threats" be defined. The Board believes that Act 2 refers to drummed waste as an example of the types of threats that must be addressed in a remediation of a special industrial area. The Department will provide guidance on direct threats in the *Manual*.

*Subchapter F. Exposure and Risk Determinations*

*Section 250.601. Scope.*

Subsection (c)(3) was deleted on final rulemaking because an indepth risk assessment is not required for each remediation alternative unless the Department requests the evaluation of additional remediation alternatives.

*Section 250.602. Risk assessment procedures.*

A risk assessment must define unacceptable risks to both humans and ecological receptors. Language has been added to subsection (a) to explain that the risk assessment is required when using a site-specific standard under Subchapter D (relating to site-specific standard). This change was made in response to comments received that interpreted the proposed language to also apply to the background and Statewide health standards.

Commentators suggested that the guidelines referred to in subsection (b) and listed in subsection (g) be modified to state that they serve as examples of appropriate guidance, but are not all inclusive. The references in subsection (g) have been deleted on final rulemaking and the language in subsection (b) has been changed to refer to EPA or ASTM guidelines approved by the Department. The Department intends to publish approved guidelines in its *Manual*.

*Section 250.603. Exposure factors for site-specific standards.*

This section explains which exposure factors should be used to perform an exposure assessment. The proposed regulations stated that site-specific exposure factors must be used and must be clearly justified by supporting data. On proposed, if site-specific exposure factors were not used, the exposure assessment was required to be based on the standard exposure factors used to develop the Statewide health standards.

Commentators suggested that a reference to the EPA's Final Guidelines for Exposure Assessment be used for the application of site-specific exposure factors to a risk assessment. This reference is included in the final rulemaking in subsection (a).

Commentators indicated that proposed subsections (a) and (b) were confusing in their description of when site-specific exposure factors could be used. On final rulemaking, subsection (b) was changed to clarify that either site-specific exposure factors or the standard exposure factors used to develop the Statewide health standards shall be used.

*Section 250.604. Fate and transport modeling requirements for exposure assessments.*

This section explains which models may be used to estimate site-specific, soil-to-groundwater leaching potential for organic contaminants. The soil-to-groundwater model in the Statewide health standards may be used in site-specific exposure assessment. Because the model was based on a number of assumptions, only the values of K<sub>oc</sub>, water-filled soil porosity, dry soil bulk density,

fraction organic carbon and the default dilution factor in the model may be varied based on site-specific measurements.

This section also recognizes that many fate and transport models and methods are available in the EPA and ASTM guidelines. To ensure the proper application of groundwater models, the Department requires that the EPA or ASTM quality assurance/quality control criteria, such as model verification, model calibration and model validation shall be followed.

Commentators recommended that modeling references be more inclusive and allow for use of appropriate alternative models. In response to the comments, all references in subsection (c) have been deleted and the final-form regulations refer to the use of criteria and models approved by the Department. The Department intends to publish a list of approved criteria and models in its *Manual*.

One minor revision was made in subsection (a)(3). The word "nonaqueous" was deleted and replaced with "separate." This change was made to describe in plain language the category of liquids.

*Section 250.605. Sources of toxicity information.*

When conducting the toxicity assessment, this section establishes sources of toxicology data that are acceptable for use and a hierarchy within these sources for selection of the most appropriate oral reference dose and cancer slope factor. This is the same protocol which was used to select the toxicity values used in generation of the Statewide health standards.

If no toxicity data is available in any of these defined sources, a person may use the background standard or may develop, for the Department's review, one of the following: 1) chemical-specific toxicity values in accordance with the EPA guidance and based on published, peer-reviewed scientific literature; or 2) toxicity values developed from appropriately justified surrogates. If toxicity information is not available from any of the above sources, then the person must use the minimum threshold standard for regulated substances listed in Table 6.

Commentators recommended inserting "or from other credible and relevant information that is available" at the end of subsection (a). The list of the EPA guidelines or protocols for chemical-specific toxicity values was extended by adding the words "approved by the Department" in subsection (b)(1)(i) and by deleting the references in subsection (c). The Department intends to publish approved guidelines in its *Manual*.

*Section 250.606. Development of site-specific standards.*

If an unacceptable risk is identified through the risk assessment, a person may choose to eliminate the pathway or implement a remedy which abates the risks posed by that pathway to the protection levels established for site-specific standard remedies.

Specific factors must be considered in the assessment of risks posed by contamination that include consideration of the fate and transport of released regulated substances through the environment, natural conditions that may affect this fate and transport, specified exposure pathways, current and future land use and the effectiveness of institutional or legal controls placed on the use of the land.

Commentators recommended adding the phrase "for present or currently planned future use of the property" after the phrase "future exposure pathways" in subsection (a)(1). The Board does not believe that currently planned future land use will be sufficient to address reasonable future pathways. If necessary, the Department may elaborate on the meaning of future exposure pathways in the *Manual*.

On final rulemaking, minor revisions were made to this section.

*Section 250.607. Risk assessment of remediation alternatives.*

This section was deleted on final rulemaking because an indepth risk assessment is not required for each remediation alternative unless the Department requests the evaluation of additional remediation alternatives.

#### *Subchapter G. Demonstration of Attainment*

##### *Section 250.701. Scope.*

This section describes the scope of the subchapter for demonstration of attainment. The subchapter clarifies what information and procedures are necessary to demonstrate attainment with the cleanup standards, where a release of a regulated substance has occurred.

A change was made to subsection (c) to use the phrase "limits relating to the PQLs" to be consistent with the title change in § 250.5.

##### *Section 250.702. Attainment requirements.*

This section explains that attainment will apply to the horizontal and vertical extent of soil and groundwater identified as contaminated. In the proposed regulations, the areas defined as contaminated were those areas that exceed the cleanup standard selected. Where separate zones of contamination exist on a property from multiple releases, attainment applies to each individual separate zone.

This section also identifies what is required to be included in a final report to demonstrate attainment. The report must include a demonstration that the cleanup standard has been met, based on an analysis of data through the application of statistical tests, and must include a demonstration of a statistical trend analysis, knowledge of the plume stability or other acceptable method that shows that the standard will not be exceeded at the point of compliance. For attainment of the site-specific standard, a demonstration of pathway elimination, if applicable, and a demonstration that the site does not exceed the least protective risk level provided for in Act 2, must be provided.

As requested by commentators, subsection (a) is changed to provide that attainment of a standard shall be demonstrated using appropriate data quality objectives and data quality assessment processes as specified by the EPA. Incorporation of the EPA DQO process responds to the concerns for specifying parameters, spatial and temporal boundaries defining the scale of the decision making process, and identifying practical constraints on data collection.

Subsection (a) is further changed to clarify that attainment of the Statewide health standard and site-specific standard attainment in soil is demonstrated in the vertical and horizontal extent of the soil contaminated from the release above the selected standard, and groundwater attainment is demonstrated at the point of compliance and beyond. This means that the groundwater contamination that has migrated beyond the point of compliance

must also attain the standard. For the background standard, the subsection clarifies that attainment of the standard applies to the vertical and horizontal extent of soil and water identified as contaminated from the release across the site. These changes were made in response to comments that the section should identify what the attainment demonstration is required to address.

Subsection (b)(2) has been changed to clarify that the plume stability analysis is applied to groundwater attainment and that the statistical trend is a temporal trend. This subsection has been changed to provide that demonstration of attainment includes an analysis that indicates continued attainment over time. These changes respond to comments concerning the need for spatial and temporal boundaries in statistical analysis. These comments also are addressed in the changes to § 250.707(d)(3)(ii) (relating to statistical tests).

Section 250.702 (b)(3)(ii) has been changed to clarify that calculated site-specific standards are attained using the procedures in § 250.707(c) and (d), rather than a general reference to this subchapter. Section 250.702(b)(3)(ii) and subsection (b)(4) also have been changed to state that for calculated numerical site-specific standards, and for background and Statewide health standards, attainment shall be demonstrated within the soil and groundwater directly impacted by separate phase liquids. This change was to clarify that random sampling should also occur in the soil and groundwater directly impacted by separate phase liquids.

##### *Section 250.703. General attainment requirements for soil.*

In the proposed regulations, this section explained that the data collected to demonstrate attainment of a cleanup standard for soil must be random, both horizontally and vertically, over the areal extent which was shown to be contaminated above the selected cleanup standard during the site characterization. This data varies spatially and is used to determine statistically whether or not attainment has been demonstrated. This data is not the same as the data used to characterize the site. The data is collected specifically for the demonstration of attainment. The number of samples needed is dependent on the size of the area.

A comment was made that the regulation should specify particular EPA guidance documents to demonstrate attainment. Methodologies and acceptable references are discussed later in the subchapter. In general, the Department intends to list the guidances it will accept in its *Manual*.

A commentator suggested that subsection (b) should be changed to specify the uncertainty associated with the estimation of the volume of contaminated soil. The uncertainty estimation would be burdensome in most cases; therefore, no uncertainty is specified in the final-form regulations.

Subsection (c) has been changed to provide that soil sampling is to be random and representative, both horizontally and vertically, based on systematic random sampling. Additionally, the section has been changed to provide that the Department may require additional sampling if three or more adjacent samples exceed the standard by more than 10 times. This provision would allow the Department to require additional characterization and remediation, if there is a localized area of exceedances of the standard in the area that has been remediated. This change responds to the comment that those areas should be addressed.

Subsection (d) has been changed. Eight samples still are required for contaminated soil volumes of less than 125 cubic yards or less, although a commentator noted that fewer samples have been sufficient for some tank closures. Section 250.707(b)(1)(iii) of the final-form regulations allows fewer samples to be taken in accordance with a Department technical guidance document for localized storage tank contamination. Under that circumstance no exceedances of the standard are allowed. For other methods, eight samples are usually required, in part because this is a minimum number to allow the 75%/10X statistical rule to function appropriately. Under that rule, two samples could exceed the standard, but not by more than 10 times. Thus, eight as the number of samples has been retained in subsection (d)(1).

Subsection (d)(2) now provides that at least 12 sample points must be used for contaminated areas of up to 3,000 cubic yards. Subsection (d)(3) provides that for each additional soil volume up to 3,000 cubic yards, an additional 12 sample points will be required. These two changes respond to the comment that an upper limit should be set to the soil volume that a minimum of 12 samples was initially meant to characterize. This subsection also has other minor changes.

*Section 250.704. General attainment requirements for groundwater.*

This section contains general attainment requirements for groundwater and provides that a sufficient number of sampling points must be installed to demonstrate attainment with a cleanup standard.

Subsection (b) was revised to state that wells should be located so that there is sufficient groundwater to be tested; that is, the water being tested should not merely be condensate on the walls of the well.

Subsections (c) and (d) in the proposed rulemaking had required attainment demonstrations for each aquifer, and required clusters of compliance wells where there was significant vertical migration of contamination within a single aquifer. Commentators had asked for greater specificity. These sections have been deleted, but a requirement has been added in subsection (b) that monitoring should be sufficient to demonstrate attainment within each plume of contamination.

Also, the section was changed to make it clear that the new subsection (d), relating to the 75%/10x test for groundwater, applies to demonstration of attainment for groundwater, rather than "groundwater subject to remediation" as stated in the proposed regulations. This responds to the comment that attainment will be demonstrated at some sites where no remediation is performed.

Commentators expressed concern with the requirement in subsection (d) of eight quarters of sampling to demonstrate attainment of groundwater remediation standards. Commentators indicated that a reduced number of samples should be allowed in certain circumstances. This requirement for eight quarters of sampling only applies to the 75%/10x rule and is generally necessary for that rule to function. As an alternative to the 75%/10x rule, under certain circumstances, four quarters only, or fewer, may be required. This subsection has been amended to allow fewer than four quarters of sampling if written approval is obtained from the Department. In order to use only four or fewer quarters of data as an alternative to the 75%/10x rule, conditions regarding the knowledge of the stability and decreasing trend of the plume must be demonstrated, and there can be no exceedances of the groundwater standard or the limit related to the PQL.

This approach is similar to other circumstances where eight samples may be taken over only four quarters or fewer, or sampling may be accelerated, where conditions are satisfied regarding the knowledge and stability of the plume. This occurs in § 250.707(a)(2)(x) and (3)(v) when a person is demonstrating attainment with some background demonstrations.

If statistical tests other than the 75%/10x rule referred to in subsection (d) are used, the documentation of the chosen method dictates the number of required samples. This responds to the comment that the number and type of samples should meet the specified decision error criteria. Additionally, § 250.707(d)(2)(vi) requires tests to control for seasonal and spatial variability, and temporal correlation. This means that methods, other than the 75%/10X rule, must rely on data that is taken over a period of seasons. The period of seasons is determined under the data quality objectives process for those methods, while the period is defined explicitly for the 75%/10X rule in § 250.704(d).

Minor changes were made to subsections (d)(1) and (3) and (e).

*Section 250.705. Attainment requirements for groundwater in aquifers not used or currently planned to be used.*

This is a new section which establishes requirements for demonstrating attainment, under the Statewide health standards, for groundwater that is in aquifers that are not used or are not currently planned to be used. This section provides that, in addition to the sampling and statistical analyses that apply to attainment of the Statewide health standards in this subchapter, a fate and transport analysis must be conducted, based on sufficient sampling and monitoring data to calibrate the model. The fate and transport analysis must show that the MSC pertinent to groundwater in an aquifer used or currently planned for use must be attained no later than 30 years from the final report approval, at all points at and beyond a radius of 1,000 feet downgradient from the property boundary. This section is designed to respond to persons who prefer to use the Statewide health standard in an area where groundwater is not being used for drinking water or agricultural purposes.

*Section 250.706. Demonstration of attainment of surface water and air quality standards.*

This section requires that all applicable State and Federal laws and regulations related to surface water and air must be met to demonstrate attainment within the surface water and air media. A minor clarification has been added to indicate that surface water and air are media, as requested by a commentator.

*Section 250.707. Statistical tests.*

This section specifies the requirements for using and applying statistical tests to demonstrate attainment. The statistical tests may also be used to establish background concentrations at a site, as required by the background standard subchapter. The statistical test used to establish background must correspond with the statistical test used to demonstrate attainment with that standard.

The final-form regulations allow a person to choose between the 75%/10X rule for demonstrating attainment with the Statewide health standard, or a 95% Upper Confidence Level (UCL) of the mean statistical test, or other methods that meet specified performance standards, for demonstrating attainment with the Statewide health and site-specific standards. For the background standard in soil, a person may use a test which compares the

highest measurements, or a combination of the Wilcoxon rank-sum test and quantile test, or other methods that compare the population of analytical results of background samples with a population of the medium of concern and meet specified performance standards. For the background standard in groundwater, a person may use the nonparametric Tolerance Intervals, or a retesting strategy using nonparametric Prediction Limits in accordance with the EPA guidance or other statistical methods that meet specified performance standards. A nonparametric statistical test compares distributions rather than parameters and is intended to apply to a large class of distributions rather than a single distribution. A parametric statistical test estimates parameters, such as arithmetic average, and tests hypotheses concerning them. The assumptions generally specify the form of distribution.

The 95% UCL test is documented in Federal guidances. The 95% UCL of the mean test is a parametric statistical procedure for determining whether the mean (average) concentration in the area of concern attains the cleanup standard. If the 95% upper confidence limit of the mean value is below the cleanup standard, the area of concern would be considered clean.

The 75%/10x rule requires that 75% of all samples collected for attainment purposes must be equal to or less than the standard with no individual sample exceeding ten times the standard. This rule requires that a sufficient number of samples be collected in the field to provide an acceptable result in the test. Therefore, a minimum of eight samples must be collected in order to reduce the false positive rate in the test. A false positive conclusion means that the statistical finding of clean is not representative of the overall field conditions at the site. To substantially reduce the false positive rate, the regulations require a minimum of eight samples in groundwater and a minimum of eight samples in soil equal to or less than 125 cubic yards.

On proposed rulemaking, using statistical simulations based on the median, the tests were evaluated using log normal distributions with coefficients of variation (Cv) ranging from 0.5 to 4.0, and with the number of samples ranging from 5 to 40. The conclusions were discussed more specifically in the preamble to the proposed rulemaking at 26 Pa.B. 3985. Since the time of the proposed rulemaking, the Department obtained additional information regarding the 75%/10x rule, based on additional simulation studies to evaluate the true arithmetic mean at a site that meets the cleanup standard. Specific changes to each subsection are as follows.

Subsection (a) has been changed to clarify the demonstration of attainment of the background standard. When the site involves naturally occurring substances, the area to which the site is being compared must be representative of naturally occurring regulated substances on the site. When the substances are not naturally occurring, the background area to which the site is being compared must be an area from which the contamination is migrating. The background areas to which the site is being compared are termed the background "reference" areas; this clarification occurs throughout this section.

Subsection (a)(1) provides that attainment of background in soil may be demonstrated by using the highest measurement comparison, a combination test, or other methods meeting general requirements. Subsubsection (a)(1)(i) has been modified to clarify that it is the obligation of the person demonstrating attainment to show that the highest measurement of contamination on-

site is not higher than the highest measurement from the background area. In response to commentators, subsubsection (a)(1)(i) also has been changed to state that the Department may accept insignificant variations in the numbers.

Alternatively, a person may demonstrate attainment of background in soil by using a combination of the Wilcoxon rank-sum test and the Quantile test, and showing that background is not exceeded. This is a change from proposed rulemaking, when the nonparametric upper tolerance limit was required in conjunction with the Wilcoxon rank-sum test. This change was in response to a request from a commentator. Additionally, the clause relating to the percentage of nondetect data was deleted because it would be more appropriate to discuss the use of a combination of the Quantile and Wilcoxon tests in the *Manual*. The final-form regulations in subsections (a)(1)(iv) and (vi) provide that the application of this method, along with other methods, must also use a false positive rate not greater than 0.2, with a minimum number of 10 samples from the background area and 10 from each area of contamination, and that it must meet the requirements of subsection (d), which relates to the null hypothesis, the alternative hypothesis, and performance standards for statistical tests.

Also, in regard to the false-positive (Type I) error rate in subsection (a)(1)(iv), a commentator requested that the Department consider attainment based on a controlling constituent, rather than each constituent, to control the effect of multiple constituents on the decision error of the process. The Department believes that the overall error rate should be controlled, and the Type I error for each individual constituent can be adjusted to meet that goal as long as the power to detect contamination is not compromised and the overall error rate does not exceed 0.20.

Several commentators indicated that ten background samples and ten impacted area samples were excessive. The Department retained this requirement, however, because it was needed to provide sufficient power in the statistical method to detect contamination.

Other statistical methods besides the highest measurement comparison test and the combined Wilcoxon-Quantile test can be used, but both parametric and nonparametric methods must meet the conditions to which the combination Wilcoxon-Quantile test is subject regarding the false positive rate, number of samples, the null and alternative hypotheses, and the performance standards for statistical tests. In addition, if a parametric method is chosen, subsubsection (a)(1)(v) has been changed to provide that the censoring level for each nondetect shall be an assigned value that is randomly generated that is between zero and the limit related to the PQL.

Minor changes were made to subsections (a)(1)(iv)—(vi) to clarify what standards apply to various statistical methods.

Subsection (a)(2) governs the demonstration of attainment of background groundwater quality when there is a known upgradient release of a regulated substance. Subsection (a)(2)(ii) has been modified to provide that the upgradient concentration must be representative of concentrations in groundwater that are migrating onto the site. Attainment of background where groundwater is affected by substances migrating from an upgradient release must be demonstrated by sampling taken over eight quarters in both the background reference wells and



the onsite wells, as clarified in the change to subsection (a)(2)(iii). The attainment method is applied to each monitoring well over eight quarters. In lieu of the eight quarters of sampling, the Department may accept eight samples over four quarters or, under the change in subsection (a)(2)(x), fewer than four quarters with written Department approval, if certain conditions, such as knowledge of the plume and parameters affecting fate and transport, are satisfied.

In addition to a minor change, subsection (a)(2)(ix) has been modified to say that the censoring level for nondetects is randomly generated between zero and the limit related to the PQL. Subsection (a)(2)(x)(C) has been modified to provide that the coefficient of variation may not exceed 1.0 for metals and 2.0 for organics, rather than using 1.0 for certain organic compounds as was done on proposed rulemaking. This change was made for the sake of simplicity. Another minor change was made to subsection (a)(2)(ix).

Subsection (a)(3) relates to the determination of background conditions due to naturally occurring or areawide contamination. The person using this subsection needs to obtain the Department's approval that the site is appropriate for the areawide contamination process. At least twelve samples are required, but sampling may be accelerated as long as serial correlation in the data does not result. Subsection (a)(3)(iv) was modified to clarify that all samples do not have to be taken simultaneously. Subsection (a)(3)(v) was modified for clarity; the substance remains unchanged. Subsection (a)(3)(vi) has been clarified to say that the values may be used with appropriate methods to compare the populations. Subsection (a)(3)(vii) has been changed. The proposed language provided that the sampling could not have "extreme values." It has been changed to provide that the sampling results in the plume onsite may not exceed the sum of the background arithmetic average and three times the standard deviation calculated for the background area. This is in response to a comment asking the Department to explain what is meant by "extreme values." Subsection (a)(3)(ix) has been modified to reflect the change of the censoring level to a random value, consistent with other sections.

Subsection (a)(2) of the proposed regulations has been deleted. This subsection related to the use of the standard related to the PQL as a default background standard for substances that are coming from a release somewhere off-property. This provision is not necessary since persons can sample reference areas to determine the background levels.

Subsection (b) sets out the statistical tests which may be accepted by the Department to demonstrate attainment with the Statewide health standard. The statistical tests apply to each area of soil contamination and to each groundwater well. Tests are performed individually for each regulated substance identified as present at the site, for which a person wants relief from liability under the act.

Subsection (b) has been modified to delete the application of the 75%/10X rule to attainment demonstrations of standards relating to PQLs and to the site-specific standard. This was done because the Department obtained additional information, since the time of proposed rulemaking, involving simulation studies of the tests based on the arithmetic mean. These simulations indicated that a site could pass the 75%/10X rule, although the true site arithmetic average concentrations could exceed the cleanup standard by two to three times, if the coefficient

of variation is small. Because the Department believes that the Statewide health standards are based on conservative assumptions this concern is not as significant for that standard. However, under the site-specific standard, exposure assumptions are based on site-specific conditions. Therefore, although commentators supported the use of the 75%/10X rule for site-specific remediations, it was determined that the 75%/10X rule was appropriate only for the Statewide health standard. Subsection (b) was also modified to make it clear that the statistical test applies to each well used for monitoring compliance, as opposed to wells that are irrelevant because they are not within the area of contamination.

Subsection (b)(1) governs attainment of the standard in soil. Subsection (b)(1)(i) has been changed in the description of the requirements for the 75%/10X rule. The changes make it clear that the samples must be randomly collected, during a single event, and 75% of these samples must be equal to or less than the Statewide health standard or the limit related to PQLs, with no individual sample exceeding 10 times the Statewide health standard.

Subsection (b)(1)(ii) has been changed in regard to the use of the 95% UCL test for demonstrating attainment with the Statewide health standard for soil. The change allows the 95% UCL of the arithmetic mean to be at or below the Statewide health standard. This was made specifically in response to a request from a commentator to clarify whether the arithmetic mean or the geometric mean is of concern, and to a comment asking that the arithmetic mean be used. It is the arithmetic average concentration that represents the exposure to a receptor. Geometric average concentration is not representative of exposure. The Department considers a site to be adequately remediated when the true site arithmetic average concentration, not geometric average concentration, of a site is at or below the numerical standard.

Subsection (b)(1)(iii) includes a new procedure for demonstrating attainment with the Statewide health standard for soils. For sites that are localized storage tank contamination sites, if samples are taken in accordance with closure guidance for underground storage tanks, then that process may be used if the remediator takes fewer samples than would be required under the other tests in this section. Attainment can be demonstrated under Act 2 if no samples exceed the standard. This allows the use of fewer samples for storage tank sites. The concern that the statistical method would not have a large enough base is resolved by the requirement that none of the samples exceed the standard.

Attainment of the Statewide health standard in groundwater is discussed in subsection (b)(2). The first change to paragraph (2) makes it clear that attainment is demonstrated at each monitoring well used for compliance. Subsection (b)(2)(i) describes the functioning of the 75%/10X rule. Changes here clarify that 75% of the samples collected within each monitoring well over time shall be equal to or less than the Statewide health standard or the limit related to PQLs. No individual sample may exceed ten times the Statewide health standard on the property, or two times the Statewide health standard beyond the property boundary. For clarification, "at the point of compliance" was deleted.

In subsection (b)(2)(ii), the use of the 95% UCL for demonstration that the Statewide health standard has been achieved in groundwater has also been changed to clarify that the 95% UCL of the arithmetic mean must be at or below the Statewide health standard.

A new subsection, that allows the use of other statistical tests that satisfy the requirements of subsection (d), is provided for in subsection (b)(3).

Demonstration of attainment methods for the site-specific standard is discussed in subsection (c). This section allows the use of the 95% UCL for soil or groundwater, or a statistical test that meets the general requirements for other methods in subsection (d). The 75%/10X rule is not available for demonstrating attainment with the site-specific standard. This subsection also sets forth the requirement that the method used to demonstrate attainment must be the same as the method used in the risk assessment.

Subsection (d) sets forth the general requirements that apply to attainment tests other than the 75%/10X rule or the highest measurement comparison for demonstrating attainment in soil and groundwater. Subsection (d)(1) relates to methods for demonstrating attainment of the Statewide health standard or the site-specific standard. The application of these methods to background standards after remediation and to standards relating to PQLs is deleted. For the Statewide health and site-specific standards, the statistical method must employ a null hypothesis ( $H_0$ ) that the true site arithmetic average concentration is at or above the cleanup standard, rather than that the null hypothesis is that the cleanup is not achieved. The final rule states that the alternative hypothesis ( $H_a$ ) is that the true site arithmetic average concentration is below the cleanup standard, rather than that the alternative hypothesis is that the cleanup standard is achieved. The new language regarding the true site arithmetic average does not change the hypothesis, but clarifies that the intent of the section is that the true site arithmetic average is the statistical parameter of interest. The regulation incorporates a commentator's request to reverse the hypothesis statements for attainment of the postremediation background standard. This is because the proposed rulemaking would have required the person to do a remediation that could have resulted in actual site conditions being cleaner than the background area. Reversing the hypothesis for background using current methods allows some on-property measurements to exceed background concentrations and still demonstrate attainment. This is appropriate because it is accepted by the EPA and because it is more reasonable on a consideration of cost, to allow a small number of exceedances of the background standard, than to require a degree of cleanup that would result in all on-property sample concentrations to be at or below the background conditions. As a result of this reversal, both the initial determination and the postremediation determination of the background standard have the same hypothesis statements. Therefore, the word "initially" has been deleted from the phrase "when statistical methods are to be used to initially determine that the background standard other than the limit related to the PQL is exceeded" in subsection (d) (1).

Another general requirement for statistical methods is that they must be recommended for the particular use in a Department approved guidance or regulation rather than a relevant Federal guidance. This requirement is found in subsection (d)(2)(ii).

In regard to subsection (d)(2)(iii), commentators felt that compositing of the surface soil should be allowed. The Department agreed that composite sampling may be used under these regulations, but for situations other than those involving VOCs or the use of nonparametric methods. A change was made to subsection (d)(2)(iii) that compositing cannot be used for VOCs.

Subsection (d)(2)(iv) was changed to delete the requirement that statistical parameters shall be protective of human health and the environment. Additionally, the language regarding the censoring levels for nondetects was changed to be consistent with other subsections governing this issue.

Subsection (d)(2)(v) allows the Department to approve tests that do not need to account for seasonal and spatial variability and temporal correlation, where appropriate. The word "account" was substituted for "control" for purposes of readability.

Subsection (d)(2)(vi) has been changed to say that all tests, not just initial tests, used to demonstrate that background is exceeded shall maintain adequate power to detect contamination in accordance with current EPA guidance, regulations, or protocols. "1-Beta" was deleted since the power is described in the supporting guidance documents.

Subsection (d)(2)(viii) has been modified to clarify that statistical testing is done for each regulated substance.

In response to a comment, subsection (d)(3)(ii) requires new information to be documented in a final report when a statistical method is applied: it must include a clear statement of the applicable decision rule in the form of statistical hypotheses for each spatial unit and temporal boundary, including the applicable statistical parameter of interest and the specific cleanup standard.

A requirement is added to subsection (d)(3)(v) to specify false negative rates for demonstrating attainment with the background standard. This requirement is added to the general requirements for specification of false positive rates in methods used to demonstrate attainment with background and other standards.

Other minor changes were made to subsection (d).

*Section 250.708. Postremediation care attainment.*

Section 250.708 applies to remediations that require the use of engineering or institutional controls to attain and maintain a cleanup standard beyond the time that a final report is reviewed and approved by the Department. Implementation of a postremediation care plan is required if engineering or institutional controls are utilized to demonstrate attainment with a cleanup standard.

Commentators recommended that postremediation care requirements should not apply to passive engineering controls or to institutional controls other than those that require security measures. The wording was not changed because passive engineering controls, such as a slurry wall or cap, still require maintenance and care after the final report is approved. The regulation was not changed to limit postremediation care to institutional controls only if they involve security measures because a wide range of institutional measures are possible, and the postremediation care plan need only address applicable care requirements. Deed restrictions need no maintenance and thus would not have to be addressed in the postremediation care plan.

In response to a comment, subsection (a) was revised to clarify that the statistical test (to show that substances do not exceed the standard at the point of compliance) is done after engineering controls are in place and concentration levels have stabilized following any effects from the remediation. This revision is a change from the less precise language on proposed rulemaking that the groundwater has reached a "consistent concentration level." Subsection (e) was clarified to allow persons to terminate postremediation care when they document that

the standard is not expected to be exceeded in the future, through use of a fate and transport analysis.

#### *Appendix A, Tables 1—8*

On proposed, Table 1 included MSCs for groundwater in aquifers used or currently planned to be used, considering residential and nonresidential land use. On final rulemaking, the table also includes MSCs for groundwater in aquifers not used or currently planned to be used, considering residential and nonresidential land use. Table 1 is limited to organic regulated substances. In addition, columns have been added to distinguish between aquifers with less than or greater than 2,500 mg/L total dissolved solids, instead of addressing the distinction with a footnote.

A new Table 2 has been added which includes the MSCs for inorganic substances in groundwater. The table follows the same format as Table 1. In addition, a subtable containing substances with secondary MCLs has been added.

Table 3, formerly Table 2 in the proposed regulations, presents the MSCs for organic regulated substances in soil. This table has been divided into two categories: A) direct contact numeric values; and B) soil-to-groundwater numeric values. In addition, soil buffer distances have been added to Table 3, B. for each substance, in accordance with § 250.308(b) and (c). The MSCs for inorganic regulated substances in soil have been moved to Table 4 for the convenience of the user.

A new Table 4 has been added which identifies the MSCs for inorganic substances in soil and follows the format of Table 3. This table has been divided into two categories: A) direct contact values; and B) soil-to-groundwater numeric values.

Table 5, formerly Table 3 in the proposed regulations, has been modified to indicate the aqueous solubility for each regulated substance, which is used by § 250.304(b) as a cap to the MSCs for groundwater. A column has been added to indicate those substances that are liquids at standard temperature and pressure for the purpose of determining the appropriate saturation cap to be applied under § 250.305(b). A column has been added to indicate the boiling point of each substance to determine which are volatile organic substances for the purpose of implementing §§ 250.304(d) and 250.307.

Table 6, formerly Table 4 in the proposed regulations, has been modified to provide threshold of regulation soil-to-groundwater numeric values based solely on 100X the groundwater MSC.

Table 5 in the proposed regulations, relating to MSCs for radionuclides, was deleted because of the deletion of the MSCs for radionuclides in the final rulemaking.

Table 6 in the proposed regulations, relating to exposure assumptions for lead, was renumbered Table 7.

Table 7 in the proposed regulations, relating to the identification of constituents of potential ecological concern, was renumbered Table 8.

#### *F. Benefits, Costs and Compliance*

Executive Order 1996-1 requires a cost/benefit analysis of the final-form regulation.

##### *Benefits*

The final-form regulations provide significant benefits to the public, local government and the private sector. The public and local government are notified of plans to remediate sites, by the person who intends to perform the

remediation, prior to the initiation of the cleanup. In the past, this notice was not required. In addition, for cleanups that involve the site-specific standard or special industrial areas, a person who is remediating a site must publish the availability of the opportunity for a municipality to become involved in the remediation and reuse plans for the site.

These final-form regulations will encourage the voluntary cleanup and reuse of contaminated sites, restoring these sites to safe and productive uses, while promoting additional employment and tax revenues to distressed communities. The reuse of these sites will also reduce industrial development of greenfields sites.

##### *Compliance Costs*

The Department does not anticipate any new compliance costs associated with the final-form regulations. Costs to remediate contaminated sites should be reduced based on the availability of a release of liability for compliance with the cleanup standards. Act 2, however, does impose fees for the submission of plans and reports that are reviewed by the Department. These fees will be collected by the Department and will be used to implement the provisions of Act 2, including implementation of these final-form regulations.

##### *Compliance Assistance Plan*

Act 2 establishes an Industrial Sites Cleanup Fund, which is administered by the Department of Community and Economic Development. The fund provides financial assistance to persons who did not cause or contribute to contamination on a property used for industrial activity and who propose to undertake a voluntary cleanup of the property.

The Department of Environmental Protection has developed a *Manual* for the land recycling program. The *Manual* provides detailed, technical information on how to comply with Act 2 and the final-form regulations.

##### *Paperwork Requirements*

The paperwork required by these final-form regulations is based on statutory requirements. Act 2 requires notices of intent to remediate and final reports for remediations. In addition, Act 2 requires the preparation of remedial investigation reports, risk assessment reports and cleanup plans for remediations that will attain the site-specific standard. For the remediation of special industrial areas, Act 2 requires the preparation of a work plan and a baseline remedial investigation report. Also, a person undertaking the reuse of a special industrial site is required to enter into an agreement with the Department based on the baseline remedial investigation report. The reports are an important aspect of the cleanup program because releases of liability will be based on the Department-approved reports that identify contamination and demonstrate compliance with a cleanup standard. The final-form regulations do not require additional paperwork beyond what is established by statute.

##### *G. Pollution Prevention*

Pollution prevention approaches to environmental management often provide environmentally sound and longer-term solutions to environmental protection because pollution is prevented at the source. Generally speaking, pollution prevention refers to measures taken to avoid or reduce the generation of all types of pollution at their points of origin. These final-form regulations will be applied after the pollution has been generated and a person is remediating the property. It should be noted, however, that these final-form regulations are intended to

encourage the reuse of contaminated sites and prevent the generation of pollution at a site that is no longer contaminated.

*H. Sunset Review*

These final-form regulations will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulations effectively fulfill the goals for which is was intended.

*I. Regulatory Review*

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), on June 18, 1997, the Department submitted a copy of the proposed rulemaking to the Independent Regulatory Review Commission (IRRC), and the Chairpersons of the Senate and House Environmental Resources and Energy Committees. In compliance with section 5(b.1) of the Regulatory Review Act, the Department also provided IRRC and the Committees with copies of the comments, as well as other documentation.

In preparing these final-form regulations, the Department has considered the comments received from IRRC and the public. These comments are addressed in the comment and response document and Section E of this preamble. The Committees did not provide comments on the proposed rulemaking.

These final-form regulations were deemed approved by the House and Senate Environmental Resources and Energy Committees on July 8, 1997. IRRC met on July 17, 1997, and deemed approved the final-form regulations in accordance with section 5(c) of the Regulatory Review Act.

*J. Findings of the Board*

The Board finds that:

(1) Public notice of proposed rulemaking was given under sections 201 and 202 of the act of July 31, 1968 (P. L. 769, No. 240) (45 P. S. §§ 1201 and 1202) and regulations promulgated thereunder at 1 Pa. Code §§ 7.1 and 7.2.

(2) A public comment period was provided as required by law, and all comments were considered.

(3) These final-form regulations do not enlarge the purpose of the proposed regulations published at 26 Pa.B. 3985.

(4) These final-form regulations are necessary and appropriate for administration and enforcement of the authorizing acts identified in Section C of this Preamble.

*K. Order of the Board*

The Board, acting under the authorizing statutes, orders that:

(a) The regulations of the Department, 25 Pa. Code are amended by adding §§ 250.1—250.10, 250.201—250.204, 250.301—250.312, 250.401—250.411, 250.501—250.503, 250.601—250.606 and 250.701—250.708 to read as set forth in Annex A.

*(Editor's Note:* The addition of §§ 250.11—250.13, included in the proposal at 26 Pa.B. 3985, has been withdrawn by the Board. The addition of §§ 250.312, 250.411, 250.607 and 250.708 was not included in the proposal at 26 Pa.B. 3985.)

(b) The Chairperson of the Board shall submit this order and Annex A to the Office of General Counsel and the Office of Attorney General for review and approval as to legality and form, as required by law.

(c) The Chairperson of the Board shall submit this order and Annex A to IRRC and the Senate and House Environmental Resources and Energy Committees as required by the Regulatory Review Act.

(d) The Chairperson of the Board shall certify this order and Annex A and deposit them with the Legislative Reference Bureau, as required by law.

(e) This order shall take effect immediately upon publication.

JAMES M. SEIF  
*Chairperson*

*(Editor's Note:* For the text of the order of the Independent Regulatory Review Commission relating to this document, see 27 Pa.B. 4052 (August 9, 1997).)

**Fiscal Note:** Fiscal Note 7-300 remains valid for the final adoption of the subject regulations.

**Annex A**

**TITLE 25. ENVIRONMENTAL PROTECTION  
PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION**

**Subpart D. ENVIRONMENTAL HEALTH AND SAFETY**

**ARTICLE VI. GENERAL HEALTH AND SAFETY**

**CHAPTER 250. ADMINISTRATION OF LAND RECYCLING PROGRAM**

**Subch.**

- A. GENERAL PROVISIONS**
- B. BACKGROUND STANDARD**
- C. STATEWIDE HEALTH STANDARDS**
- D. SITE-SPECIFIC STANDARD**
- E. SIA STANDARDS**
- F. EXPOSURE AND RISK DETERMINATIONS**
- G. DEMONSTRATION OF ATTAINMENT**

**Subchapter A. GENERAL PROVISIONS**

- Sec. 250.1. Definitions.
- 250.2. Application of remediation standards.
- 250.3. Management of contaminated media.
- 250.4. Limits related to PQLs.
- 250.5. Public notice by applicant.
- 250.6. Public participation.
- 250.7. Fees.
- 250.8. Publication.
- 250.9. Interaction with other environmental statutes.
- 250.10. Measurement of regulated substances in media.

**§ 250.1. Definitions.**

In addition to the words and terms defined in the act, the following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise:

*ASTM*—The American Society for Testing and Materials.

*Act*—The Land Recycling and Environmental Remediation Standards Act (35 P. S. §§ 6026.101—6026.909).

*Anisotropy*—The variability of a physical property based on direction, for example, variation in permeability in relation to direction of groundwater flow.

*Community water system*—As defined in the Pennsylvania Safe Drinking Water Act (35 P. S. §§ 721.1—721.17), a public water system, which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

*Enterprise zone*—An area specially designated as an enterprise zone under requirements determined by the Department of Community and Economic Development.

*Environmental protection acts*—Includes:

(i) The Clean Streams Law (35 P. S. §§ 691.1—691.1001).

(ii) The Municipal Waste Planning, Recycling and Waste Reduction Act (53 P. S. §§ 4001.101—4001.1904).

(iii) The Hazardous Sites Cleanup Act (35 P. S. §§ 6020.101—6020.1305).

(iv) The Low-Level Radioactive Waste Disposal Act (35 P. S. §§ 7130.101—7130.906).

(v) The act of July 13, 1988 (35 P. S. §§ 6019.1—6019.6), known as the Infectious and Chemotherapeutic Waste Disposal Law.

(vi) The Air Pollution Control Act (35 P. S. §§ 4001—4015).

(vii) The Surface Mining Conservation and Reclamation Act (52 P. S. §§ 1396.1—1396.31).

(viii) The Noncoal Surface Mining Conservation and Reclamation Act (35 P. S. §§ 3301—3326).

(ix) The Dam Safety and Encroachments Act (32 P. S. §§ 693.1—693.27).

(x) The Solid Waste Management Act (35 P. S. §§ 6018.101—6018.1003).

(xi) Other State or Federal statutes relating to environmental protection or the protection of public health.

*EQL*—Estimated quantitation limit.

*Habitats of concern*—A habitat defined as one of the following:

(i) Typical wetlands with identifiable function and value, except for exceptional value wetlands as defined in § 105.17 (relating to wetlands).

(ii) Breeding areas for species of concern.

(iii) Migratory stopover areas for species of concern.

(iv) Wintering areas for species of concern.

(v) Habitat for State endangered plant and animal species.

(vi) Federal, State and local parks and wilderness areas, and areas designated as wild, scenic or recreational.

(vii) Areas otherwise designated as critical or of concern by the Game Commission, the Fish and Boat Commission or the Department of Conservation and Natural Resources.

*Heterogeneity*—Nonhomogeneous structure, composition and physical properties.

*MCL*—Maximum contaminant level.

*MSC*—Medium-specific concentration.

*NIR*—Notice of Intent to Remediate.

*NPDES*—National Pollutant Discharge Elimination System.

*PQL*—Practical quantitation limit.

*Property*—A parcel of land defined by the metes and bounds set forth in the deed for that land.

*Regulated discharge*—A point or nonpoint source discharge subject to the permit or approval requirements of Chapters 91—105 and any diffuse surface or groundwater discharge to surface waters which has the potential to cause an exceedance of the water quality standards in Chapter 93 (relating to water quality standards).

*Risk assessment*—A process to quantify the risk posed by exposure of a human or ecological receptor to regulated substances. The term includes baseline risk assessment, development of site-specific standards and risk assessment of the remedial alternatives.

*SIA—special industrial area*—Property where there is no financially viable responsible person to perform remediation or property located within an enterprise zone, and where the property was used for industrial activity.

*Secondary contaminants*—A regulated substance for which a secondary MCL exists, and no lifetime health advisory level exists.

*Site*—The extent of contamination originating within the property boundaries and all areas in close proximity to the contamination necessary for the implementation of remediation activities to be conducted under the act.

*Species of concern*—Species designated as of special concern, rare, endangered, threatened or candidate by the Game Commission, the Fish and Boat Commission or the Department of Conservation and Natural Resources, if the species has not also been designated threatened or endangered by the Federal government.

*TF*—Transfer factor.

*Volatile compound*—A chemical compound with a boiling point less than 200° centigrade at 1 atmosphere.

## § 250.2. Application of remediation standards.

(a) This chapter provides remediation standards which shall be used whenever site remediation is voluntarily conducted or is required under environmental statutes in section 106 of the act (35 P. S. § 6026.106).

(b) A person who is required to perform a site remediation under an enforcement action of the Department shall meet the following:

(1) Select one or a combination of the background standards contained in Subchapter B (relating to background standard), Statewide health standards contained in Subchapter C (relating to Statewide health standards) and site-specific standards, contained in Subchapter D (relating to site-specific standards).

(2) Demonstrate compliance with the substantive, procedural and notice requirements of the act and this chapter.

(c) To qualify for liability protection under the act, a person conducting remediation shall comply with this chapter and the act. Administrative and procedural requirements for remediations in paragraphs (1) and (2) shall be used in lieu of those requirements listed in this chapter to qualify for liability protection under the act.

(1) Persons remediating sites placed on the Pennsylvania Priority List shall comply with the Hazardous Sites Cleanup Act (35 P. S. §§ 6020.101—6020.1305), except for the cleanup levels which are set by the act.

(2) Persons remediating releases from storage tanks regulated under the Storage Tank and Spill Prevention Act (35 P. S. §§ 6021.101—6021.2104) shall comply with the requirements of the corrective action process under the Storage Tank and Spill Prevention Act, except for the cleanup levels which are set by the act.

**§ 250.3 Management of contaminated media.**

(a) Contaminated media removed for reuse, treatment or disposal shall be managed in accordance with the Solid Waste Management Act (35 P. S. §§ 6018.101—6018.1003), The Clean Streams Law (35 P. S. §§ 691.1—691.1001), the act of July 13, 1988 (P. L. 525, No. 93) (35 P. S. §§ 6019.1—6019.6), known as the Infectious and Chemotherapeutic Waste Law, the Air Pollution Control Act (35 P. S. §§ 4001—4015) and the regulations thereunder.

(b) The Department may waive procedural and operating requirements for onsite remediation activities based on a written demonstration of any of the criteria in section 902(b) of the act (35 P. S. § 6026.902).

**§ 250.4. Limits related to PQLs.**

(a) The PQLs shall be selected from the PQLs specified by the EPA as EQLs in the most current version of the EPA RCRA Manual SW-846 (U. S. EPA, 1990. *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*. Third Edition. Office of Solid Waste and Emergency Response) for soil listed as "low level soil" and for groundwater listed as "groundwater" in accordance with the following:

(1) For inorganic compounds, the PQLs under this chapter shall be the values listed for methods associated with analysis by Inductively Coupled Plasma (ICP) with the following exceptions:

(i) For lead, cadmium, arsenic and selenium, values listed for the atomic absorption graphite furnace methods for water shall be used.

(ii) Mercury shall be the value listed for the cold vapor method.

(2) For organic compounds, the PQLs shall be the EQLs listed for the GC/Mass spec methods—for example, Method 8240 for volatile organic compounds.

(b) If the PQL selected under subsection (a) is higher than the MCL or HAL for an organic regulated substance in groundwater, the PQLs shall be derived from the analytical methodologies published under the drinking water program in the most current version of *Methods for the Determination of Organic Compounds in Drinking Water* (U. S. EPA, 1988, Environmental Monitoring Systems Laboratory, EPA/600/4-88/039). If a PQL determined under this subsection is not below a HAL, the methodologies in subsection (c)(1) or (2) shall be used unless those quantitation limits are higher than the PQL determined under this subsection.

(c) For regulated substances when EQLs set by the EPA have a health risk that is greater (less protective) than the risk levels set in sections 303(c) and 304(b) and (c) of the act (35 P. S. §§ 6026.303(c) and 6026.304(b) and (c)) or for substances when no EQL has been established by the EPA, the limits related to the PQL shall be the quantitation limits established by the methodologies in paragraph (1) or (2).

(1) A level set by multiplying 3.18 by the published method detection limit (MDL) of the most recently approved EPA methodology.

(2) A level representing the lowest calibration point that can consistently be determined to have a percent relative standard deviation (%RSD) of less than 30% or correlation coefficient of greater than 0.995 using reagent water.

(d) For regulated substances which have no limits related to PQLs identified in subsection (c)(1) or (2), a

person shall demonstrate attainment under the site-specific standard or the background standard.

(e) When a minimum threshold MSC is used as a Statewide health standard, the minimum threshold MSC is the Statewide health standard regardless of whether it is higher or lower than a quantitation limit established by this section.

(f) Nothing in this section restricts the selection of valid and generally accepted methods to be used to analyze samples of environmental media.

**§ 250.5. Public notice by applicant.**

(a) Public notice under the background, Statewide health or site-specific standard and under a special industrial area cleanup shall be initiated by the applicant through an NIR. For remediations proposing the use of a site-specific standard or, for remediations under an SIA agreement, the public and the municipality where the site is located shall be provided a 30-day period, in the NIR, in which the municipality may request to be involved in the development of the remediation and reuse plans for the site.

(b) The remedial investigation report, the risk assessment report and the cleanup plan, prepared under a site-specific remediation, may not be submitted to the Department until after the initial 30-day public and municipal comment period following the submission of the NIR has expired.

(c) The baseline environmental report, prepared under an SIA remediation, shall be submitted after the initial 30-day public and municipal comment period has expired.

**§ 250.6. Public participation.**

(a) The publication date of the summary of the NIR in a newspaper of general circulation in the area of the site shall initiate the 30-day public and municipal comment period during which the municipality can request to be involved in the development of the remediation and reuse plans for a site being remediated to a site-specific standard or for remediation at an SIA.

(b) The person proposing remediation shall be responsible for developing and implementing a public involvement plan if both of the following circumstances exist:

(1) The remediation involves a site-specific standard or an SIA cleanup.

(2) A municipality, through its official representatives, has requested, in writing, to be involved in the development of the remediation and reuse plans within the 30-day public and municipal comment period identified in the notice to the municipality and the newspaper notice.

(c) If a public involvement plan has been initiated, the person proposing remediation shall, at a minimum, provide:

(1) Public access at convenient locations for document review.

(2) Designation of a single contact person to address questions from the community.

(3) A location near the remediation site for any public hearings and meetings that may be part of the public involvement plan.

(d) If a public involvement plan has been requested, it shall be submitted with one of the following:

(1) A remedial investigation report under a site-specific remediation.

(2) A baseline environmental report under an SIA cleanup.

**§ 250.7. Fees.**

(a) Resubmission of a cleanup plan, remedial investigation, risk assessment or final report will require payment of the appropriate fee identified in the act for each resubmission.

(b) The Department will disapprove a plan or report that is submitted without the appropriate fee.

**§ 250.8. Publication.**

The Department will publish a notice of its final actions on plans and reports in the *Pennsylvania Bulletin*.

**§ 250.9. Interaction with other environmental statutes.**

(a) A release of a regulated substance at a solid waste facility which did not receive waste after September 7, 1980, shall be remediated in accordance with this chapter and the act.

(b) Nothing in this chapter affects the permitting, operation, design, performance or closure requirements under the environmental protection acts or regulations thereunder. The groundwater standards in Subchapters B and C (relating to background standards; and Statewide health standards) apply as part of a Department-approved assessment and abatement plan that is implemented prior to closure of a solid waste facility and apply as the standards that shall be demonstrated to qualify for liner and leachate treatment system waivers or modifications as specified in Chapter 287 (relating to residual waste management—general provisions). The standards in Subchapters B—D (relating to site-specific standards) apply as groundwater standards for remediation of a release of a regulated substance at closure of a solid waste facility but do not substitute for design and performance standards required under the solid waste management regulations. See Articles VII—IX. In the case of hazardous waste facilities, remediations shall comply with requirements applicable under the Resource Conservation and Recovery Act (42 United States C.A. §§ 6091—6986). The groundwater parameters and human health and environmental protection levels in Article IX (relating to residual waste) do not apply to groundwater remediations.

(c) An unpermitted release or spill of a regulated substance at a permitted solid waste facility that is outside a disposal or processing unit, including surface impoundments, waste storage areas, associated piping and underlying containment systems, shall be remediated in accordance with this chapter and the act.

**§ 250.10. Measurement of regulated substances in media.**

(a) For measuring regulated substances in soil and sediments, analyses shall be performed on a dry weight basis.

(b) For metals in soil, analyses shall be performed on total metals, except for hexavalent and trivalent chromium, which analyses shall be performed individually.

(c) For groundwater, samples for metals analysis shall be field filtered and field acidified in accordance with the most current version of the *Groundwater Monitoring Guidance Manual*, Department of Environmental Protection, 3610-BK-DEP1973.

(d) For groundwater where monitoring is being performed at a drinking water well, samples for metals

analysis shall be field acidified and unfiltered in accordance with the most current version of *Groundwater Monitoring Guidance Manual*, Department of Environmental Protection, 3610-BK-DEP1973.

(e) For surface water, samples for metals analysis shall be field acidified in accordance with approved EPA analytical methods in § 16.102 (relating to approved EPA analytical methods and detection limits).

(f) For air, samples and analyses shall be performed in accordance with Chapters 131 and 139 (relating to ambient air quality standards; and sampling and testing).

**Subchapter B. BACKGROUND STANDARD**

Sec.

250.201. Scope.

250.202. Establishing background concentrations.

250.203. Points of compliance.

250.204. Final report.

**§ 250.201. Scope.**

This subchapter sets forth requirements and procedures for a person selecting the background standard, as provided in § 250.2 (relating to application of remediation standards).

**§ 250.202. Establishing background concentrations.**

(a) Background concentrations shall be established based on a site characterization, as set forth in § 250.204(a)—(e) (relating to final report).

(b) The background concentrations shall be established using analysis of samples of regulated substances present at the property but not related to any release at the property. If all areas on the property are affected by a release, background shall be determined at points off the property in accordance with § 250.204(f)(7) and (8).

(c) Background concentrations shall be established by a methodology that is statistically valid and consistent with the methodology used to demonstrate attainment under Subchapter G (relating to demonstration of attainment).

**§ 250.203. Points of compliance.**

(a) For attainment of the background standard for groundwater, the point of compliance shall be throughout the contaminant plume, including areas of the plume that are outside the property boundary, as determined by the site characterization.

(b) For attainment of a background soil standard, the point of compliance shall be throughout the area of the soil that has become contaminated as a result of releases on the property.

(c) For attainment of a surface water quality standard, compliance shall be measured for point source discharges at the point of discharge in accordance with limits specified in the NPDES permit.

(d) For the emission of regulated substances to outdoor air, the point of compliance for any applicable air quality standard shall be as specified in the air quality regulations in Subpart C, Article III (relating to air resources).

**§ 250.204. Final report.**

(a) For sites remediated under the background standard, the person conducting the remediation shall submit a final report to the Department which documents attainment of the selected standard. The final report shall include site characterization information in subsections (b)—(e). The site characterization shall be conducted in accordance with scientifically recognized principles, standards and procedures. The level of detail in the investigation, and the selected methods and analyses, that may

include models, shall sufficiently define the rate of movement and the present and future extent and fate of contaminants to ensure continued attainment of the remediation standard. Interpretations of geologic and hydrogeologic data shall be prepared by a professional geologist licensed in this Commonwealth.

(b) As derived from specific knowledge of the subject property, historic use of the subject property or regulated substance usage information regarding the subject property, an appropriate number of sample locations should be investigated from the identified media of concern to characterize the nature and composition of the contaminants including the following:

(1) Source characterization or development of a conceptual site model.

(2) The vertical and horizontal extent of contamination within each media of concern.

(3) The direction and rate of contaminant movement and fate and transport of all contaminants within each media of concern.

(4) A determination of the appropriate remedial technology for each media of concern.

(c) Descriptions of sampling and decontamination methodologies and analytical quality assurance/quality control procedures should be included within a Sampling and Analysis Plan and Quality Assurance Plan. Copies of soil and geologic boring descriptions and as-built construction drawings of wells used for site characterization should be included in the report. Copies of laboratory analytical results and applicable laboratory quality control results should be included within the report, including historical data and data eliminated from consideration based on data validation protocols. Analytical results should be presented within the report in table form.

(d) If soil is determined to be a media of concern, the site characterization shall determine the relative location of soil samples necessary to characterize the horizontal and vertical extent of contamination based on factors such as hydraulic conductivity of the soils, heterogeneity of the soils and the nature of the contaminants. The horizontal and vertical extent of soil with concentrations of regulated substances above the selected standard shall be defined by an appropriate number of samples inside and outside of the area that exceeds the standard. Soil samples from the area with the anticipated highest levels of contamination shall be obtained, as appropriate, to determine the applicability of the proposed remedial action or handling and disposal requirements, or both, for that soil during remediation.

(e) If groundwater is determined to be a media of concern, the site characterization shall characterize the effects of a release on groundwater to adequately determine how naturally occurring physical and geochemical characteristics define the movement of groundwater and contaminants beneath the surface, including the delineation of the position of aquifers, as well as geologic units which inhibit groundwater flow. The site characterization shall meet the following conditions:

(1) If appropriate, the characterization shall consider the heterogeneity and anisotropy of aquifer materials based on hydraulic conductivity values (measured or published), and the effect of local and regional groundwater flow directions and any influence from pumping wells.

(2) Defining the horizontal extent of concentrations of regulated substances above the standard shall require

more than one round of groundwater sampling from properly constructed and developed monitoring wells taken a sufficient number of days apart to yield independently valid results.

(3) When characterizing the vertical extent of groundwater contamination, the person shall perform more than one round of groundwater sampling and shall consider the specific gravity of the regulated substances identified in the groundwater in the site, and the potential for naturally occurring or induced downward vertical hydraulic gradients.

(4) When characterizing the vertical extent of groundwater contamination, properly constructed monitoring wells or nested monitoring wells should be utilized to focus groundwater sampling in zones of potential contaminant accumulation such as zones directly above a confining layer. Samples shall be taken a sufficient number of days apart to yield independently valid results.

(f) Final reports for the background standard shall include the following additional information:

(1) Descriptions of treatment, removal or decontamination procedures performed in remediation. The description shall include the methodology and analytical results used to direct the remediation and determine the cessation of remediation.

(2) Descriptions of the sampling methodology and analytical results, including the appropriate statistical methodologies, which pertain to whether the remediation has attained the selected standard, following the requirements of Subchapter G (relating to demonstration of attainment).

(3) Documentation of compliance with postremediation care requirements, if they are needed to maintain the selected standard.

(4) All sampling data.

(5) For fate and transport analyses, submission of the following information:

(i) The name and version of the analysis, a description of the analysis, and the name of the organization or person which developed the analysis, if modeling is used.

(ii) The site characterization data used in the analysis.

(iii) Any assumptions used in the analysis and justification for the assumptions.

(iv) Appropriate documentation of the quality assurance and quality control of the analysis.

(v) Documentation of the results of the analysis in appropriate figures and tables.

(6) A summary of sampling methodology and analytical results that relate to the determination of the background concentration. The summary shall contain the following:

(i) For soil, the final report shall identify the background reference region within which all background samples were collected.

(ii) For groundwater, the final report shall identify background reference wells.

(7) Documentation that background reference areas for soil meet the following criteria:

(i) The background reference region and background reference areas shall be free of contamination from any release at the site.

(ii) Sampling at the background reference area and the contaminated area shall be comparable and random.



(iii) A background reference area selected for comparison with a given contaminated area may not differ significantly from that contaminated area in physical, chemical or biological characteristics that might cause measurements in the background reference area and the contaminated area to differ.

(8) Documentation that background reference groundwater concentrations have been determined at hydrogeologically upgradient points that characterize the groundwater flow onto the site that are not affected by any release at the property.

(g) If engineering controls are needed to attain or maintain a standard, if institutional controls are needed to maintain a standard, if the fate and transport analysis indicates that the remediation standard may be exceeded at the point of compliance in the future, or, if the remediation relies on natural attenuation, a postremediation care plan shall be documented in the final report. The plan shall include the following:

- (1) Reporting of any instance of nonattainment.
- (2) Reporting of measures to correct nonattainment conditions.
- (3) Monitoring on a quarterly basis, or as otherwise approved by the Department, that demonstrates the effectiveness of the remedy and periodic reporting of monitoring results and analysis.
- (4) Maintenance of records at the property where the remediation is being conducted for monitoring, sampling and analysis.
- (5) A schedule for operation and maintenance of the controls and submission of proposed changes.
- (6) If requested by the Department, documentation of financial ability to implement the remedy and the postremediation care plan.

### Subchapter C. STATEWIDE HEALTH STANDARDS

Sec.

- 250.301. Scope.  
 250.302. Point of compliance.  
 250.303. Aquifer determination; current use and currently planned use of aquifer groundwater.  
 250.304. MSCs for groundwater.  
 250.305. MSCs for soil.  
 250.306. Ingestion numeric values.  
 250.307. Inhalation numeric values.  
 250.308. Soil to groundwater pathway numeric values.  
 250.309. MSCs for surface water.  
 250.310. Minimum threshold MSCs.  
 250.311. Evaluation of ecological receptors.  
 250.312. Final report.

#### § 250.301. Scope.

(a) This subchapter sets forth generic Statewide health standards as one of three remediation standards that a person may select. The Statewide health standards are concentrations of regulated substances associated with a specific environmental medium, and are designated as the MSCs. The values used to determine the MSCs are contained in Appendix A, Tables 1—4 and 6 and are the concentrations of regulated substances that shall be met to demonstrate attainment of a Statewide health standard. Appendix A, Table 5 presents the toxicological and physical parameters used to calculate the MSCs in Appendix A, Tables 1—4.

(b) This subchapter sets forth minimum threshold MSCs for soil and groundwater that shall be met to demonstrate attainment of the Statewide health standards for regulated substances in Appendix A, Table 6.

Minimum threshold MSCs are standards developed for regulated substances for which no chemical-specific toxicological data exist.

(c) For regulated substances which do not have an MSC for the relevant medium on Appendix A, Tables 1—4 or 6, the background standard or site-specific standard shall be met to qualify for a release of liability under the act.

#### § 250.302. Point of compliance.

(a) For attainment of the Statewide health standard for groundwater, the point of compliance is the property boundary that existed at the time the contamination was discovered. Statewide health standards shall be attained at and beyond the point of compliance. The Department may determine, in writing, a point of compliance beyond the property boundary to be appropriate if one of the following situations is demonstrated:

- (1) Structures are located on the property boundary which prohibit internal or external access for a drill rig.
- (2) The property is a small parcel of land with limited space for onsite monitoring wells.
- (3) It is not physically possible to monitor groundwater quality at the property boundary.
- (4) The downgradient property was owned by the same party at the time the contamination was discovered and the use of the groundwater on the downgradient property can be controlled to prevent unacceptable exposure.

(5) For measuring compliance with the groundwater MSCs that apply to secondary contaminants.

(b) For attainment of the Statewide health standard for soil, the MSC as determined in § 250.305 (relating to MSCs for soil) shall be met at the specified depth.

(c) For the emission of regulated substances to outdoor air, the point of compliance for any applicable air quality standard shall be as specified in the air quality regulations.

#### § 250.303. Aquifer determination; current use and currently planned use of aquifer groundwater.

(a) With the exception of seasonal, localized and hydrologically isolated perched systems under a property, all geologic formations or parts or groups of formations in this Commonwealth which are saturated are presumed to be aquifers for the purpose of applying the Statewide health standards. The term includes saturated residuum such as saprolite and other weathered rock strata or intervals developed from underlying bedrock and other saturated deposits overlying these formations to which the geologic formations are hydrologically connected.

(b) All groundwater in aquifers is presumed to be used or currently planned for use. The Department may determine, in writing, based on a demonstration by the person remediating the site that groundwater is not used or currently planned to be used, if the requirements in subsection (c) are met within the property and within a radius of 1,000 feet downgradient of the points of compliance plus any additional areas to which the contamination has migrated and might reasonably migrate at concentrations that exceed the MSC for groundwater used or currently planned to be used.

(c) The following requirements shall be met within the area described in subsection (b):

- (1) No groundwater derived from wells or springs is used or currently planned to be used for drinking water or agricultural purposes.

(2) All downgradient properties are connected to a community water system.

(3) The area described in subsection (b) does not intersect a radius of 1/2 mile from a community water supply well source or does not intersect an area designated by the Department as a zone 2 wellhead protection area under Chapter 109 (relating to safe drinking water).

(d) If the Department determines that groundwater is not used or currently planned to be used, the following requirements apply within the area identified in subsection (b):

(1) The requirements in § 250.309 (relating to MSCs for surface water).

(2) The ecological screening process identified in § 250.311 (relating to evaluation of ecological receptors).

(e) The MSCs for groundwater in an aquifer that is not used or currently planned for use, under § 250.304(d) (relating to MSCs for groundwater), shall be met at the points of compliance identified in § 250.302 (relating to point of compliance).

**§ 250.304. MSCs for groundwater.**

(a) A person shall implement a remedy under the Statewide health standard that is protective of human health and the environment.

(b) The MSCs for regulated substances in groundwater are presented in Appendix A, Tables 1 and 2. The methodology used by the Department for calculating MSCs in groundwater is detailed in subsections (c)—(f).

(c) The MSCs for regulated substances contained in groundwater in aquifers used or currently planned to be used for drinking water or for agricultural purposes is the MCL as established by the Department or the EPA (U. S. EPA, 1996. *Drinking Water Regulations and Health Advisories*. Office of Water. EPA 822-R-96-001). For a regulated substance where no MCL has been established, the MSC is the lifetime health advisory level (HAL) for that compound. For a regulated substance where neither an MCL nor a lifetime HAL is established, the MSC is the lowest concentration calculated using the appropriate residential and nonresidential exposure assumptions and the equations in §§ 250.306 and 250.307 (relating to ingestion numeric values; and inhalation numeric values).

(d) For regulated substances contained in aquifers not used or currently planned to be used, the MSCs in Appendix A, Tables 1 and 2 are calculated by the following:

(1) For volatile organic regulated substances with an attenuation factor of less than 20, as calculated by the methodology in paragraph (7), ten times the appropriate residential or nonresidential MSC for groundwater in aquifers used or currently planned to be used containing less than 2,500 mg/l total dissolved solids.

(2) For volatile organic regulated substances with an attenuation factor of greater than or equal to 20, as calculated by the methodology in paragraph (7), 100 times the appropriate residential or nonresidential MSC for groundwater in aquifers used or currently planned to be used containing less than 2,500 mg/l total dissolved solids.

(3) For semivolatile organic and inorganic regulated substances, regardless of the attenuation factor, 1,000 times the appropriate residential or nonresidential MSC for groundwater in aquifers used or currently planned to be used containing less than 2,500 mg/l total dissolved solids.

(4) For benzene, 100 times the appropriate residential or nonresidential MSC for groundwater in aquifers used or currently planned to be used containing less than 2,500 mg/l total dissolved solids.

(5) For regulated substances with no calculated attenuation factor because of a lack of data in Howard, P. H., R. S. Boethling, W. F. Jarais, W. M. Meylan and E. M. Michalenko. 1991. *Handbook of Environmental Degradation Rates*. Lewis Publishers, Inc., Chelsea, MI., the appropriate residential or nonresidential MSC for groundwater in aquifers used or currently planned to be used containing less than 2,500 mg/l total dissolved solids.

(6) For minimum threshold MSCs, 5 micrograms per liter in groundwater shall be used.

(7) The attenuation factor (AF) for an organic regulated substance shall be calculated according to the following formula:

$$AF = K \times KOC$$

Where:

$$K = \text{degradation coefficient} = \frac{0.693}{T_{1/2}}$$

$T_{1/2}$ —half-life of organic regulated substance in groundwater as reported in Howard, P. H., R. S. Boethling, W. F. Jarais, W. M. Meylan and E. M. Michalenko. 1991. *Handbook of Environmental Degradation Rates*. Lewis Publishers, Inc., Chelsea, MI.

KOC—organic carbon partitioning coefficient (See Appendix A Table 5)

(e) If the groundwater in aquifers used or currently planned for use at the site has naturally occurring background total dissolved solids concentrations greater than 2,500 milligrams per liter, the Statewide health standard for a regulated substance dissolved in the groundwater may be adjusted by multiplying the MSC for groundwater in aquifers by 100. The adjusted Statewide health standard shall then be used in calculating the soil to groundwater pathway numeric value as specified in § 250.308 (relating to soil to groundwater pathway numeric values).

(f) In addition to the requirements in this section, the MSCs are further limited by solubility as identified in Appendix A, Table 5. The solubility limits are derived from the following references, which are keyed to the numbers in Table 5:

(1) Howard, P. H. 1991. *Handbook of Environmental Fate and Exposure Data for Organic Chemicals. Vol. III. Pesticides*. Lewis Publishers.

(2) Lyman, W. J., W. F. Reehl, and D. H. Rosenblatt. 1982. *Handbook of Chemical Property Estimation Methods*. McGraw-Hill Book Co. NY.

(3) Mabey, et al. 1982. *Aquatic Fate Process Data for Organic Priority Pollutants*. SRI. EPA Contract Nos. 68-01-3867, 68-03-2981.

(4) Milne, G.W.A., Ed. 1995. *CRC Handbook of Pesticides*. CRC Press, Inc.

(5) Montgomery, J. H. 1991. *Groundwater Chemicals Desk Reference*. Vol. II. Lewis Publishers.

(6) Montgomery, J. H., and L. M. Welkom. 1990. *Groundwater Chemicals Desk Reference*. Vol. 1. Lewis Publishers.

(7) Montgomery, J. H. 1993. *Agrochemicals Desk Reference, Environmental Data*. Lewis Publishers.

(8) National Library of Medicine (Grateful Med). *Hazardous Substances Databank*.

(9) Nirmalakhandan, N. N., and R. E. Speece. 1988a. *Prediction of Aqueous Solubility of Organic Chemicals Based on Molecular Structure*. ES&T 22:328-337.

(10) Nirmalakhandan, N. N., and R. E. Speece. 1988b. *Prediction of Aqueous Solubility of Organic Chemicals Based on Molecular Structure*. 2. Application to PNAS, PCBs, PCDDs, etc. ES&T. 23:708-713.

(11) Sax, N. I. 1989. *Dangerous Properties of Industrial Materials*. Seventh Edition. Vol. 1-3. Van Nostrand Reinhold.

(12) Environmental Protection Agency. Undated. *IRIS—The Integrated Risk Information System*.

(13) Environmental Protection Agency. 1985. *Physical/Chemical Properties and Characterization of RCRA Wastes According to Volatility*. Office of Air Quality and Planning and Standards. EA 450/3-85-007.

(14) Environmental Protection Agency. 1989. *Database of Chemical Properties for SARA*. Section 313 Chemicals.

(15) Environmental Protection Agency. 1992. *Handbook of RCRA Ground-water Monitoring Constituents: Chemical & Physical Properties*. 40 CFR Part 264, Appendix IX. Office of Solid Waste. Permits and State Programs Division. EPA 530-R-92-022.

(16) EPA. 1994. *Superfund Chemical Data Matrix*. Office of Solid Waste and Emergency Response. EPA 540-R-94-009.

(17) Verschuere, K. 1977. *Handbook of Environmental Data on Organic Chemicals*. Van Nostrand Reinhold.

(18) Windholz, M., ED. 1976. *The Merck Index*. 9th ED. Merck and Co.

#### § 250.305. MSCs for soil.

(a) A person shall implement a remedy under the Statewide health standard that is protective of human health and the environment.

(b) The MSCs for regulated substances in soil are presented in Appendix A, Tables 3 and 4. The methodology for calculating MSCs in soil is detailed in subsections (c)—(e) and the MSCs are further limited to not exceed the physical capacity of the soil to contain a regulated substance. This physical limitation is based on an assumed porosity of 0.35, an assumed dry bulk density of soil of 1.8 kilograms per liter and an assumed density of a regulated substance of 1.0 kilograms per liter. This is calculated according to the equation in paragraph (1). For regulated substances which are organics and liquids at standard temperature and pressure (STP) as identified in Appendix A, Table 5 (Chemical Properties), the physical

limitation is further limited based on residual saturation with the additional assumption of a residual saturation ratio of substance volume to soil volume of 0.051, as calculated in Equation (2).

$$(1) \quad C_{PL} = \frac{\rho_{RS}^n}{\rho_B}$$

$$(2) \quad MSC = S_r * \frac{\rho_{RS}^n}{\rho_B} * 1,000,000 \text{ mg/kg} = 10,000 \text{ mg/kg}$$

where:

$\rho_{rs}$  = density of the regulated substance = 1.0 kg/L

$n$  = porosity of the soil = 0.35

$\rho_B$  = dry bulk density of the soil = 1.8 kg/L

$S_r$  = residual saturation ratio (substance vol./soil vol.) = 0.051

(c) For the residential standard, the MSC for regulated substances contained in soil is one of the following:

(1) The lowest of the following:

(i) The ingestion numeric value throughout the soil column to a depth of up to 15 feet from the existing ground surface as determined by the methodology in § 250.306 (relating to ingestion numeric values), using the appropriate default residential exposure assumptions contained in § 250.306(e).

(ii) The inhalation numeric value throughout the soil column to a depth of up to 15 feet in soil from the existing ground surface, which considers volatilization into the outdoor air and inhalation of particulates, as determined by the methodology in § 250.307 (relating to inhalation numeric values), using the appropriate default residential exposure assumptions contained in § 250.307(d).

(iii) The soil-to-groundwater pathway numeric value throughout the entire soil column as determined by the methodology in § 250.308 (relating to soil to groundwater pathway numeric values).

(2) The lowest of paragraph (1)(i) and (ii) and, in addition, one of the following:

(i) A demonstration of the soil-to-groundwater pathway soil buffer as identified in § 250.308(b), if applicable.

(ii) A soil-to-groundwater pathway equivalency demonstration as identified in § 250.308(d).

(d) For the nonresidential standard, the MSC for regulated substances contained in soil throughout the soil column to a depth of 2 feet from the existing ground surface is one of the following:

(1) The lowest of the following:

(i) The ingestion numeric value as determined by the methodology in § 250.306, using the appropriate default nonresidential exposure assumptions contained in § 250.306(e).

(ii) The inhalation numeric value which is the lower of the values for volatilization into the outdoor air and the inhalation of particulates, as determined by the methodology in § 250.307, using the appropriate default nonresidential exposure assumptions contained in § 250.307(d).

(iii) The soil-to-groundwater pathway numeric value throughout the entire soil column as determined by the methodology in § 250.308.

(2) The lowest of paragraph (1)(i) or (ii) and, in addition, one of the following:

(i) A demonstration of the soil-to-groundwater pathway soil buffer as identified in § 250.308(b), if applicable.

(ii) A soil-to-groundwater pathway equivalency demonstration as identified in § 250.308(d).

(e) For the nonresidential standard, the MSC for regulated substances contained in soils at depths greater than 2 feet through 15 feet from the existing ground surface, is one of the following:

(1) The lowest of the following:

(i) The inhalation numeric value which considers volatilization to the outdoor air, as determined by the methodology in § 250.307, using the appropriate default nonresidential exposure assumptions contained in § 250.307(d), and using a transfer factor (TF) based upon the calculated emission rate from subsurface soil as specified in the method of Jury, et al. 1990. *Water Resources Research*, Vol. 26, No. 1, pp. 13–20.

(ii) The soil-to-groundwater pathway numeric value throughout the entire soil column as determined by the methodology in § 250.308.

(2) The value identified in paragraph (1)(i) and one of the following:

(i) A demonstration of the soil-to-groundwater pathway soil buffer as identified in § 250.308(b), if applicable.

(ii) A soil-to-groundwater pathway equivalency demonstration as identified in § 250.308(d).

(f) The MSC for regulated substances contained in soil at depths greater than 15 feet is one of the following:

(i) The soil-to-groundwater pathway numeric value as determined by § 250.308(a).

(ii) A demonstration of the soil-to-groundwater pathway soil buffer as identified in § 250.308(b), if applicable.

(iii) A soil-to-groundwater pathway equivalency demonstration as identified in § 250.308(d).

(g) A person conducting a remediation of soils contaminated with a substance having a secondary MCL will not be required to comply with the soil-to-groundwater pathway requirements for those substances to protect groundwater in aquifers for drinking water.

**§ 250.306. Ingestion numeric values.**

(a) For a regulated substance which is a systemic toxicant, the ingestion numeric value for that substance was calculated using the appropriate residential or nonresidential exposure assumptions from subsection (d) according to the following equation:

$$MSC = \frac{THQ \times RfD_o \times BW \times AT_{DC} \times 365 \text{ days/year}}{Abs \times EF \times ED \times IngR \times CF}$$

(b) For a regulated substance which is a carcinogen, the ingestion numeric value for that substance was calculated using the appropriate residential or nonresidential exposure assumptions from subsection (d) according to the following equation:

$$MSC = \frac{TR \times AT_c \times 365 \text{ days/year}}{CSF_o \times Abs \times EF \times IF_{adj} \times CF}$$

(c) For a regulated substance that has both an oral reference dose and an oral cancer slope factor, the ingestion numeric value is the lower of the two numbers as calculated by the equations in subsections (a) and (b).

(d) The default exposure assumptions used to calculate the ingestion numeric values are as follows:

Term		Residential		Nonresidential (Onsite Worker)
		Systemic <sup>1</sup>	Carcinogens <sup>2</sup>	
THQ	Target Hazard Quotient	1	N/A	1
RfD <sub>o</sub>	Oral Reference Dose (mg/kg-day)	Chemical-specific	N/A	Chemical-specific
BW	Body Weight (kg)		N/A	
	Soil Groundwater	15 70		70 70
AT <sub>DC</sub>	Averaging Time for systemic toxicants (yr)			
	Soil Groundwater	6 30	N/A N/A	25 25
Abs	Absorption (unitless) <sup>3</sup>	1	1	1
EF <sup>5</sup>	Exposure Frequency (d/yr)			
	Soil Groundwater	250 350	250 350	180 250
ED	Exposure Duration (yr)			
	Soil Groundwater	6 30	N/A N/A	25 25
IngR	Ingestion Rate			
	Soil (mg/day) GW (L/day)	100 2	N/A N/A	50 1
CF	Conversion Factor			
	Soil (kg/mg) GW (unitless)	1 x 10 <sup>-6</sup> 1	1 x 10 <sup>-6</sup> 1	1 x 10 <sup>-6</sup> 1

Term		Residential		Nonresidential (Onsite Worker)
		Systemic <sup>1</sup>	Carcinogens <sup>2</sup>	
TR	Target Risk	N/A	1 x 10 <sup>-5</sup>	1 x 10 <sup>-5</sup>
CSF <sub>o</sub>	Oral Cancer Slope Factor (mg/kg-day) <sup>-1</sup>	N/A	Chemical-specific	Chemical-specific
At <sub>c</sub>	Averaging Time for carcinogens (yr)	N/A	70	70
If <sub>adj</sub> <sup>4</sup>	Ingestion Factor Soil (mg-yr/kg-day) GW (L-yr/kg-day)	N/A	57.1 1.1	17.9 0.4

## Notes:

<sup>1</sup>Residential exposure to noncarcinogens is based on childhood (ages 1-6) exposure for soil, and adult exposure for groundwater, consistent with USEPA (1991).

<sup>2</sup>Residential exposure to carcinogens is based on combined childhood and adult exposure.

<sup>3</sup>The oral absorption factor takes into account absorption and bioavailability. In cases where the oral RfD or CSF is based on administered oral dose, the absorption factor would be limited to bioavailability. The default value is 1.

<sup>4</sup>The Ingestion Factor for the residential scenario is calculated using the equation  $If_{adj} = ED_c \times IR_c / BW_c + ED_a \times IR_a / BW_a$ , where  $ED_c = 6$  yr,  $IR_c = 100$  mg/day for soils and 1 L/day for groundwater,  $BW_c = 15$  kg,  $ED_a = 24$  yr,  $IR_a = 50$  mg/day for soils and 2 L/day for groundwater, and  $BW_a = 70$  kg. The ingestion factor for the nonresidential scenario is calculated using the equation  $If_{adj} = ED \times IR / BW$ , where  $ED = 25$  yr,  $IR = 50$  mg/day for soils and 1 L/day for groundwater, and  $BW = 70$  kg.

<sup>5</sup>In cases where the inhalation RfD or CSF is based on absorbed dose, this factor can be applied in the exposure algorithm. The default value is 1.

(e) The residential ingestion numeric value for lead in soil was developed using the Uptake Biokinetic (UBK) Model for Lead (version 0.4) developed by the EPA (U. S. Environmental Protection Agency. (1990). Uptake Biokinetic (UBK) Model for Lead (version 0.4). U. S. EPA/ECAO. August 1990, in lieu of the algorithms presented in subsections (a) and (b). Default input values are identified in Appendix A, Table 7. Because the UBK model is applicable only to children, the nonresidential ingestion numeric value was calculated according to the method developed by the Society for Environmental Geochemistry and Health (Wixson, B. G. (1991)). The Society for Environmental Geochemistry and Health (SEGH) Task Force Approach to the Assessment of Lead in Soil. *Trace Substances in Environmental Health*. (11-20), using the following equations:

$$S = \frac{1000 \left[ \left( \frac{T}{G^n} \right) - B \right]}{\delta}$$

Table 7 identifies each of the variables in this equation.

#### § 250.307. Inhalation numeric values.

(a) For a regulated substance which is a systemic toxicant, the following applies:

(1) For a volatile compound, the numeric value for inhalation from soil shall be calculated using the appropriate residential or nonresidential exposure assumptions from subsection (d) according to the following equation using TF for volatiles:

$$MSC = \frac{THQ \times RfD_i \times BW \times AT_{nc} \times 365 \text{ days/yr} \times TF}{Abs \times ET \times EF \times ED \times IR}$$

(2) For a regulated substance attached to particulates, the numeric value for inhalation from soil was calculated using the appropriate residential or nonresidential exposure assumptions from subsection (d) according to the equation in paragraph (1) using TF for particulates.

(b) For a regulated substance which is a carcinogen, the following apply:

(1) For a volatile compound, the numeric value for inhalation from soil was calculated using the appropriate residential or nonresidential exposure assumptions from subsection (d) according to the following equation using TF for volatiles:

$$MSC = \frac{TR \times AT_c \times 365 \text{ days/year} \times TF}{CSF_i \times Abs \times ET \times EF \times If_{adj}}$$

(2) For a regulated substance attached to particulates, the numeric value for inhalation from soil was calculated using the appropriate residential or nonresidential exposure assumptions from subsection (d) according to the equation in paragraph (1) using TF for particulates.

(c) For a regulated substance which is both a systemic toxicant and a carcinogen, the inhalation numeric value is the lower of the two numbers as calculated by the equations in subsections (a) and (b).

(d) The default exposure assumptions used to calculate the inhalation numeric values for soil are as follows:

Term	Residential		Nonresidential (Onsite Worker)	
	Systemic <sup>1</sup>	Carcinogens <sup>2</sup>		
THQ	Target Hazard Quotient	1	N/A	1
RfD <sub>i</sub>	Inhal. Reference Dose (mg/kg-day)	Chemical-specific	N/A	Chemical-specific
BW	Body Weight (kg)	70	N/A	70
AT <sub>nc</sub>	Averaging Time for systemic toxicants (yr)	30	N/A	25
TF	Transport Factor (mg/kg)/(mg/m <sup>3</sup> ) Volatilization <sup>3</sup> Particulate <sup>4</sup>	Chemical-specific 1 × 10 <sup>10</sup>	Chemical-specific 1 × 10 <sup>10</sup>	Chemical-specific 1 × 10 <sup>10</sup>
Abs	Absorption (unitless) <sup>5</sup>	1	1	1
ET	Exposure Time (hr/day)	24	24	8
EF	Exposure Frequency <sup>6</sup> (d/yr)	250	250	180
ED	Exposure Duration (yr)	30	N/A	25
IR	Inhalation Rate (m <sup>3</sup> /hr)	0.8 <sup>3</sup>	N/A	1.25
TR	Target Risk	N/A	1 × 10 <sup>-5</sup>	1 × 10 <sup>-5</sup>
CSF <sub>i</sub>	Inhalation Cancer Slope Factor (mg/kg-day) <sup>-1</sup>	N/A	Chemical-specific	Chemical-specific
AT <sub>c</sub>	Averaging Time for carcinogens (yr)	N/A	70	70
If <sub>adj</sub>	Inhalation Factor <sup>7</sup> (m <sup>3</sup> -yr/kg-hr)	N/A	0.5	0.4

Notes: Modified from USEPA Region III Risk-based Concentration Table, dated October 20, 1995.

N/A = Not Applicable

<sup>1</sup>Residential exposure to systemic toxicants is based on adult exposure, consistent with USEPA (1991).

<sup>2</sup>Residential exposure to carcinogens is based on combined child and adult exposure.

<sup>3</sup>Volatilization transport factor is calculated using  $TF = (ER \times DF)^{-1}$ , where  $DF = 12 \text{ (mg/m}^3\text{)/(m}^2\text{-sec)}$ . See soil depth-specific algorithm for the calculation of ER.

<sup>4</sup>Particulate transfer factor was calculated using  $TF = (ER \times DF)^{-1}$ , where  $ER = 8.25 \times 10^{-12} \text{ (mg/m}^2\text{-sec)/(mg/kg)}$  and  $DF = 12 \text{ (mg/m}^3\text{)/(mg/m}^2\text{-sec)}$ .

<sup>5</sup>In cases where the inhalation RfD or CSF is based on absorbed dose, this factor can be applied in the exposure algorithm. The default value is 1.

<sup>6</sup>Assumes approximately 100 days/yr with the ground being frozen. Exposure to surficial soils when the ground is frozen is considered *de minimis*. The nonresidential exposure frequency is defined as  $5/7 \times 250$  days/yr.

<sup>7</sup>The inhalation factor for the residential scenario is calculated using the equation  $IF_{adj,r} = ED_c \times IR_c/BW_c + ED_a \times IR_a/BW_a$ , where  $ED_c = 6$  yr,  $IR_c = 0.5 \text{ m}^3\text{/hr}$ ,  $BW_c = 15\text{kg}$ ,  $ED_a = 24$  yr,  $IR_a = 0.83 \text{ m}^3\text{/hr}$ , and  $BW_a = 70$  kg. The inhalation factor for the nonresidential scenario is calculated using the equation  $IF_{adj,nr} = ED \times IR/BW$ , where  $ED = 25$  yr,  $IR = 1.25 \text{ m}^3\text{/hr}$  and  $BW = 70$  kg.

(e) For the inhalation numeric values in subsections (a) and (b), the TF was calculated by the following equation:

$$TF = (ER \times DF)^{-1}$$

The Dispersion Factor (DF) value of  $12 \text{ (mg/m}^3\text{)/(mg/m}^2\text{/sec)}$  is taken from the default value in the EPA Draft Soil Screening Guidance (U. S. EPA, 1994. *Technical Background Document for Soil Screening Guidance*. Review Draft. Office of Emergency and Remedial Response. EPA-540/R-94/106) and the Emission Rate (ER) is calculated by the following equations (from Jury et al. 1990. *Water Resources Research*, Vol. 26. No. 1. pp. 13-20):

(i) For surficial soils:

$$ER = \frac{1}{T} \int_0^T \left( \frac{C_0}{C_s} \right) (D_E/\pi t)^{0.5} [1 - \exp(-L^2/(4D_E t))] \bullet (10^3) dt$$

$$D_E = \frac{D_G}{\frac{\rho_b K_d}{H} + \frac{\theta_m}{H} + \theta_a} + \frac{D_L}{\rho_b K_d + \theta_m + \theta_a H}$$

where:

$$D_G = \left( \frac{\theta_a^{10/3}}{\theta^2} \right) D_{ai}$$

$$D_L = \left( \frac{\theta_m^{10/3}}{\theta^2} \right) D_{Li}$$

(ii) For subsurface soils:

$$ER = \frac{1}{T} \int_0^T \left( \frac{C_o}{C_s} \right) (D_E/\pi t)^{0.5} \left[ \exp^{(-1^2/4D_E t)} - \exp^{-(1+W)^2/(4D_E t)} \right] \bullet (10^3) dt$$

$$D_E = \frac{D_G}{\frac{\rho_b K_d}{H} + \frac{\theta_m}{H} + \theta_a} + \frac{D_L}{\rho_b K_d + \theta_m + \theta_a H}$$

where:

$$D_G = \left( \frac{\theta_a^{10/3}}{\theta^2} \right) D_{ai}$$

$$D_L = \left( \frac{\theta_m^{10/3}}{\theta^2} \right) D_{Li}$$

Parameter	Definition	Unit	Recommended Value <sup>(1)</sup>
ER	Chemical vapor emission rate from surface soil or subsurface soil	mg/m <sup>2</sup> -sec per mg/kg	Chemical-specific
C <sub>o</sub>	Chemical concentration in soil, C <sub>o</sub> = C <sub>s</sub> ρ <sub>b</sub>	g/m <sup>3</sup>	1.8
C <sub>s</sub>	Chemical concentration in soil	mg/kg (ppm)	1
D <sub>E</sub>	Effective diffusion coefficient	m <sup>2</sup> /sec	Chemical-specific
D <sub>ai</sub>	Air diffusivity for chemical i	m <sup>2</sup> /sec	Chemical-specific
D <sub>Li</sub>	Water diffusivity for chemical i	m <sup>2</sup> /sec	Chemical-specific
t	Time	sec	N/A
T	Emission averaging time	sec	Equal to exposure duration
θ	Total soil porosity, θ = θ <sub>a</sub> + θ <sub>m</sub>	cm <sup>3</sup> /cm <sup>3</sup>	0.32 <sup>(2)</sup>
θ <sub>a</sub>	Air-filled soil porosity	cm <sup>3</sup> /cm <sup>3</sup>	0.12 <sup>(2)</sup>
θ <sub>m</sub>	Moisture-filled soil porosity, θ <sub>m</sub> = wρ <sub>b</sub>	cm <sup>3</sup> /cm <sup>3</sup>	0.20 <sup>(2)</sup>
w	Moisture content for soil	g water/g soil	0.11
ρ <sub>b</sub>	Dry bulk density of soil, ρ <sub>b</sub> = (1-θ) ρ	g/cm <sup>3</sup>	1.8 <sup>(2)</sup>
ρ	Soil particle density	g/cm <sup>3</sup>	2.65
K <sub>d</sub>	Partition coefficient, K <sub>d</sub> = K <sub>oc</sub> f <sub>oc</sub>	cm <sup>3</sup> /g	Chemical-specific
H	Henry's Law constant	dimensionless	Chemical-specific
D <sub>G</sub>	Effective gas-phase diffusion coefficient	m <sup>2</sup> /sec	Chemical-specific
D <sub>L</sub>	effective liquid-phase diffusion coefficient	m <sup>2</sup> /sec	Chemical-specific
L	Depth of the contaminated surface soil	m	0.6 <sup>(3)</sup>
l	Depth of the clean soil cover	m	0.6 <sup>(3)</sup>
W	Thickness of the contaminated subsurface soil	m	4.0 <sup>(3)</sup>
K <sub>OC</sub>	Organic carbon partition coefficient for chemical i	cm <sup>3</sup> /g	Chemical-specific
f <sub>OC</sub>	Fraction of organic carbon in soil	dimensionless	0.005 <sup>(4)</sup>

(1) All default values from USEPA (1994) Draft Soil Screening Guidance, EPA-540/R-94/106, except as noted.

(2) Consistent with Standards Subcommittee recommendation.

(3) Based on Act 2 SAB-agreed depths.

(4) The Risk Assessment Subcommittee selected a f<sub>oc</sub> of 0.005, which falls between f<sub>oc</sub>'s of 0.006 for surface soil and 0.002 for subsurface soil.

(f) For a regulated substance which is a systemic toxicant and is a volatile compound, the numeric value for the inhalation of volatiles from groundwater was calculated by using the appropriate residential or nonresidential exposure assumptions from subsection (h) according to the following equation:

$$MSC = \frac{THQ \times RfDi \times BW \times ATnc \times 365 \text{ days/yr}}{Abs \times ET \times EF \times ED \times IR \times TF}$$

(g) For a regulated substance which is a carcinogen and is a volatile compound, the numeric value for the inhalation of volatiles from groundwater shall be calculated by using the appropriate residential or nonresidential exposure assumptions from subsection (h) according to the following equation:

$$MSC = \frac{TR \times ATc \times 365 \text{ days/yr}}{CSFi \times ABs \times ET \times EF \times IFadj \times TF}$$

(h) The default exposure assumptions used to calculate the inhalation numeric values for the inhalation of volatiles from groundwater are as follows:

Term		Residential		Nonresidential (Onsite Worker)
		Systemic <sup>1</sup>	Carcinogens <sup>2</sup>	
THQ	Target Hazard Quotient	1	N/A	1
RfDi	Inhal. Reference Dose (mg/kg-day)	Chemical-specific	N/A	Chemical-specific
BW	Body Weight (kg)	70	N/A	70
AT <sub>nc</sub>	Averaging Time for systemic toxicants (yr)	30	N/A	25
Abs	Absorption (unitless) <sup>3</sup>	1	1	1
ET	Exposure Time (hr/day)	24	24	8
EF	Exposure Frequency <sup>6</sup> (d/yr)	350	350	250
ED	Exposure Duration (yr)	30	N/A	25
IR	Inhalation Rate (m <sup>3</sup> /hr)	0.625	N/A	1.25
TF	Transfer Factor (L/m <sup>3</sup> ) <sup>4</sup>	0.5	0.5	0.5
TR	Target Risk	N/A	1 × 10 <sup>-5</sup>	1 × 10 <sup>-5</sup>
CSF <sub>i</sub>	Inhalation Cancer Slope Factor (mg/kg-day) <sup>-1</sup>	N/A	Chemical-specific	Chemical-specific
AT <sub>c</sub>	Averaging Time for carcinogens (yr)	N/A	70	70
If <sub>adj</sub>	Inhalation Factor <sup>5</sup> (m <sup>3</sup> -yr/kg-hr)	N/A	0.4	0.4

Notes: Modified from USEPA Region III Risk-based Concentration Table, dated October 20, 1995.

N/A = Not Applicable

<sup>1</sup>Residential exposure to systemic toxicants is based on adult exposure, consistent with USEPA (1991).

<sup>2</sup>Residential exposure to carcinogens is based on combined child and adult exposure.

<sup>3</sup>In cases where the inhalation RfD or CSF is based on absorbed dose, this factor can be applied in the exposure algorithm.

<sup>4</sup>Default Transfer Factor is as presented in USEPA's RAGS, Part B.

<sup>5</sup>The inhalation factor for the residential scenario is calculated using the equation  $IF_{adj} = ED_c \times IR_c/BW_c + ED_a \times IR_a/BW_a$ , where  $ED_c = 6$  yr,  $IR_c = 0.5$  m<sup>3</sup>/hr,  $BW_c = 15$  kg,  $ED_a = 24$  yr,  $IR_a = 0.625$  m<sup>3</sup>/hr, and  $BW_a = 70$  kg. The inhalation factor for the nonresidential scenario is calculated using the equation  $IF_{adj} = ED \times IR/BW$ , where  $ED = 25$  yr,  $IR = 1.25$  m<sup>3</sup>/hr and  $BW = 70$  kg.

**§ 250.308. Soil to groundwater pathway numeric values.**

(a) A person may use the soil-to-groundwater pathway numeric values listed in Appendix A, Table 3B, as developed using the methods contained in paragraph (1), (2) or (4), may use a concentration in soil at the site which does not produce a leachate in excess of the MSC for groundwater contained in Appendix A, Tables 1 and 2, when subjected to the Synthetic Precipitation Leaching Procedure (Method 1312 of SW-846, Test Methods for Evaluating Solid Waste, promulgated by the U. S. EPA), or may use the soil-to-groundwater pathway soil buffer criteria in subsection (b) or may use the soil-to-groundwater pathway equivalency demonstration in subsection (d).

(1) A value which is 100 times the applicable MSC for

groundwater identified in § 250.304(c) or (d) (relating to MSCs for groundwater), expressed as milligrams per kilogram of soil.

(2) For organic compounds, a generic value determined not to produce a concentration in groundwater in the aquifer in excess of the MSC for groundwater as calculated by the equation in paragraph (3).

(i) For soil not in the zone of groundwater saturation, the generic value shall be calculated by the equation in paragraph (3).

(ii) For soil in the zone of groundwater saturation, the standard is 1/10th of the generic value calculated by the equation in paragraph (3).



(3) The equation referenced in paragraphs (1) and (2) is the following:

$$MSC_S = MSC_{GW} ((K_{oc} * f_{oc}) + \theta_w / \rho_b) DF$$

where:  $MSC_S$  (mg/kg) = the generic value for a regulated substance in soil

$MSC_{GW}$  (mg/L) = MSC of a regulated substance in groundwater

$K_{oc}$  (L/kg) = organic carbon partition coefficient for a regulated substance

$f_{oc}$  = fraction of organic carbon in soil (default value = 0.0025)

$\theta_w$  = water-filled porosity of soil (default value = 0.2)

$\rho_b$  (kg/L) = dry bulk density of soil (default value = 1.8 kg/l)

DF = dilution factor (default value = 100)

(4) For inorganic regulated substances, a generic value determined not to produce a concentration in groundwater in the aquifer in excess of the MSC for groundwater as calculated by the equation in paragraph (5) and listed in Appendix A, Table 4B.

(i) For soil not in the zone of groundwater saturation, the generic value shall be calculated by the equation in paragraph (5).

(ii) For soil in the zone of groundwater saturation, the standard is 1/10th of the generic value calculated by the equation in paragraph (5).

(5) The equation referenced in paragraph (4) is the following:

$$MSC_S = MSC_{GW} (K_d + \theta_w / \rho_b) DF$$

where:  $MSC_S$  (mg/kg) = the generic value for the inorganic regulated substance in soil

$MSC_{GW}$  (mg/L) = MSC of the inorganic regulated substance in groundwater

$K_d$  (L/kg) = soil to water partition coefficient for the inorganic regulated substance

$\theta_w$  = water-filled porosity of soil (default value = 0.2)

$\rho_b$  (kg/L) = dry bulk density of soil (default value = 1.8 kg/L)

DF = dilution factor (default value = 100)

(b) The soil-to-groundwater pathway soil buffer is the entire area between the bottom of the area of contamination and the groundwater or bedrock and shall meet the following criteria:

(1) The soil depths established in Appendix A, Tables 3B and 4B for each regulated substance.

(2) The concentration of the regulated substance cannot exceed the limit related to the PQL or background throughout the soil buffer.

(3) No Karst carbonate formation underlies or is within 100 feet of the perimeter of the contaminated soil area.

(c) The soil-to-groundwater pathway soil buffer distances were developed by using the following equations.

(1) The following equations were used iteratively for each layer of soil for each time increment in a total time period of 30 years and pertain to a soil column where the first 4 feet of soil are contaminated with a regulated substance at a concentration of 10,000 mg/kg.

$$C_{soil(it)} = C_{soil(i(t-1))} - \frac{(TI)(R)(C_{aq(i(t-1))} - C_{aq(i+1)(t-1)})}{(360)(DI)(\rho_b)}$$

$$TI = (360)(DI)(\theta_w)/R$$

$$C_{aq(i(t-1))} = \frac{(\rho_b)(C_{soil(i(t-1))})}{(K_d)(\rho_b) + \theta_w}$$

$$C_{aq(i+1)(t-1)} = \frac{(\rho_b)(C_{soil(i+1)(t-1)})}{(K_d)(\rho_b) + \theta_w}$$

where:  $C_{soil(it)}$  (mg/kg) = concentration of regulated substance in soil at layer i at time increment TI

$C_{soil(i(t-1))}$  (mg/kg) = concentration of regulated substance in soil at layer i at time increment immediately preceding TI

$C_{soil(i+1)(t-1)}$  (mg/kg) = concentration of regulated substance in soil at layer immediately above layer i at time increment immediately preceding TI

R (cm/yr) = recharge rate of water infiltrating soil (default value = 33 cm/yr)

DI (feet) = thickness of each layer i of soil (default value = 1 foot)

$\rho_b$  (kg/L) = dry bulk density of soil (default value = 1.8 kg/L)

360 (month-cm/yr-ft) = conversion factor

TI (months) = time duration of each time increment

$\theta_w$  = water-filled porosity (default value = 0.2)

$C_{aq(i(t-1))}$  (mg/L) = concentration of regulated substance in soil pore water at layer i at time increment immediately preceding TI

$C_{aq(i+1)(t-1)}$  (mg/L) = concentration of regulated substance in soil pore water at layer immediately above layer i at time increment immediately preceding TI

$K_d$  (L/kg) = soil to water partition coefficient for the regulated substance where five different contaminant-specific values are used: 2.5, 5, 10, 100 and 1,000.

$K_d$  values of organic regulated substances are based on the following equation:

$$K_d = (f_{oc})(K_{oc})$$

where:  $f_{oc}$  = fraction of organic carbon in soil (default value = 0.005)

$K_{oc}$  (L/kg) = organic carbon partition coefficient for a regulated substance

(2) The buffer distances listed for regulated substances in Tables 3B and 4B were determined by the Department using these equations to model the distance that the regulated substance travels from the bottom of the first 4 feet of contaminated soil through the soil column in 30 years at a concentration at or above 1  $\mu$ G/L in the water infiltrating the soil.

(d) For any regulated substance, an equivalency demonstration may be substituted for the soil-to-groundwater numeric value throughout the site and the soil-to-groundwater pathway soil buffer if the groundwater is below the MSC value or the background standard prior to remediation. This equivalency demonstration shall include the following:

(1) Fate and transport analysis of the regulated substance from the deepest point of contamination in the soil

through unsaturated zone soil and shall include the use of soil-to-water partition coefficients. The analysis shall demonstrate that the regulated substances will not migrate to bedrock or the groundwater within 30 years at concentrations exceeding the greater of the groundwater MSC or background in groundwater as the endpoint in soil pore water directly under the site.

(2) In addition to sampling required for attainment of the inhalation or ingestion numeric values for soils up to 15 feet, as applicable, reporting and monitoring for eight quarters that shows no exceedances of the greater of the groundwater MSCs or of the background standard for groundwater beneath the contaminated soil and no indications of an increasing trend of concentration over time that may exceed the standard.

**§ 250.309. MSCs for surface water.**

(a) Any regulated discharge to surface waters shall comply with the applicable provisions of Chapters 91—105, including antidegradation requirements, and may not cause an exceedance of the applicable water quality standards for the surface water in question.

(b) For point source discharges to surface water, compliance shall be measured at the point of discharge in accordance with limits specified in the NPDES permit.

(c) For purposes of determining compliance with surface water quality standards from a diffuse surface or groundwater discharge, the person shall determine the expected instream regulated substance concentrations, that are attributable to releases at the site, using mass balance techniques for groundwater/surface water mixing at design flow conditions.

(1) If the results indicate that surface water quality standards are being achieved, no action is required.

(2) If results indicate that surface water quality standards are not being achieved, additional sampling may be performed to help evaluate whether surface water quality standards are being achieved.

(3) If the results of the sampling indicate surface water quality standards are being met, no further action is required.

(4) If the results of the modeling, and sampling if any, indicate that surface water quality standards are not being met, the person shall perform further remedial action to attain the surface water quality standards.

(d) Except if an NPDES permit is required, for purposes of complying with surface water quality standards in a spring, the point of compliance is the point of first designated or existing use, as defined in §§ 93.1, 93.4 and 93.9 (relating to definitions; Statewide water uses; and designated water uses and water quality criteria). If the point of first designated or existing use occurs in a surface water into which a spring flows, compliance with surface water quality standards shall be determined in the manner specified in subsection (c).

**§ 250.310. Minimum threshold MSCs.**

(a) For regulated substances listed in Appendix A, Table 6 that are found in groundwater, the minimum threshold MSC of 5 micrograms per liter in groundwater, shall be used.

(b) For regulated substances listed in Appendix A, Table 6 that are found in soil, the lowest of one of the following values shall be used as the minimum threshold MSC:

(1) An ingestion numeric value of 100 milligrams per kilogram in soil.

(2) The soil-to-groundwater pathway numeric value throughout the soil column as determined by the methodology in § 250.308 (relating to soil-to-groundwater pathway numeric values), but substituting 5 micrograms per liter in groundwater for the groundwater MSC. The soil-to-groundwater pathway numeric value shall be calculated by using a concentration in soil at the site which does not produce a leachate in excess of the MSC for groundwater or by using a value which is 100 times the MSC for groundwater, expressed in milligrams per kilogram of soil. An equivalency demonstration under § 250.308(d) may be substituted for the soil-to-groundwater numeric value.

(c) The minimum threshold MSC in subsection (a) and the ingestion numeric value in subsection (b)(1) are calculated according to the following exposure assumption and equation: 0.50 ppb dietary intake corresponds to a  $1 \times 10^{-6}$  risk (USFDA Threshold of Regulation Final Rule July 17, 1995) assuming the substance is a carcinogen. Correcting this value (or 5.0 ppb) to the  $10^{-5}$  risk level, in Statewide health standard formulation, the threshold of regulation concentrations are determined by the following exposure assumptions and calculations:

Five  $\mu\text{g}/\text{kg}$  (substance of concern) threshold level corresponding to  $1 \times 10^{-5}$  risk

Dietary intake  $2 \text{ kg}/\text{day} \times 5 \mu\text{g}/\text{kg}$  (substance –  $10 \mu\text{g}/\text{day}$  (daily intake of substance of concern)

For soil ingestion:  $10 \mu\text{g}/100 \text{ mg soil}$  or  $100 \text{ mg}/\text{kg}$  = Threshold concentration for soils

For groundwater ingestion:  $10 \mu\text{g}/2\text{L water}$  =  $5 \mu\text{g}/\text{L}$  – Threshold concentration for water

The 100 mg soil and 2L water factors are the default ingestion rates from § 250.306(c) (relating to ingestion numeric values).

**§ 250.311. Evaluation of ecological receptors.**

(a) In addition to any protection afforded under other requirements for meeting surface water and air quality standards and MSCs under this chapter, based on the screening process in this section, direct impacts from regulated substances to the following receptors shall be assessed and addressed to implement a remedy that is protective of the environment:

(1) Individuals of threatened or endangered species as designated by the United States Fish and Wildlife Service under the Endangered Species Act (16 United States C.A. §§ 1531—1544).

(2) Exceptional value wetlands as defined in § 105.17 (relating to wetlands).

(3) Habitats of concern.

(4) Species of concern.

(b) For purposes of determining impacts on ecological receptors, no additional evaluation is required if the remediation attains a level equal to  $1/10^{\text{th}}$  of the value in Appendix A, Tables 3 and 4, except for constituents of potential ecological concern identified in Table 8, or if the criteria in paragraphs (1), (2) or (3) are met. Information that supports a determination that no additional evaluation is required shall be documented in the final report.

(1) Jet fuel, gasoline, kerosene, number two fuel oil or diesel fuel are the only constituents detected onsite.

(2) The area of contaminated soil is less than 2 acres and the area of contaminated sediment is less than 1,000 square feet.

(3) The site has features, such as buildings, parking lots or graveled paved areas, which would obviously eliminate the specific exposure pathways, such as soils exposure.

(c) If none of the criteria in subsection (b) are met and if no Constituents of Potential Ecological Concern (CPECs), as identified in Appendix A, Table 8, are detected onsite, an onsite evaluation shall be conducted to document any indications of ecological impact. Ecological impacts requiring more detailed evaluation exist if there are differences of greater than 50% in the density or diversity of species or habitats of concern when compared with nearby reference areas representing equivalent ecological areas without contamination, if available. This evaluation shall also document the presence of threatened and endangered species and exceptional value wetlands. If no ecological impacts requiring further evaluation are identified, and no threatened and endangered species exist within a 2,500-foot radius of the site and no exceptional value wetlands exist on the site, no further evaluation is required and that determination shall be documented in the final report.

(d) If none of the criteria in subsection (b) are met and if CPECs are detected onsite or ecological impacts requiring more detailed evaluation, threatened and endangered species, or exceptional value wetlands as identified in subsection (c) exist, a detailed onsite evaluation shall be conducted by a person qualified to perform environmental risk assessments to document any substantial ecological impacts. Substantial ecological impacts exist if there are differences of greater than 20% in the density of species of concern or greater than 50% in the diversity and extent of habitats of concern when compared with nearby reference areas representing equivalent ecological areas without contamination, if available. If there are no substantial ecological impacts identified and there are no threatened or endangered species on or within a 2,500-foot radius of the site and no exceptional value wetlands on the site, that determination shall be provided in the final report.

(e) If the person cannot demonstrate that they meet the criteria in subsection (b), and cannot demonstrate that the evaluation performed under subsection (c) identified no ecological impacts requiring more detailed evaluation under subsection (d), or cannot demonstrate that the evaluation performed under subsection (d) identified no substantial ecological impacts, or threatened or endangered species or exceptional value wetlands, one of the following shall be met:

(1) A person shall demonstrate in the final report that attainment of the Statewide health standard MSCs are protective of the ecological receptors.

(2) If a demonstration cannot be made that the Statewide health standard MSCs are protective of ecological receptors, a person shall demonstrate in the final report that postremedy use will eliminate complete exposure pathways at the time of the final report or in accordance with a postremediation care plan, or that mitigative measures identified in subsection (f) have been instituted and are subject to postremediation care plan requirements as described in § 250.312(b) (relating to final report).

(3) A person shall demonstrate attainment of the background standard.

(4) A person shall follow the procedures in §§ 250.402(c) and 250.409 (relating to human health and environmental protection goals; and risk assessment report) and demonstrate attainment of the site-specific standard for protection of ecological receptors.

(f) Mitigation measures to restore or replace equivalent ecological resources in the local area of the site may be applied if the following are met:

(1) No exceptional value wetlands have been identified by the screening process.

(2) No Federal or State laws and regulations prohibit or restrict the elimination of habitats or species identified by the screening process.

(3) A mitigation measure is selected based on the following hierarchy:

(i) Restoration onsite of species and habitats identified in the screening process.

(ii) Replacement onsite of species and habitats identified in the screening process.

(iii) Replacement on an adjacent area to the site of species and habitats identified in the screening process.

(iv) Replacement at a location within the municipality where the site is located of species and habitats identified in the screening process.

(4) The Department will review and approve mitigation measures prior to implementation to ensure that the proposed remedy and intended use of the property minimize the impacts to ecological receptors identified in the screening procedure.

(5) The postremediation care plan requirements in § 250.312(e) or 250.411(f) (relating to final report) are implemented.

#### **§ 250.312. Final report.**

(a) For sites remediated under the Statewide health standard, the person conducting the remediation shall submit a final report to the Department which documents attainment of the selected standard. This final report shall include site characterization information identified in § 250.204(b)—(e) (relating to final report). The site characterization shall be conducted in accordance with scientifically recognized principles, standards and procedures. The level of detail in the investigation, and the selected methods and analyses, that may include models, shall sufficiently define the rate of movement and the present and future extent and fate of contaminants to ensure continued attainment of the remediation standard. Interpretations of geologic and hydrogeologic data shall be prepared by a professional geologist licensed in this Commonwealth.

(b) The final report for the Statewide health standard shall include the results of the evaluation of ecological receptors. If a person relies on a postremedy use to eliminate complete exposure pathways that is not implemented at the time of the final report submission, a postremediation care plan shall be submitted to document that the postremedy use is implemented within 1 year from final report approval, unless the Department approves an extension of time. If mitigation measures are implemented under § 250.311 (relating to evaluation of ecological receptors), a postremediation care plan shall be documented in the final report that includes the following:

(1) A plan to maintain the mitigated ecological resource.

(2) Reporting of the ongoing success or failure of the mitigation measure implemented.

(3) Mitigation measures, instituted at the time of the final report, shall be successfully accomplished and sustained up to 5 years from final report approval.

(c) Final reports for the Statewide health standard shall include information on the basis for selecting residential or nonresidential standards and the additional information identified in § 250.204(f)(1)–(5).

(d) The final report for the Statewide health standard shall include all sampling data and descriptions of the sampling methodology and analytical results, including the appropriate statistical methodologies, which pertain to whether the remediation has attained the selected standard, following the requirements of Subchapter G (relating to demonstration of attainment).

(e) If engineering controls are needed to attain or maintain a standard, if institutional controls are needed to maintain a standard, if the fate and transport analysis indicates that the remediation standard, including the solubility limitation in § 250.304(b), may be exceeded at the point of compliance in the future, or if the remediation relies on natural attenuation, a postremediation care plan shall be documented in the final report that includes the information identified in § 250.204(g).

(f) If the soil-to-groundwater pathway soil buffer distances are used, as identified in § 250.308 (relating to soil-to-groundwater pathway numeric values), the following information shall be included in the final report:

(1) Information demonstrating that the actual site soil column thickness below the contaminated soil by the information gathered from soil sample borings conducted during the site characterization is at least the thickness identified in Appendix A, Tables 3 and 4.

(2) Information gathered during the field investigation phase and the laboratory analyses conducted on the soil samples.

(3) The boring logs and all other data presented in appropriate maps, cross sections, figures and tables.

(g) If an equivalency demonstration is used under § 250.308(d), the following information shall be included in the final report:

(1) Information describing the actual site soil column below the contaminated soil determined by soil sample borings conducted during the site characterization.

(2) Information gathered during the field investigation phase and the laboratory analyses conducted on the groundwater samples beneath the contaminated soil.

(3) The boring logs and all other data presented in appropriate maps, cross sections, figures and tables.

(4) Sampling data, in a tabular format, that shows no exceedances of groundwater MSCs or the background standard, under § 250.308(d)(2).

(5) A demonstration, submitted in a graphic format, that sampling data indicates no increasing trend of concentration over time that may exceed the standard.

(h) When a person implements a remedy that relies on access to properties owned by third parties, for remediation or monitoring, documentation of cooperation or agreement shall be submitted as part of the final report.

**Subchapter D. SITE-SPECIFIC STANDARD**

- Sec.
- 250.401. Scope.
- 250.402. Human health and environmental protection goals.
- 250.403. Use of groundwater.
- 250.404. Pathway identification and elimination.
- 250.405. When to perform a risk assessment.
- 250.406. Relationship to surface water quality requirements.
- 250.407. Point of compliance.
- 250.408. Remedial investigation report.
- 250.409. Risk assessment report.
- 250.410. Cleanup plan.
- 250.411. Final report.

**§ 250.401. Scope.**

(a) This subchapter sets forth requirements and procedures for any person selecting the site-specific standards.

(b) The Department may approve or disapprove a remedial investigation report, a risk assessment report or cleanup plan based on consideration of all subsections in section 304 of the act (35 P. S. § 6026.304).

**§ 250.402. Human health and environmental protection goals.**

(a) Site-specific standards shall be developed that meet the human health and environmental protection goals specified in this section. The development of site-specific standards shall be based on a site-specific risk assessment, if required.

(b) The site-specific standard shall be a protective level that eliminates or reduces any risk to human health in accordance with the following:

(1) For known or suspected carcinogens, soil and groundwater cleanup standards shall be established at exposures which represent an excess upperbound lifetime risk of between 1 in 10,000 and 1 in 1 million. The cumulative excess risk to exposed populations, including sensitive subgroups, may not be greater than 1 in 10,000.

(2) For systemic toxicants, soil and groundwater cleanup standards shall represent the level to which the human population could be exposed on a daily basis without appreciable risk of deleterious effect to the exposed population. Where several systemic toxicants affect the same target organ or act by the same method of toxicity, the hazard index may not exceed one.

(c) In addition to any protection afforded under other requirements for meeting surface water and air quality standards under this chapter, direct impacts resulting from a release of regulated substances to the receptors identified in § 250.311(a) (relating to evaluation of ecological receptors) shall be assessed and addressed in the remedial investigation, risk assessment and cleanup plans.

(d) If a person is using the site-specific standard to protect ecological receptors under this subchapter or in accordance with § 250.311(e), the following shall be performed:

(1) An ecological risk assessment to determine if an impact has occurred or will occur if the release of a regulated substance goes unabated.

(2) An ecological risk assessment conducted in accordance with Department-approved EPA or ASTM guidance to establish acceptable remediation levels or alternative remedies based on current and future use that are protective of the ecological receptors.

(3) Implementation of the selected remedy, which may include mitigation measures under § 230.311(f), that is protective of the ecological receptors.

**§ 250.403. Use of groundwater.**

(a) Groundwater will not be considered a current or potential source of drinking water where groundwater has a background total dissolved solids concentration greater than 2,500 milligrams per liter.

(b) Except as provided in subsection (a), current and probable future use of groundwater shall be determined on a site-specific basis.

(c) Drinking water use of groundwater shall be made suitable by at least meeting the primary and secondary MCLs at all points of exposure identified in § 250.404 (relating to pathway identification and elimination).

(d) Current drinking water or agricultural uses of groundwater, at the time contamination was discovered, shall be protected.

**§ 250.404. Pathway identification and elimination.**

(a) The person shall use Department-approved EPA or ASTM guidance to identify any potential current and future exposure pathways for both human receptors and environmental receptors identified in § 250.402 (relating to human health and environmental protection goals).

(b) The person shall summarize pathways for current land use and any probable future land use separately in the site-specific remedial investigation report.

(c) If no exposure pathway exists, and no remedy is required to be proposed and completed, the following apply:

(1) The remedial investigation report shall contain information necessary to determine that no current or future exposure pathway exists.

(2) A risk assessment, including an ecological risk assessment, and cleanup plan are not required.

(3) The remedial investigation report and the final report may be submitted simultaneously.

(d) Prior to performing a risk assessment as required in § 250.405 (relating to when to perform a risk assessment), the person may take into account the effect of engineering and institutional controls in eliminating pathways identified in subsection (b) and include this evaluation in the remedial investigation report.

**§ 250.405. When to perform a risk assessment.**

(a) Except as specified in subsections (b) and (c), a person who remediates under this subchapter shall develop site-specific standards based on a risk assessment. The person shall conduct the risk assessment according to the procedures specified in Subchapter F (relating to exposure and risk determinations).

(b) The risk assessment report is not required if a fate and transport analysis which takes into account the effects of engineering and institutional controls demonstrates that neither present nor future exposure pathways exist. This demonstration shall follow the procedures described in § 250.404 (relating to pathway identification and elimination).

(c) The baseline risk assessment report is not required if the Department, in its remedial investigation report or cleanup plan approval, determines that a specific remediation measure that eliminates all pathways, other than a no-action remedial alternative, can be implemented to attain the site-specific standard in accordance with the requirements of attainment demonstration as specified in Subchapter G (relating to demonstration of attainment). A baseline risk assessment is that portion of

a risk assessment that evaluates a risk in the absence of the proposed site-specific measure.

**§ 250.406. Relationship to surface water quality requirements.**

(a) A regulated discharge to surface waters shall comply with the applicable provisions of Chapters 91—105, including antidegradation requirements.

(b) For point source discharges to surface water, compliance shall be measured at the point of discharge in accordance with limits specified in the NPDES permit.

(c) For purposes of determining compliance with surface water quality standards from a diffuse surface or groundwater discharge, the person shall determine the expected instream regulated substance concentrations, that are attributable to releases at the site, using mass balance techniques and appropriate sampling for groundwater/surface water mixing at design flow conditions. If the results indicate that surface water quality standards are being achieved, no action is required. If results indicate that surface water quality standards are not being achieved, additional sampling may be performed to help evaluate whether surface water quality standards are being achieved. If the results of the sampling indicate the surface water quality standards are being met, no further action is required. If the results of the modeling, and sampling if any, indicate the surface water quality standards are not being met, the person shall perform further remedial action to attain the surface water quality standards, unless a waiver of the surface water quality standards is obtained under paragraphs (1) and (2).

(1) In the case of a diffuse surface or groundwater discharge which existed at the time contamination was discovered, the Department may waive any otherwise applicable provisions, including the provisions of Chapter 93 (relating to water quality standards), under section 902(b) of the act (35 P. S. § 6026.902(b)).

(2) An applicant for a waiver of provisions in Chapter 93 shall demonstrate to the Department that the proposed remedial alternative will result in attainment of a concentration in the stream that does not exceed human health criteria and aquatic life criteria under the requirements in Chapter 93. The person may propose the use of alternative site-specific exposure factors or design conditions that will demonstrate attainment of the human health criteria.

(d) Except if an NPDES permit is required, for purposes of complying with surface water quality standards in a spring, the point of compliance is the point of first designated or existing use, as defined in §§ 93.1, 93.4 and 93.9 (relating to definitions; Statewide water uses; and designated water uses and water quality criteria). Where the point of first designated or existing use occurs in a surface water into which a spring flows, compliance with surface water quality standards shall be determined in the manner specified in subsection (c).

**§ 250.407. Point of compliance.**

(a) For attainment of a site-specific standard in groundwater, the point of compliance is the property boundary that existed at the time the contamination was discovered. Site-specific standards shall be attained at and beyond the point of compliance. The Department may determine in writing a point of compliance beyond the property boundary to be appropriate if one of the following situations is demonstrated:

(1) Structures are located on the property boundary which prohibit internal or external access for a drill rig.

(2) The property is a small parcel of land with limited space for onsite monitoring wells.

(3) It is not physically possible to monitor groundwater quality at the property boundary.

(4) The downgradient property was owned by the same party at the time the contamination was discovered and the use of the groundwater on the downgradient property can be controlled to prevent unacceptable exposure.

(5) For measuring compliance with secondary contaminants.

(b) For attainment of a site-specific standard in residential areas for volatilization directly to indoor air, the point of compliance is the point of exposure where there is exposure on the site in a below-grade occupied space.

(c) For attainment of site-specific soil standards in residential areas, the point of compliance for ingestion and inhalation exposure is up to 15 feet below the existing surface unless bedrock or physical structures are encountered which prevent safe continued remediation.

(d) For attainment of site-specific soil standards in nonresidential areas, the point of compliance for ingestion, inhalation and volatilization is the point of exposure as identified in an approved risk assessment report, if required.

(e) For attainment of soil-to-groundwater soil standards in both residential and nonresidential areas, the point of compliance is throughout the soil column.

(f) For the emission of regulated substances to outdoor air, the point of compliance for the air quality standard shall be as specified in the air quality regulations. See Article III (relating to air resources).

#### **§ 250.408. Remedial investigation report.**

(a) Persons electing to remediate a site to the site-specific standard shall submit a remedial investigation report to the Department for review and approval. This report shall include documentation and a description of the procedures and conclusions from the site characterization conducted according to the requirements of subsections (b)–(e). The site characterization shall be conducted in accordance with scientifically recognized principles, standards and procedures. The level of detail in investigation, and the selected methods and analyses, that may include models, shall sufficiently define the rate of movement and the present and future extent and fate of contaminants, to ensure continued attainment of the remediation standard. Interpretations of geologic and hydrogeologic data shall be prepared by a professional geologist licensed in this Commonwealth.

(b) As directed from specific knowledge of the subject property, historic use of the subject property or regulated substance usage information regarding the subject property, an appropriate number of sample locations should be investigated from the identified media of concern to characterize the nature and composition of the contaminants including:

(1) Source characterization or development of a conceptual site model.

(2) The vertical and horizontal extent of contamination above the selected standard within each medium of concern.

(3) The direction and rate of contaminant movement within each medium of concern.

(4) Identification of the appropriate remedial technology options for each medium of concern.

(c) Descriptions of sampling and decontamination methodologies and analytical quality assurance/quality control procedures should be included within a sampling and analysis plan and quality assurance plan. Copies of soil and geologic boring descriptions and as-built construction drawings of wells used for site characterization should be included in the report. Copies of all laboratory analytical results and applicable laboratory quality control results should be included within the report, including all historical data and data eliminated from consideration based on data validation protocols. Analytical results should be presented within the report in table form.

(d) If soil is determined to be a medium of concern, the site characterization shall determine the relative location of the soil samples necessary to characterize the horizontal and vertical extent of contamination, and factors which could relate to the movement of the contamination. The horizontal and vertical extent of soil with concentrations of regulated substances above the selected standard shall be defined by an appropriate number of samples inside and outside of the area that exceeds the standard. Soil samples from the area with the anticipated highest levels of contamination shall be obtained, as appropriate, to determine the applicability of the proposed remedial action and handling and disposal requirements for that soil during remediation.

(e) If groundwater is determined to be a medium of concern, the site characterization shall characterize the effects of a release on groundwater to adequately determine how naturally occurring physical and geochemical characteristics define the movement of groundwater and contaminants beneath the surface, including the delineation of the position of aquifers, as well as geologic units which inhibit groundwater flow. When appropriate, the characterization shall consider the heterogeneity and anisotropy of aquifer materials based on hydraulic conductivity values (measured or published), and the effect of local and regional groundwater flow directions and influence from pumping wells. Defining the horizontal extent of concentrations of regulated substances above the standard shall require more than one round of groundwater sampling from properly constructed and developed monitoring wells taken with a sufficient number of days apart to yield independently valid results. When characterizing the vertical extent of groundwater contamination, the person shall perform more than one round of groundwater sampling and shall consider the specific gravity of the regulated substances identified in the groundwater in the site, and the potential for naturally occurring or induced downward vertical hydraulic gradients. When characterizing the vertical extent of groundwater contamination, properly constructed monitoring wells or nested monitoring wells should be utilized to focus groundwater sampling in zones of potential contaminant accumulation (that is, directly above a confining layer) and sampling shall be taken with a sufficient number of days apart to yield independently valid results.

(f) The comments obtained as a result of a public involvement plan, if any, and the responses to those public comments shall be included in a remedial investigation report.

**§ 250.409. Risk assessment report.**

The risk assessment report shall conform to this subchapter and Subchapter F (relating to exposure and risk determinations), and shall include the following unless not required under § 250.405 (relating to when to perform a risk assessment):

(1) A risk assessment report that describes the potential adverse effects, including the evaluation of ecological receptors, under both current and planned future conditions caused by the presence of regulated substances in the absence of any further control, remediation or mitigation measures.

(2) The development of the site-specific standards risk assessment report that describes the methods used to calculate a concentration level at which human health and the environment are protected.

(3) The comments obtained as a result of a public involvement plan, if any, and the responses to those public comments.

**§ 250.410. Cleanup plan.**

(a) A cleanup plan is required to be submitted to the Department for approval when the site-specific standard is selected as the remediation goal. The cleanup plan shall evaluate the relative abilities of the alternative remedies to achieve the site-specific standard and propose a remedial measure which shall achieve the standard established according to the procedures contained in this subchapter. The person submitting the plan shall evaluate additional alternative remedies that have been requested for evaluation by the Department in accordance with the act.

(b) Other components of the cleanup plan include:

(1) Site maps.

(2) The results of treatability, bench scale or pilot scale studies or other data collected to support the remedial actions.

(3) Adequate design plans and specifications sufficient to evaluate the proposed remedy.

(4) The comments obtained as a result of a public involvement plan and the responses to those public comments.

(5) Documentation of proposed postremediation care requirements if they are needed to maintain the standard.

(c) When a person proposes a remedy that relies on access to properties owned by third parties, for remediation or monitoring, documentation of cooperation or agreement shall be submitted as part of the cleanup plan.

(d) A cleanup plan is not required and no remedy is required to be proposed or completed if no current or future exposure pathways exist.

**§ 250.411. Final report.**

(a) For sites remediated under the site-specific standard, the person conducting the remediation shall submit a final report to the Department which documents attainment of the selected standard.

(b) Final reports shall demonstrate that the remedy has been completed in accordance with an approved cleanup plan.

(c) Final reports shall include the information identified in § 250.204(f)(1)–(5) (relating to final report).

(d) If engineering or institutional controls are needed to maintain a standard, if the fate and transport analysis indicates that the remediation standard may be exceeded at the point of compliance in the future, or, if the remediation relies on natural attenuation, a postremediation care plan shall be documented in the final report that includes the information identified in § 250.204(g).

(e) The comments obtained as a result of a public involvement plan and the responses to those public comments shall be included in a final report.

(f) If mitigation measures are implemented in accordance with § 250.311(f) (relating to evaluation of ecological receptors), a postremediation care plan shall be documented in the final report that includes the following:

(1) A plan to maintain the mitigated ecological resource.

(2) Reporting of the ongoing success or failure of the mitigation measure implemented.

(3) Mitigation measures instituted at the time of the final report which shall be successfully accomplished and sustained up to 5 years from final report approval.

**Subchapter E. SIA STANDARDS**

Sec.

250.501. Scope.

250.502. Eligibility determinations.

250.503. Remediation requirements.

**§ 250.501. Scope.**

(a) This subchapter sets forth requirements and procedures for any person who conducts remediation activities for property located in an SIA.

(b) A person who conducts remediation activities in an SIA shall comply with the requirements for notifying municipalities, the public and the Department.

**§ 250.502. Eligibility determinations.**

The person proposing remediation shall demonstrate:

(1) The property was used for industrial activity.

(2) The person did not cause or contribute to contamination on the property.

(3) There is no financially viable responsible person to clean up the contamination; or the property is located within a designated enterprise zone.

**§ 250.503. Remediation requirements.**

(a) A person proposing remediation of an SIA shall perform a baseline remedial investigation that establishes a reference point for existing contamination.

(b) A work plan shall be prepared that will define the scope of the baseline remedial investigation and shall be submitted to the Department for approval prior to the initiation of the investigation.

(c) At a minimum, a baseline remedial investigation shall include the following:

(1) Identification of the historical regulated substance use, handling and disposal activities on the property and any known or suspected releases associated with these activities by conducting environmental site assessment research and interviews with any person who may have knowledge of the property.

(2) If indicated by the investigation, performance of environmental sampling, within all potential media of concern, to confirm that the releases have occurred.

(3) Identification of potential migration pathways off the property and associated potential receptors of any confirmed releases on the property.

(4) If migration pathways and associated potential receptors have been identified, performance of environmental sampling of groundwater and other media at the downgradient property boundary to determine if regulated substances from the releases on the property have migrated off the property.

(5) Evaluation of exposure conditions within the portion of the property to be reused to identify existing contamination that poses an immediate, direct or imminent threat to public health or the environment which is inconsistent with the intended reuse of that portion of the property.

(d) The results of the baseline remedial investigation shall be included in a baseline environmental report. At a minimum, the baseline environmental report shall include the following:

(1) A description of the location and boundaries of the SIA.

(2) Identification of all areas of contamination.

(3) A description of the intended reuse of the property and exposure patterns.

(4) A remediation plan for the property that addresses all immediate, direct or imminent threats to public health and the environment which would prevent the property from being occupied for its intended purpose and delineates methods of compliance monitoring. At a minimum, immediate, direct or imminent threats will entail:

(i) Containerized wastes not intended in the property reuse, such as wastes in drums, above or below ground tanks and small containers.

(ii) Wastes not contained which present a direct threat to workers or other users or occupants of the property.

(iii) Contaminated soil presenting a direct threat to workers or other users or occupants of the property. The depth of consideration shall be the first 2 feet from the ground surface, unless reuse of the property presents exposure threats from depths greater than 2 feet.

(iv) Contaminated groundwater, if groundwater use will expose persons on the property to contaminants.

(v) Contaminated surface water and sediments, if use will expose persons on the property to contaminants.

(5) A remediation plan to prevent access to portions of the property containing contaminated media that is not being required to be remediated and that poses unacceptable health risks to trespassers or workers on the site.

(6) A description of the existing or potential public benefits of the reuse of the property, such as employment, housing, open space or recreation.

(7) The comments obtained as a result of a public involvement plan and the responses to these public comments.

(e) A person that changes the use of the property from nonresidential to residential, or changes the use of the property to create substantial changes in exposure conditions to contamination that existed prior to the person's reuse shall notify the Department of the changes and may be required to implement a remediation plan to address any new imminent, direct or immediate threats to human health and the environment resulting from the changes.

(f) The baseline environmental report shall include and address any municipal and public comments and the response to those comments as developed by the public involvement plan.

(g) The baseline environmental report shall be submitted to the Department after the date of approval of the baseline remedial investigation work plan, and the public participation period.

**Subchapter F. EXPOSURE AND RISK DETERMINATIONS**

Sec.

250.601. Scope.

250.602. Risk assessment procedures.

250.603. Exposure factors for site-specific standards.

250.604. Fate and transport modeling requirements for exposure assessments.

250.605. Sources of toxicity information.

250.606. Development of site-specific standards.

**§ 250.601. Scope.**

(a) This subchapter specifies the information and procedures necessary to conduct a risk assessment.

(b) A risk assessment shall ensure adequate evaluation of the risks associated with human and ecological receptors exposed to regulated substances at contaminated sites.

(c) A risk assessment may include one or more of the following:

(1) A baseline risk assessment.

(2) A risk assessment to develop site-specific standards.

**§ 250.602. Risk assessment procedures.**

(a) Except as specified in § 250.405 (relating to when to perform a risk assessment), a person shall perform a risk assessment when using a site-specific standard under Subchapter D (relating to site-specific standards) to determine if there are unacceptable exposures to humans or unacceptable exposures to ecological receptors, or both.

(b) A person who proposes to perform a risk assessment under the site-specific standard shall use the methodologies used to develop the Statewide health standards contained in Subchapter C (relating to Statewide health standards) to conduct the risk assessment. If methodologies are not specified in Subchapter C or this subchapter, the risk assessment shall be conducted in accordance with the methodology specified in EPA or ASTM guidelines approved by the Department.

(c) A risk assessment for human exposure shall include the following components:

(1) Data collection, including source characterization and development of a conceptual site model, and evaluation to identify contaminants of concern.

(2) Exposure assessment that considers ingestion, inhalation and volatilization pathways and exposure assumptions based on land use.

(3) Toxicity assessment that includes the use of toxicity information from sources identified in § 250.605 (relating to sources of toxicity information).

(4) Risk characterization that evaluates if the risks meet the human health protection goals and ecological receptor protection specified in § 250.402 (relating to human health and environmental protection goals).

(d) An exposure assessment that is based on sampling shall use a data handling methodology that is consistent with the statistical method used to demonstrate attainment.



(e) When performing an exposure assessment, a person shall use the appropriate exposure factors identified in § 250.603 (relating to exposure factors for site-specific standards) and meet the requirements of § 250.604 (relating to fate and transport modeling requirements for exposure assessments).

(f) The risk assessment report shall discuss the degree of uncertainty associated with the risk assessment.

**§ 250.603. Exposure factors for site-specific standards.**

(a) A risk assessment for the site-specific standard shall use site-specific exposure factors under the EPA's *Final Guidelines for Exposure Assessment*, 1992 (57 FR 22888—22938) or exposure factors used in the development of the Statewide health standards identified in Subchapter C (relating to Statewide health standards).

(b) If a person uses site-specific exposure factors that deviate from the standard exposure factors in Subchapter C, the site-specific exposure factors shall be clearly justified by supporting data. The person shall provide the supporting data in the site-specific risk assessment report.

(c) The exposure factors shall be selected based on the land use of the site with reference to current and currently planned future land use and the effectiveness of institutional or legal controls placed on the future use of the land.

(d) The person shall document in the site-specific risk assessment report the future use of the site.

**§ 250.604. Fate and transport modeling requirements for exposure assessments.**

(a) A person may use the soil-to-groundwater model in § 250.308(a)(2) (relating to soil-to-groundwater pathway numeric values) to estimate site-specific, soil-to-groundwater leaching potential for organic contaminants if the following conditions are met:

(1) Site-specific values of water-filled soil porosity, dry soil bulk density, dilution factors (DF) and fraction organic carbon in soil beneath the source of contamination (that is, not from top soil) are appropriately justified and the person provides supporting data to the Department.

(2) Koc values as provided in § 250.308(a)(2) are used or site-specific values which are appropriately justified are used and the person provides supporting data to the Department.

(3) There is no identified separate phase liquid contamination at the site.

(4) Other processes such as colloidal transport or transport by means of dissolved organic matter (DOM) are not significant at the site.

(5) The application of the soil-to-groundwater model shall meet the most current EPA or ASTM quality assurance/quality control criteria approved by the Department.

(b) Except for the soil-to-groundwater model in § 250.308(a)(2), a person planning to use other fate and transport models and methods to estimate exposure concentrations and to develop site-specific standards shall

use appropriate models or methods approved by the Department. The application of groundwater models shall meet the most current EPA or ASTM quality assurance/quality control criteria approved by the Department.

**§ 250.605. Sources of toxicity information.**

(a) For site-specific standards, the person shall use appropriate reference doses and cancer slope factors identified in Subchapter C (relating to Statewide health standards), unless the person can demonstrate that published data, available from one of the following sources, provides more current reference doses or cancer slope factors:

(1) Integrated Risk Information System (IRIS).

(2) Health Effects Assessment Summary Table (HEAST).

(3) United States Environmental Protection Agency, National Center for Environmental Assessment (NCEA) provisional values.

(4) Agency for Toxic Substances and Disease Registry (ATSDR) Toxicological Profiles.

(5) California EPA, California Cancer Potency Factors.

(6) EPA criteria documents, including drinking water criteria documents, drinking water health advisory summaries, ambient water quality criteria documents and air quality criteria documents.

(b) If no toxicity values are available from sources identified in subsection (a), the person may use the background standard or meet one of the following:

(1) Develop for the Department's review in the risk assessment report one of the following:

(i) Chemical-specific toxicity values in accordance with the methods in the most current EPA guidelines or protocols, approved by the Department, using corroborated peer-reviewed data published in a scientific journal, if they exist.

(ii) Toxicity values developed from appropriately justified surrogates.

(2) Use the minimum threshold medium-specific concentration, as the site-specific standard, with an assumed risk of  $1 \times 10^{-5}$  for purposes of calculating cumulative risk for the regulated substances identified in Appendix A, Table 6.

**§ 250.606. Development of site-specific standards.**

(a) If an unacceptable risk is identified by the assessments described in § 250.602 (relating to risk assessment procedure), a person shall perform one of the following:

(1) A remediation that eliminates all current and probable future exposure pathways.

(2) A remediation utilizing a standard developed under a site-specific risk assessment that is protective of human health and the environment.

(b) A person who chooses to use a standard developed under a site-specific risk assessment shall meet the human health and environmental protection requirements identified in § 250.402 (relating to human health and environmental protection goals).

(c) The development of site-specific standards shall be based on the standard in § 250.605(b)(2) (relating to sources of toxicity information) or the components of risk

assessment in § 250.602, the appropriate exposure factors identified in § 250.603 (relating to exposure factors for site-specific standards), the fate and transport modeling requirements of § 250.604 (relating to fate and transport modeling requirements for exposure assessments) and the toxicity values of § 250.605 (relating to source of toxicity information).

(d) The following factors shall be considered in the development of the risk assessment and in the development of site-specific standards:

- (1) Groundwater in aquifers.
  - (i) Natural environmental conditions that affect the fate and transport of contaminants, such as natural attenuation, shall be determined.
  - (ii) The person shall identify routes of exposure for aquifer groundwater such as human exposure to groundwater by ingestion, human inhalation of regulated substances from volatilization and migration of these substances into buildings or other areas where humans could be exposed, human ingestion of regulated substances in surface water or other site-specific surface water exposure pathways with respect to groundwater discharges or releases to surface water, human inhalation of regulated substances in air, or other site-specific air exposure pathways with respect to release of regulated substances from groundwater to air.
  - (2) Nonaquifer groundwater. The persons shall consider current and probable future exposure scenarios, such as human exposure as described in paragraph (1)(ii).
  - (3) The person shall consider current and probable future exposure scenarios, such as:
    - (i) Human ingestion of soil when direct contact exposure to the soil may reasonably occur.
    - (ii) Exposure to groundwater by ingestion with respect to leaching of regulated substances from soils to groundwater.
    - (iii) Human inhalation of regulated substances from volatilization and migration of these substances into below grade occupied space.
    - (iv) Human ingestion of regulated substances in surface water or other site-specific surface water exposure pathways with respect to regulated substances migration from soil to surface water.
    - (v) Human inhalation of regulated substances in air or other site-specific air exposure pathways with respect to the release of regulated substances from soil to air.
  - (4) If ecological receptors have been identified under § 250.311 (relating to evaluation of ecological receptors) or § 250.402, and are impacted, a remedial activity that eliminates current or future exposure pathways, or a standard, shall be developed to protect the receptors from the direct impacts.

(e) In determining soil and groundwater site-specific standards, the person shall identify the land use of the site with reference to current and currently planned future land use and the effectiveness of institutional or legal controls placed on the future use of the land.

(f) In determining soil and groundwater site-specific standards, the person shall use appropriate statistical techniques, including Monte Carlo simulations as appropriate, to establish statistically valid cleanup standards. The report for a risk assessment to develop site-specific standards shall discuss the degree of uncertainty associated with the risk assessment.

**Subchapter G. DEMONSTRATION OF ATTAINMENT**

- Sec.
- 250.701. Scope.
- 250.702. Attainment requirements.
- 250.703. General attainment requirements for soil.
- 250.704. General attainment requirements for groundwater.
- 250.705. Attainment requirements for groundwater in aquifers not used or currently planned to be used.
- 250.706. Demonstration of attainment of surface water and air quality standards.
- 250.707. Statistical tests.
- 250.708. Postremediation care attainment.

**§ 250.701. Scope.**

(a) This subchapter specifies the information and procedures necessary to demonstrate attainment with one or a combination of the background standard, Statewide health standard, site-specific standard and the minimum threshold standard, when a release of a regulated substance has occurred.

(b) This subchapter applies to persons who undertake a remediation in accordance with the act and this chapter.

(c) For purposes of determining attainment of one or a combination of remediation standards, the concentration of a regulated substance is not required to be less than the limits relating to the PQLs for a regulated substance in accordance with § 250.4 (relating to limits related to PQLs).

(d) Attainment of a standard shall be demonstrated at the point of compliance, as identified in § 250.203, 250.302 or 250.407 (relating to point of compliance), whichever is applicable.

**§ 250.702. Attainment requirements.**

(a) Attainment of a standard shall be demonstrated with adherence to Data Quality Objectives (DQO) and Data Quality Assessment (DQA) processes as specified by the EPA, as appropriate. Attainment of the Statewide health or site-specific standard will apply to the vertical and horizontal extent of soil identified as contaminated from the release of a regulated substance above the selected standard and of groundwater at the point of compliance and beyond in a site characterization. Attainment of the background standard will apply to the vertical and horizontal extent of soil and water identified as contaminated from the release across the site. Where multiple releases occur on a property which produce distinctly separate zones of contamination, the characterization and subsequent attainment demonstrations apply individually to the separate zones.

(b) Demonstration of attainment in a final report shall include the following:

(1) A demonstration that the analysis of the data, through the application of statistical tests provided for in § 250.707 (relating to statistical tests), indicates that the standard has been met.

(2) For groundwater, a demonstration of a statistical time trend analysis, knowledge of the plume stability or other acceptable method that shows contaminant concentration at the point of compliance will not exceed the selected standard. A statistical analysis shall be applied that indicates continued attainment of the standard.

(3) For the site-specific standard, the following apply:

(i) If pathway elimination is part of the remediation, it shall be demonstrated on the basis of either an engineering or hydrogeologic analysis, or both, which includes fate and transport analysis that some or all of the exposure pathways have been eliminated.

(ii) If pathway elimination is not part of the remediation or it cannot be demonstrated that all pathways have been eliminated, it shall be demonstrated that the calculated numerical site-specific standards for the remaining pathways have been attained in accordance with paragraphs (1) and (2), using the procedures in § 250.707(c) and (d), or that the risk level remaining at a site does not exceed a risk level of  $1 \times 10^{-4}$  and a hazard index of 1, provided for in the act. If separate phase liquids are present, it shall also be demonstrated that calculated site-specific numeric standards are attained within the soil and groundwater directly impacted by the separate phase liquids when those numeric standards are associated with exposure to separate phase liquids.

(4) For the background and Statewide health standards, if separate phase liquids are present, attainment at the point of compliance shall also be demonstrated within the soil and groundwater directly impacted by separate phase liquids.

**§ 250.703. General attainment requirements for soil.**

(a) For any standard selected, the attainment demonstration for the soil media shall be made at the point of compliance as defined in Subchapters B—D (relating to background standards; Statewide health standards; and site-specific standards).

(b) The volume of soil to which the attainment criteria is applied shall be determined by circumscribing with an irregular surface those concentrations detected during characterization which exceed the selected standard.

(c) Sampling points for demonstration of attainment of soils shall be selected to be random and representative both horizontally and vertically based on a systematic random sampling as set forth in a Department approved reference. If exceedances of a standard occur in a localized area, the Department may require additional characterization and remediation if three or more adjacent samples exceed the standard by more than ten times.

(d) For statistical methods under § 250.707(b)(1)(i) (relating to statistical tests), the number of sample points required for each distinct area of contamination to demonstrate attainment shall be determined in the following way:

(1) For soil volumes equal to or less than 125 cubic yards, at least eight samples.

(2) For soil volumes up to 3,000 cubic yards, at least 12 sample points.

(3) For each additional soil volume of up to 3,000 cubic yards, an additional 12 sample points.

(4) Additional sampling points may be required based on site-specific conditions.

(e) For statistical methods under § 250.707(b)(1)(ii) and (c), the minimum number of samples required for demonstrating attainment shall be as specified by the documentation of the chosen method.

**§ 250.704. General attainment requirements for groundwater.**

(a) For any standard selected, the attainment demonstration for the groundwater media shall be made at the point of compliance as defined in Subchapters B—D (relating to background standards; Statewide health standards; and site-specific standards).

(b) A sufficient number and location of monitoring wells necessary to demonstrate attainment of each plume of contamination shall be installed at the point of compliance for each aquifer based on site-specific conditions. Well locations shall be selected to yield an adequate amount of water to produce statistically valid results.

(c) In cases where the site characterization has determined the groundwater contamination (plume) extends beyond the property boundary, and the concentration of regulated substances beyond the property is above the cleanup levels of the standard selected, then the location and number of wells shall determine compliance:

(1) At and beyond the property boundary.

(2) Within the area of property shown, in the site investigation report, to be contaminated with regulated substances above the selected standard.

(d) For statistical methods under § 250.707(b)(2)(i) (relating to statistical tests), the demonstration of attainment for groundwater shall be based on at least eight consecutive quarters of groundwater data. As an alternative, the Department may accept four consecutive quarterly sampling events or less with written approval from the Department under the following conditions:

(1) There is adequate spatial monitoring of the plume upgradient which indicates a decreasing concentration trend toward the downgradient property boundary.

(2) Parameters affecting the fate and transport of regulated substances within the plume have been fully evaluated.

(3) Concentrations of regulated substances in the plume at the point of compliance monitoring wells along the downgradient property boundary are all less than or equal to the groundwater standard or the limit relating to the PQL, whichever is higher, in all samples collected during the quarters of monitoring.

(4) One of the following requirements are met:

(i) The age of the plume is sufficiently well known to permit a judgment to be made regarding its stability.

(ii) The remediation includes source removal or containment actions which would reduce the chemical flux into the plume.

(e) For statistical methods under § 250.707(b)(2)(ii) and (c), the minimum number of samples required for demonstrating attainment shall be as specified by the documentation of the chosen method.

**§ 250.705. Attainment requirements for groundwater in aquifers not used or currently planned to be used.**

In addition to sampling and statistical analyses that apply to attainment of the Statewide health standards for groundwater in this subchapter, attainment of the MSC for aquifers not used or currently planned to be used shall include the following:

(1) A scientifically valid and applicable fate and transport analysis, based on sufficient sampling and monitoring data to calibrate the model.

(2) Based on the fate and transport analysis in paragraph (1), a demonstration that the MSC for groundwater in an aquifer used or currently planned for use is not exceeded at and beyond all points on a radius of 1,000 feet, downgradient from the property boundary within a period of no more than 30 years.

**§ 250.706. Demonstration of attainment of surface water and air quality standards.**

A person shall demonstrate attainment within the surface water and the air media by demonstrating compliance with the applicable State and Federal laws and regulations.

**§ 250.707. Statistical tests.**

(a) For regulated substances which are naturally occurring, the person shall compare the analytical results of background reference samples, that are representative of naturally occurring concentrations of regulated substances on the site, with the analytical results of the medium of concern onsite. For nonnaturally occurring regulated substances for which a known background condition exists, the person shall compare the analytical results of background reference samples, which are related to the migration of contaminants onto the site, with the analytical results of the medium of concern onsite. In addition, application of statistical tests for the background standard shall be as follows:

(1) *Soil.* For soil, a person shall use one of the following statistical methods in subparagraphs (i)—(iii) and conditions relating to subparagraphs (i)—(iii) as described in subparagraphs (iv)—(vi) to demonstrate attainment of the background standard:

(i) The person shall demonstrate that the highest measurement from the area of concern is not greater than the highest measurement from the background area. The Department may accept insignificant variances in numbers. The minimum number of samples to be collected is ten from the background reference population and ten from each distinct area of contamination.

(ii) The Department may accept the use of a combination of the Wilcoxon rank-sum test (equivalent to the Mann-Whitney U test) and the quantile test for data from two populations. The application of these tests shall meet the criteria in subparagraphs (iv) and (vi).

(iii) The Department may accept other appropriate statistical methods that meet the requirements of subparagraphs (iv)—(vi).

(iv) For nonparametric and parametric methods under subparagraphs (ii) and (iii), the false-positive rate for a set of data applied to a statistical test may not be greater than 0.20. The minimum number of samples to be collected is ten from the background population and ten from each distinct area of contamination.

(v) For parametric methods under subparagraph (iii), the censoring level for each nondetect (ND) shall be the assigned value randomly generated that is between zero and the limit related to the PQL.

(vi) For nonparametric and parametric methods under subparagraphs (ii) and (iii), the application of a statistical method shall meet the criteria in subsection (d).

(2) *Groundwater for known upgradient release of a regulated substance.*

(i) The Department may accept the use of the nonparametric tolerance intervals that are applied in accordance with the procedures in subparagraphs (ii)—(vi) and (viii)—(x).

(ii) The upgradient concentration shall be determined by sampling in a background reference well shown on the basis of characterization to exhibit the highest concentration and by demonstrating that the groundwater is representative of concentrations in groundwater that are migrating onto the site.

(iii) The background reference well shall be sampled over a period of eight quarters to provide eight samples.

(iv) From these eight samples, the highest concentration for each regulated substance shall be selected as the upper tolerance limit.

(v) In each onsite well, eight samples shall also be collected during the same eight-quarter period.

(vi) The upper tolerance limit shall be met in each onsite well. The maximum of data collected from each onsite well shall be at or below the upper tolerance limit.

(vii) In lieu of subparagraphs (iv)—(vi), the Department may accept a retesting strategy using nonparametric prediction limit in accordance with current EPA guidance (EPA, Office of Solid Waste Management Division. "Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities;" Addendum to Interim Final Guidance, EPA, Washington, D. C. June 1992). For each regulated substance, the highest concentration of the eight background reference samples shall be selected as the upper prediction limit, as determined by the most current EPA guidance.

(viii) The application of a statistical method for groundwater background standard shall meet the criteria in subsection (d).

(ix) For parametric methods, the censoring level for each nondetect (ND) shall be the assigned value randomly generated that is between zero and the limit related to the PQL.

(x) In lieu of eight-quarter sampling in subparagraphs (iii) and (v), the Department may allow the eight samples to be taken during a period of four quarters, or less with written approval from the Department if the following criteria can be met:

(A) There is adequate spatial monitoring of the plume upgradient of the property on which the release occurred which indicates a stable plume condition.

(B) Parameters affecting the fate and transport of regulated substances within the plume have been fully evaluated.

(C) Coefficient of variation for the eight samples collected over a four-quarter period may not exceed 1.0 for metals and 2.0 for organic compounds.

(D) The age of the plume is sufficiently well known to permit a judgment to be made regarding its stability and remediation of the source associated with the upgradient contamination is not currently or has not recently occurred.

(3) *Background groundwater conditions due to naturally occurring or areawide contamination.*

(i) To use this subparagraph for areawide contamination, the person performing remediation shall demonstrate to the Department, in writing, that the site conditions are due to areawide contamination and shall obtain the Department's approval to use this subsection.

(ii) A minimum of 12 samples shall be collected from any combination of monitoring wells, including upgradient locations, if all data collected is used in determination of background concentrations.

(iii) The same number of samples shall be collected within and representative of the area of groundwater contamination (plume) onsite as were collected in the upgradient sampling for each sampling event.

(iv) The samples from the upgradient wells and the wells in the plume onsite shall be collected during the same sampling event.

(v) Sampling may be accelerated so that all sampling events occur in as short a period of time as possible so as not to result in serial correlation in the data.

(vi) The resulting values may be used with appropriate nonparametric or parametric methods to compare the two populations.

(vii) The sampling results in the plume onsite may not exceed the sum of the background arithmetic average and three times the standard deviation calculated for the background area.

(viii) The application of a statistical method for groundwater background standard shall meet the criteria in subsection (d).

(ix) For parametric methods, the censoring level for each nondetect (ND) shall be the assigned value randomly generated that is between zero and the limit related to the PQL.

(b) The following statistical tests may be accepted by the Department to demonstrate attainment of the Statewide health standard. The statistical test for soil shall apply to each distinct area of contamination. The statistical test for groundwater will apply to each compliance monitoring well. Testing shall be performed individually for each regulated substance identified in the final report site investigation as being present at the site for which a person wants relief from liability under the act. The application of a statistical method shall meet the criteria in subsection (d).

(1) For soil attainment determination at each distinct area of contamination, subparagraph (i), (ii) or (iii) shall be met in addition to the attainment requirements in §§ 250.702 and 250.703 (relating to attainment requirements; and general attainment requirements for soil).

(i) Seventy-five percent of all samples, which shall be randomly collected in a single event from the site, shall be equal to or less than the Statewide health standard or the limit related to PQLs with no individual sample exceeding ten times the Statewide health standard.

(ii) As applied in accordance with EPA approved methods on statistical analysis of environmental data, as identified in subsection (e), the 95% UCL of the arithmetic mean shall be at or below the Statewide health standard.

(iii) For sites that qualify as localized contamination sites under the document entitled "Closure Requirements for Underground Storage Tank Systems" (DEP Technical Guidance Document No. 2530-BK-DEP2008), where samples are taken in accordance with that document that result in fewer samples being taken than otherwise required in this section, no sample may exceed the Statewide health standard.

(2) For groundwater attainment determination at each compliance monitoring well, subparagraph (i) or (ii) shall be met in addition to the attainment requirements in § 250.702 and § 250.704 (relating to general attainment requirements for groundwater).

(i) Seventy-five percent of all samples collected within each monitoring well over time shall be equal to or less than the Statewide health standard or the limit related to PQLs with no individual sample exceeding both of the following:

(A) Ten times the Statewide health standard on the property.

(B) Two times the Statewide health standard beyond the property boundary.

(ii) As applied in accordance with EPA approved methods on statistical analysis of environmental data, as identified in subsection (e), the 95% UCL level of the arithmetic mean shall be at or below the Statewide health standard.

(3) In addition to the statistical tests identified in paragraphs (1) and (2), a person may use a statistical test that meets the requirements of subsection (d) to demonstrate attainment.

(c) To demonstrate attainment of the site-specific standard, a person may use a statistical test identified in subsection (b)(1)(ii) and (2)(ii) where the 95% UCL of the arithmetic mean is below the site-specific standard or a statistical test that meets the requirements of subsection (d). The attainment test and the methodology used in the risk assessment to evaluate exposure concentrations shall be the same.

(d) Except for the statistical methods identified in subsections (a)(1)(i) and (b)(1)(i) and (2)(i), a demonstration of attainment of one or a combination of remediation standards shall comply with the following:

(1) When statistical methods are to be used for demonstration of attainment of Statewide health or site-specific standards, the null hypotheses ( $H_0$ ) shall be that the true site arithmetic average concentration is at or above the cleanup standard, and the alternative hypothesis ( $H_a$ ) shall be that the true site arithmetic average concentration is below the cleanup standard. When statistical methods are to be used to determine that the background standard is exceeded, the null hypothesis ( $H_0$ ) shall be that the background standard is achieved and the alternative hypothesis ( $H_a$ ) shall be that the background standard is not achieved.

(2) A statistical method chosen shall comply with the following performance standards:

(i) The underlying assumptions of the statistical method shall be met, such as data distribution.

(ii) The statistical method shall be recommended for this use in Department-approved guidance or regulation and shall be generally recognized as appropriate for the particular remediation implemented at the site.

(iii) Compositing cannot be used with nonparametric methods or for volatile organic compounds.

(iv) For parametric methods, the censoring level for each nondetect shall be the assigned value randomly generated that is between zero and the limit related to the PQL.

(v) Tests shall account for seasonal and spatial variability as well as temporal correlation of data, unless otherwise approved by the Department.

(vi) Tests used to determine that the background standard is exceeded shall maintain adequate power to detect contamination in accordance with current EPA guidances, regulations or protocols.

(vii) For the limits relating to the PQLs, Statewide health and site-specific standards, the false-positive rate for a statistical test may not be greater than 0.20 for nonresidential and 0.05 for residential.

(viii) Statistical testing shall be done individually for each regulated substance present at the site.

(3) The following information shall be documented in a final report when a statistical method is applied:

- (i) A description of the statistical method.
  - (ii) A clear statement of the applicable decision rule in the form of statistical hypotheses for each spatial unit and temporal boundary including the applicable statistical parameter of interest and the specific cleanup standard.
  - (iii) A description of the underlying assumptions of the method.
  - (iv) Documentation showing that the sample data set meets the underlying assumptions of the method and demonstrating that the method is appropriate to apply to the data.
  - (v) Specification of false positive rates and, in addition for the background standard, specification of false negative rates.
  - (vi) Documentation of input and output data for the statistical test, presented in tables or figures, or both, as appropriate.
  - (vii) An interpretation and conclusion of the statistical test.
- (e) The references identified in subsection (b)(1)(ii) and (2)(ii) are as follows:
- (1) EPA, Office of Policy, Planning and Evaluation, *Methods for Evaluating the Attainment of Cleanup Standards*, Volume 1: Soils and Solid Media, EPA 230/02-89-042, Washington, D. C. 1989.
  - (2) EPA, Office of Solid Waste Management Division, *Test Methods for Evaluating Solid Waste*, SW-846 Volume II: Field Methods, EPA, November 1985, Third Edition.
  - (3) EPA, Office of Solid Waste Management Division, *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities*, Interim Final Guidance, EPA, Washington, D. C., April, 1989.

(4) EPA, Office of Solid Waste Management Division, *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities*, Addendum to Interim Final Guidance, EPA, Washington, D. C., June, 1992.

(5) 40 CFR 264 and 265 (relating to standards for owners and operators of hazardous waste treatment, storage, and disposal facilities; and interim status standards for owners and operators of hazardous waste treatment, storage, and disposal facilities).

**§ 250.708. Postremediation care attainment.**

(a) After engineering controls are in place and the groundwater concentration levels have stabilized following any effects from the remediation, a statistical test shall be used to demonstrate that regulated substances in groundwater do not exceed the selected standard at the point of compliance. A statistical trend analysis, knowledge of the plume stability, or other acceptable method shall be used to demonstrate that contaminant concentration at the point of compliance will not exceed the selected standard in the future.

(b) If engineering or institutional controls are utilized at a site to maintain the nonresidential Statewide health standard or the site-specific standard, a postremediation care program shall be implemented to protect human health and the environment.

(c) A person implementing engineering controls shall ensure the ongoing achievement of the performance standards in order to maintain attainment.

(d) A person shall implement a postremediation care plan, as identified in an approved final report.

(e) A person may terminate postremediation care as approved in the final report if the person can demonstrate attainment under this chapter without the engineering controls in place, and document a fate and transport analysis that shows the standard will not be exceeded in the future.

**APPENDIX A**  
**Table 1—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Groundwater**

REGULATED SUBSTANCE	CASRN	USED AQUIFERS								NON-USE AQUIFERS			
		TDS ≤ 2500				TDS > 2500				R		NR	
		R		NR		R		NR		R		NR	
ACENAPHTHENE	83329	2,200	G	3,500	S	3,500	S	3,500	S	3,500	S	3,500	S
ACENAPHTHYLENE	208968	2,200	G	3,900	S	3,900	S	3,900	S	3,900	S	3,900	S
ACETALDEHYDE	75070	19	N	57	N	1,900	N	5,700	N	19	N	57	N
ACETONE	67641	3,700	G	10,000	G	370,000	G	1,000,000	G	37,000	G	100,000	G
ACETONITRILE	75058	58	N	120	N	5,800	N	12,000	N	580	N	1,200	N
ACETOPHENONE	98862	3,700	G	10,000	G	370,000	G	1,000,000	G	3,700	G	10,000	G
ACETYLAMINOFLUORENE, 2- (2AAF)	53963	0.17	G	0.68	G	17	G	68	G	170	G	680	G
ACROLEIN	107028	0.055	N	0.12	N	5.5	N	12	N	0.55	N	1.2	N
ACRYLAMIDE	79061	0.033	N	0.14	N	3.3	N	14	N	0.033	N	0.14	N
ACRYLIC ACID	79107	2.8	N	5.8	N	280	N	580	N	280	N	580	N
ACRYLONITRILE	107131	0.63	N	2.7	N	63	N	270	N	63	N	270	N
ALACHLOR	15972608	2	M	2	M	200	M	200	M	2	M	2	M
ALDICARB	116063	7	M	7	M	700	M	700	M	7,000	M	7,000	M
ALDRIN	309002	0.0087	N	0.037	N	0.87	N	3.7	N	0.87	N	3.7	N
ALLYL ALCOHOL	107186	49	N	100	N	4,900	N	10,000	N	4,900	N	10,000	N
AMINOBIHENYL, 4-	92671	0.031	G	0.12	G	3.1	G	12	G	31	G	120	G
AMITROLE	61825	0.7	G	2.8	G	70	G	280	G	700	G	2800	G
ANILINE	62533	2.8	N	5.8	N	280	N	580	N	2.8	N	5.8	N
ANTHRACENE	120127	43	S	43	S	43	S	43	S	43	S	43	S
ATRAZINE	1912249	3	M	3	M	300	M	300	M	3	M	3	M

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		TDS ≤ 2500			TDS > 2500			R		NR	
		R	NR		R	NR		R	NR		
BENZENE	71432	5 M	5 M	500 M	500 M	500 M	500 M	500 M	500 M		
BENZO[ A ]ANTHRACENE	56553	0.9 G	3.6 G	14 S	14 S	14 S	14 S	14 S	14 S		
BENZO[ A ]PYRENE	50328	0.2 M	0.2 M	3.8 S	3.8 S	3.8 S	3.8 S	3.8 S	3.8 S		
BENZO[ B ]FLUORANTHENE	205992	0.9 G	1.2 S	1.2 S	1.2 S	1.2 S	1.2 S	1.2 S	1.2 S		
BENZO[ GHI ]PERYLENE	191242	0.26 S	0.26 S	0.26 S	0.26 S	0.26 S	0.26 S	0.26 S	0.26 S		
BENZO[ K ]FLUORANTHENE	207089	0.55 S	0.55 S	0.55 S	0.55 S	0.55 S	0.55 S	0.55 S	0.55 S		
BENZOIC ACID	65850	150,000 G	410,000 G	3,400,000 S	3,400,000 S	3,400,000 S	150,000 G	410,000 G	3,400,000 S		
BENZYL ALCOHOL	100516	11,000 G	31,000 G	1,100,000 G	3,100,000 G	3,100,000 G	11,000 G	31,000 G	1,100,000 G		
BENZYL CHLORIDE	100447	0.87 N	3.7 N	87 N	370 N	370 N	87 N	370 N	370 N		
BHC, ALPHA-	319846	0.1 G	0.41 G	10 G	41 G	41 G	100 G	410 G	410 G		
BHC, BETA-	319857	0.37 G	1.4 G	37 G	140 G	140 G	370 G	1,400 G	1,400 G		
BHC, DELTA-	319868	11 G	31 G	1,100 G	3,100 G	3,100 G	11,000 G	21,000 S	21,000 S		
BHC, GAMMA (LINDANE)	58899	0.2 M	0.2 M	20 M	20 M	20 M	200 M	200 M	200 M		
BIS(2-CHLORO-ISOPROPYL)ETHER	108601	300 H	300 H	30,000 H	30,000 H	30,000 H	30,000 H	30,000 H	30,000 H		
BIS(2-CHLOROETHYL)ETHER	111444	0.13 N	0.55 N	13 N	55 N	55 N	13 N	55 N	55 N		
BIS(CHLOROMETHYL)ETHER	542881	0.00069 N	0.0029 N	0.069 N	0.29 N	0.29 N	0.069 N	0.29 N	0.29 N		
BIS[ 2-ETHYLHEXYL ] PHTHALATE	117817	6 M	6 M	340 S	340 S	340 S	340 S	340 S	340 S		
BROMODICHLOROMETHANE	75274	100 M	100 M	10,000 M	10,000 M	10,000 M	100 M	100 M	100 M		
BROMOMETHANE	74839	10 H	10 H	1,000 H	1,000 H	1,000 H	1,000 H	1,000 H	1,000 H		
BUTYL ALCOHOL, N-	71363	970 N	2,000 N	97,000 N	200,000 N	200,000 N	9,700 N	20,000 N	20,000 N		

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		R		NR		R		NR		R		NR	
BUTYL PHTHALATE, DI-N-	84742	3,700	G	10,000	G	13,000	S	13,000	S	13,000	S	13,000	S
BUTYLBENZYL PHTHALATE	85687	2,700	S	2,700	S	2,700	S	2,700	S	2,700	S	2,700	S
CAPTAN	133062	190	G	740	G	3,300	S	3,300	S	3,300	S	3,300	S
CARBARYL	63252	700	H	700	H	70,000	H	70,000	H	83,000	S	83,000	S
CARBOFURAN	1563662	40	M	40	M	4,000	M	4,000	M	40	M	40	M
CARBON DISULFIDE	75150	1,900	N	4,100	N	190,000	N	410,000	N	1,900	N	4,100	N
CARBON TETRACHLORIDE	56235	5	M	5	M	500	M	500	M	50	M	50	M
CHLORDANE	57749	2	M	2	M	56	S	56	S	56	S	56	S
CHLORO-1-PROPENE, 3- (ALLYL CHLORIDE)	107051	2.8	N	5.8	N	280	N	580	N	280	N	580	N
CHLOROANILINE, P-	106478	150	G	410	G	3,900	S	3,900	S	150	G	410	G
CHLOROBENZENE	108907	55	N	120	N	5,500	N	12,000	N	5,500	N	12,000	N
CHLOROBENZILATE	510156	2.4	G	9.6	G	240	G	960	G	2,400	G	9,600	G
CHLORODIBROMOMETHANE	124481	100	M	100	M	10,000	M	10,000	M	10,000	M	10,000	M
CHLOROETHANE	75003	28,000	N	58,000	N	2,800,000	N	5,700,000	S	2,800,000	N	5,700,000	S
CHLOROETHYL VINYL ETHER, 2-	110758	240	N	510	N	24,000	N	51,000	N	240	N	510	N
CHLOROFORM	67663	100	M	100	M	10,000	M	10,000	M	1,000	M	1,000	M
CHLORONAPHTHALENE, 2-	91587	2,900	G	6,700	S	6,700	S	6,700	S	2,900	G	6,700	S
CHLOROPHENOL, 2-	95578	40	H	40	H	4,000	H	4,000	H	40	H	40	H
CHLOROPRENE	126998	19	N	41	N	1,900	N	4,100	N	1,900	N	4,100	N
CHLORPYRIFOS	2921882	20	H	20	H	1,300	S	1,300	S	20	H	20	H

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		R		NR		R		NR		R		NR	
CHRYSENE	218019	1.8	S	1.8	S	1.8	S	1.8	S	1.8	S	1.8	S
CRESOL(S)	1319773	49	N	100	N	4,900	N	10,000	N	4,900	N	10,000	N
CRESOL, P-CHLORO-M-	59507	180	G	510	G	18,000	G	51,000	G	180	G	510	G
CROTONALDEHYDE	4170303	0.079	N	0.34	N	7.9	N	34	N	7.9	N	34	N
CUMENE	98828	25	N	52	N	2,500	N	5,200	N	2,500	N	5,200	N
CYCLOHEXANONE	108941	49,000	N	100,000	N	4,900,000	N	5,000,000	S	49,000	N	100,000	N
DDD, 4,4'-	72548	0.62	N	2.7	N	62	N	160	S	62	N	160	S
DDE, 4,4'-	72559	1.3	S	1.3	S	1.3	S	1.3	S	1.3	S	1.3	S
DDT, 4,4'-	50293	1.7	S	1.7	S	1.7	S	1.7	S	1.7	S	1.7	S
DIALATE	2303164	2.5	N	10	N	250	N	1,000	N	250	N	1,000	N
DIAZINON	333415	0.6	H	0.6	H	60	H	60	H	0.6	H	0.6	H
DIBENZO[ A,H ]ANTHRACENE	53703	0.09	G	0.36	G	0.5	S	0.5	S	0.5	S	0.5	S
DIBROMO-3-CHLOROPROPANE, 1,2-	96128	0.2	M	0.2	M	20	M	20	M	20	M	20	M
DIBROMOETHANE, 1,2- (ETHYLENE DIBROMIDE)	106934	0.05	M	0.05	M	5	M	5	M	5	M	5	M
DIBROMOMETHANE	74953	97	N	200	N	9,700	N	20,000	N	9,700	N	20,000	N
DICHLOROBENZENE, 1,2-	95501	600	M	600	M	60,000	M	60,000	M	60,000	M	60,000	M
DICHLOROBENZENE, 1,3-	541731	600	H	600	H	60,000	H	60,000	H	60,000	H	60,000	H
DICHLOROBENZENE, P-	106467	75	M	75	M	7,500	M	7,500	M	7,500	M	7,500	M
DICHLOROBENZIDINE, 3,3'-	91941	1.5	G	5.8	G	150	G	580	G	1,500	G	5,800	G

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		R		NR		R		NR		R		NR	
DICHLORODIFLUOROMETHANE (FREON 12)	75718	1,000	H	1,000	H	100,000	H	100,000	H	100,000	H	100,000	H
DICHLOROETHANE, 1,1-	75343	27	N	110	N	2,700	N	11,000	N	270	N	1,100	N
DICHLOROETHANE, 1,2-	107062	5	M	5	M	500	M	500	M	50	M	50	M
DICHLOROETHYLENE, 1,1-	75354	7	M	7	M	700	M	700	M	70	M	70	M
DICHLOROETHYLENE, CIS-1,2-	156592	70	M	70	M	7,000	M	7,000	M	700	M	700	M
DICHLOROETHYLENE, TRANS-1,2-	156605	100	M	100	M	10,000	M	10,000	M	1,000	M	1,000	M
DICHLOROMETHANE (METHYLENE CHLORIDE)	75092	5	M	5	M	500	M	500	M	500	M	500	M
DICHLOROPHENOL, 2,4-	120832	20	H	20	H	2,000	H	2,000	H	20,000	H	20,000	H
DICHLOROPHENOXYACETIC ACID, 2,4- (2,4-D)	94757	70	M	70	M	7,000	M	7,000	M	7,000	M	7,000	M
DICHLOROPROPANE, 1,2-	78875	5	M	5	M	00	M	500	M	50	M	50	M
DICHLOROPROPIONIC ACID, 2,2- (DALAPON)	75990	200	M	200	M	20,000	M	20,000	M	20,000	M	20,000	M
DICHLORVOS	62737	0.52	N	2.2	N	52	N	220	N	0.52	N	2.2	N
DIELDRIN	60571	0.041	G	0.16	G	4.1	G	16	G	41	G	160	G
DIETHYL PHTHALATE	84662	5000	H	5000	H	500,000	H	500,000	H	900,000	S	900,000	S
DIMETHOATE	60515	7.3	G	20	G	730	G	2,000	G	7,300	G	20,000	G
DIMETHYLAMINOAZOBENZENE, P-	60117	0.14	G	0.57	G	14	G	57	G	140	G	230	S
DIMETHYLHYDRAZINE, 1,1-	57147	0.087	N	0.37	N	8.7	N	37	N	0.87	N	3.7	N
DIMETHYLPHENOL, 2,4-	105679	730	G	2000	G	73,000	G	200,000	G	730,000	G	2,000,000	G

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		R	NR		R	NR		R	NR				
DINITROBENZENE, 1,3-	99650	1	H	1	H	100	H	100	H	1,000	H	1,000	H
DINITROPHENOL, 2,4-	51285	19	N	41	N	1,900	N	4,100	N	190	N	410	N
DINITROTOLUENE, 2,4-	121142	2.1	G	8.4	G	210	G	840	G	2,100	G	8,400	G
DINITROTOLUENE, 2,6- (2,6-DNT)	606202	37	G	100	G	3,700	G	10,000	G	37,000	G	100,000	G
DINOSEB	88857	7	M	7	M	700	M	700	M	700	M	700	M
DIOXANE, 1,4-	123911	5.6	N	24	N	560	N	2,400	N	56	N	240	N
DIPHENYLAMINE	122394	200	H	200	H	20,000	H	20,000	H	200,000	H	200,000	H
DIPHENYLHYDRAZINE, 1,2-	122667	0.83	G	3.3	G	83	G	330	G	830	G	3,300	G
DIQUAT	85007	20	M	20	M	2,000	M	2,000	M	20	M	20	M
DISULFOTON	298044	0.3	H	0.3	H	30	H	30	H	30	H	30	H
DIURON	330541	10	H	10	H	1,000	H	1,000	H	10	H	10	H
ENDOSULFAN I (ALPHA)	959988	220	G	530	S	530	S	530	S	220	G	530	S
ENDOSULFAN II (BETA)	33213659	220	G	280	S	280	S	280	S	220	G	280	S
ENDOSULFAN SULFATE	1031078	120	S	120	S	120	S	120	S	120	S	120	S
ENDOTHALL	145733	100	M	100	M	10,000	M	10,000	M	100	M	100	M
ENDRIN	72208	2	M	2	M	200	M	200	M	2	M	2	M
EPICHLOROHYDRIN	106898	2.8	N	5.8	N	280	N	580	N	280	N	580	N
ETHION	563122	18	G	51	G	600	S	600	S	18	G	51	G
ETHOXYETHANOL, 2- (EGEE)	110805	3,900	N	8,200	N	390,000	N	820,000	N	390,000	N	820,000	N
ETHYL ACETATE	141786	8,700	N	18,000	N	870,000	N	1,800,000	N	870,000	N	1,800,000	N

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		R		NR		R		NR		R		NR	
ETHYL ACRYLATE	140885	3.1	N	13	N	310	N	1,300	N	310	N	1,300	N
ETHYL BENZENE	100414	700	M	700	M	70,000	M	70,000	M	70,000	M	70,000	M
ETHYL ETHER	60297	1,900	N	4,100	N	190,000	N	410,000	N	1,900	N	4,100	N
ETHYLENE GLYCOL	107211	7,000	H	7,000	H	700,000	H	700,000	H	700,000	H	700,000	H
FENAMIPHOS	22224926	2	H	2	H	200	H	200	H	2	H	2	H
FLUORANTHENE	206440	270	S	270	S	270	S	270	S	270	S	270	S
FLUORENE	86737	190	S	190	S	190	S	190	S	190	S	190	S
FLUOROTRICHLOROMETHANE (FREON 11)	75694	2,000	H	2,000	H	200,000	H	200,000	H	200,000	H	200,000	H
FONOFOS	944229	10	H	10	H	1,000	H	1,000	H	10	H	10	H
FORMALDEHYDE	50000	1,000	H	1,000	H	100,000	H	100,000	H	100,000	H	100,000	H
FORMIC ACID	64186	19,000	N	41,000	N	1,900,000	N	4,100,000	N	190,000	N	410,000	N
FURFURAL	98011	110	G	290	N	11,000	G	29,000	N	110	G	290	N
GLYPHOSATE	1071836	700	M	700	M	70,000	M	70,000	M	700	M	700	M
HEPTACHLOR	76448	0.4	M	0.4	M	40	M	40	M	180	S	180	S
HEPTACHLOR EPOXIDE	1024573	0.2	M	0.2	M	20	M	20	M	200	M	200	M
HEXACHLOROBENZENE	118741	1	M	1	M	6.2	S	6.2	S	6.2	S	6.2	S
HEXACHLOROBUTADIENE	87683	1	H	1	H	100	H	100	H	1,000	H	1,000	H
HEXACHLOROCYCLOPENTADIENE	77474	50	M	50	M	3,400	S	3,400	S	3,400	S	3,400	S
HEXACHLOROETHANE	67721	1	H	1	H	100	H	100	H	100	H	100	H
HEXANE	110543	550	N	1200	N	9,500	S	9,500	S	550	N	1,200	N

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		R	NR	R	NR	R	NR	R	NR	R	NR		
INDENO[ 1,2,3-CD ]PYRENE	193395	0.9	G	3.6	G	62	S	62	S	62	S	62	S
ISOBUTYL ALCOHOL	78831	2,900	N	6,100	N	290,000	N	610,000	N	290,000	N	610,000	N
ISOPHORONE	78591	100	H	100	H	10,000	H	10,000	H	100,000	H	100,000	H
KEPONE	143500	0.041	G	0.16	G	4.1	G	16	G	41	G	160	G
MALATHION	121755	200	H	200	H	20,000	H	20,000	H	20,000	H	20,000	H
MALEIC HYDRAZIDE	123331	4,000	H	4,000	H	400,000	H	400,000	H	4,000	H	4,000	H
METHACRYLONITRILE	126987	1.9	N	4.1	N	190	N	410	N	1.9	N	4.1	N
METHANOL	67561	4,900	N	10,000	N	490,000	N	1,000,000	N	490,000	N	1,000,000	N
METHOMYL	16752775	200	H	200	H	20,000	H	20,000	H	200	H	200	H
METHOXYCHLOR	72435	40	M	40	M	100	S	100	S	100	S	100	S
METHYL CHLORIDE	74873	3	H	3	H	300	H	300	H	300	H	300	H
METHYL ETHYL KETONE	78933	2,800	N	5,800	N	280,000	N	580,000	N	280,000	N	580,000	N
METHYL ISOBUTYL KETONE	108101	220	N	470	N	22,000	N	47,000	N	22,000	N	47,000	N
METHYL METHACRYLATE	80626	780	N	1600	N	78,000	N	160,000	N	78,000	N	160,000	N
METHYL METHANESULFONATE	66273	6.7	G	26	G	670	G	2600	G	6.7	G	26	G
METHYL PARATHION	298000	2	H	2	H	200	H	200	H	200	H	200	H
METHYL TERT-BUTYL ETHER (MTBE)	1634044	20	H	20	H	2,000	H	2,000	H	200	H	200	H
METHYLNAPHTHALENE, 2-	91576	1,500	G	4,100	G	25,000	S	25,000	S	1,500	G	4,100	G
NAPHTHALENE	91203	20	H	20	H	2,000	H	2,000	H	20,000	H	20,000	H
NAPHTHYLAMINE, 1-	134327	0.37	G	1.4	G	37	G	140	G	370	G	1,400	G

All concentrations in µg/L  
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**APPENDIX A**  
**Table 1—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Groundwater**

REGULATED SUBSTANCE	CASRN	USED AQUIFERS								NON-USE AQUIFERS			
		TDS ≤ 2500				TDS > 2500				R		NR	
		R		NR		R		NR		R		NR	
NAPHTHYLAMINE, 2-	91598	0.37	G	1.4	G	37	G	140	G	370	G	1,400	G
NITROANILINE, M-	99092	2.1	G	5.8	G	210	G	580	G	2.1	G	5.8	G
NITROANILINE, O-	88744	2.1	G	5.8	G	210	G	580	G	2.1	G	5.8	G
NITROANILINE, P-	100016	2.1	G	5.8	G	210	G	580	G	2.1	G	5.8	G
NITROBENZENE	98953	18	G	51	G	1,800	G	5,100	G	18,000	G	51,000	G
NITROPHENOL, 2-	88755	2,300	G	6,300	G	230,000	G	630,000	G	2,100,000	S	2,100,000	S
NITROPHENOL, 4-	100027	60	H	60	H	6,000	H	6,000	H	60,000	H	60,000	H
NITROPROPANE, 2-	79469	0.016	N	0.068	N	1.6	N	6.8	N	0.16	N	0.68	N
NITROSODI-N-PROPYLAMINE, N-	621647	0.094	G	0.37	G	9.4	G	37	G	94	G	370	G
NITROSODIETHYLAMINE, N-	55185	0.001	N	0.0043	N	0.1	N	0.43	N	0.01	N	0.043	N
NITROSODIMETHYLAMINE, N-	62759	0.0031	N	0.013	N	0.31	N	1.3	N	0.031	N	0.13	N
NITROSODIPHENYLAMINE, N-	86306	130	G	530	G	13,000	G	35,000	S	35,000	S	35,000	S
OCTYL PHTHALATE, DI-N-	117840	730	G	2000	G	3,000	S	3,000	S	3,000	S	3,000	S
OXAMYL (VYDATE)	23135220	200	M	200	M	20,000	M	20,000	M	200	M	200	M
PARATHION	56382	220	G	610	G	6,500	S	6,500	S	220	G	610	G
PCB-1016 (AROCLOR)	12674112	2.6	G	7.2	G	49	S	49	S	2.6	G	7.2	G
PCB-1221 (AROCLOR)	11104282	1.3	G	5.2	G	130	G	200	S	1.3	G	5.2	G
PCB-1232 (AROCLOR)	11141165	1.3	G	5.2	G	130	G	520	G	1.3	G	5.2	G
PCB-1242 (AROCLOR)	53469219	1.3	G	5.2	G	130	G	240	S	1.3	G	5.2	G
PCB-1248 (AROCLOR)	12672296	0.37	G	1.4	G	6	S	6	S	0.37	G	1.4	G

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**APPENDIX A**  
**Table 1—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Groundwater**

REGULATED SUBSTANCE	CASRN	USED AQUIFERS								NON-USE AQUIFERS			
		TDS ≤ 2500				TDS > 2500				R		NR	
		R		NR		R		NR		R		NR	
PCB-1254 (AROCOR)	11097691	0.37	G	1.4	G	12	S	12	S	0.37	G	1.4	G
PCB-1260 (AROCOR)	11096825	0.25	N	1.1	N	25	N	80	S	0.25	N	1.1	N
PENTACHLOROBENZENE	608935	29	G	82	G	240	S	240	S	240	S	240	S
PENTACHLORONITROBENZENE	82688	2.5	G	10	G	250	G	590	S	590	S	590	S
PENTACHLOROPHENOL	87865	1	M	1	M	100	M	100	M	1000	M	1000	M
PHENACETIN	62442	300	G	1200	G	30,000	G	120,000	G	300,000	G	760,000	S
PHENANTHRENE	85018	1,200	S	1,200	S	1,200	S	1,200	S	1,200	S	1,200	S
PHENOL	108952	4,000	H	4,000	H	400,000	H	400,000	H	400,000	H	400,000	H
PHENYLENEDIAMINE, M-	108452	220	G	610	G	22,000	G	61,000	G	220,000	G	610,000	G
PHORATE	298022	1.9	N	4.1	N	190	N	410	N	1.9	N	4.1	N
PHTHALIC ANHYDRIDE	85449	73,000	G	200,000	G	6,200,000	S	6,200,000	S	6,200,000	S	6,200,000	S
PRONAMIDE	23950585	50	H	50	H	5,000	H	5,000	H	50	H	50	H
PROPYLENE OXIDE	75569	2.8	G	11	G	280	G	1,100	G	3	G	11	G
PYRENE	129000	13	S	13	S	13	S	13	S	13	S	13	S
PYRIDINE	110861	9.7	N	20	N	970	N	2,000	N	97	N	200	N
SIMAZINE	122349	4	M	4	M	400	M	400	M	4	M	4	M
STRYCHNINE	57249	11	G	31	G	1,100	G	3,100	G	11,000	G	31,000	G
STYRENE	100425	100	M	100	M	10,000	M	10,000	M	10,000	M	10,000	M
TERBUFOS	13071799	0.9	H	0.9	H	90	H	90	H	0.9	H	0.9	H

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**APPENDIX A**  
**Table 1—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Groundwater**

REGULATED SUBSTANCE	CASRN	USED AQUIFERS								NON-USE AQUIFERS			
		TDS ≤ 2500				TDS > 2500				R		NR	
		R	NR	R	NR	R	NR	R	NR	R	NR		
TETRACHLORODIBENZO-P-DIOXIN, 2,3,7,8- (TCDD)	1746016	0.00003	M	0.00003	M	0.003	M	0.003	M	0.019	S	0.019	S
TETRACHLOROETHANE, 1,1,2,2-	79345	0.74	N	3.2	N	74	N	320	N	74	N	320	N
TETRACHLOROETHYLENE (PCE)	127184	5	M	5	M	500	M	500	M	50	M	50	M
TETRACHLOROPHENOL, 2,3,4,6-	58902	290	N	610	N	29,000	N	61,000	N	29,000	N	61,000	N
TETRAETHYL LEAD	78002	0.0037	G	0.01	G	0.37	G	1	G	3.7	G	10	G
THIRAM	137268	180	G	510	G	18,000	G	30,000	S	180	G	510	G
TOLUENE	108883	1,000	M	1,000	M	100,000	M	100,000	M	100,000	M	100,000	M
TOLUIDINE, M-	108441	2.8	G	11	G	280	G	1,100	G	2.8	G	11	G
TOLUIDINE, O	95534	3.7	G	14	G	370	G	1,400	G	3,700	G	14,000	G
TOLUIDINE, P-	106490	3.5	G	14	G	350	G	1,400	G	3.5	G	14	G
TOXAPHENE	8001352	3	M	3	M	300	M	300	M	3	M	3	M
TRIBROMOMETHANE (BROMOFORM)	75252	100	M	100	M	10,000	M	10,000	M	10,000	M	10,000	M
TRICHLOROBENZENE, 1,2,4-	120821	70	M	70	M	7,000	M	7,000	M	49,000	S	49,000	S
TRICHLOROBENZENE, 1,3,5-	108703	40	H	40	H	4,000	H	4,000	H	40	H	40	H
TRICHLOROETHANE, 1,1,1-	71556	200	M	200	M	20,000	M	20,000	M	2,000	M	2,000	M
TRICHLOROETHANE, 1,1,2-	79005	5	M	5	M	500	M	500	M	50	M	50	M
TRICHLOROETHYLENE (TCE)	79016	5	M	5	M	500	M	500	M	50	M	50	M
TRICHLOROPHENOL, 2,4,5-	95954	3,700	G	10,000	G	370,000	G	1,000,000	G	1,200,000	S	1,200,000	S
TRICHLOROPHENOL, 2,4,6-	88062	60	G	240	G	6,000	G	24,000	G	60,000	G	240,000	G

All concentrations in µG/L

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**APPENDIX A**

**Table 1—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Groundwater**

REGULATED SUBSTANCE	CASRN	USED AQUIFERS								NON-USE AQUIFERS			
		TDS ≤ 2500				TDS > 2500				R		NR	
		R		NR		R		NR		R		NR	
TRICHLOROPHENOXYACETIC ACID, 2,4,5- (2,4,5-T)	93765	70	H	70	H	7,000	H	7,000	H	70,000	H	70,000	H
TRICHLOROPHENOXYPROPIONIC ACID, 2,4,5- (2,4,5-TP)	93721	50	M	50	M	5,000	M	5,000	M	50	M	50	M
TRICHLOROPROPANE, 1,2,3-	96184	40	H	40	H	4,000	H	4,000	H	4,000	H	4,000	H
VINYL ACETATE	108054	550	N	1,200	N	55,000	N	120,000	N	550	N	1,200	N
VINYL CHLORIDE	75014	2	M	2	M	200	M	200	M	20	M	20	M
WARFARIN	81812	0.00000092	S	0.00000092	S	0.00000092	S	0.00000092	S	0.00000092	S	0.00000092	S
XYLENES (TOTAL)	1330207	10,000	M	10,000	M	180,000	S	180,000	S	180,000	S	180,000	S

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 N = Inhalation  
 S = Aqueous Solubility Cap

**APPENDIX A**  
**Table 2—Medium-Specific Concentrations (MSCs) for Inorganic Regulated Substances in Groundwater**

REGULATED SUBSTANCE	CASRN	USE AQUIFERS								NON-USE AQUIFERS			
		TDS ≤ 2500				TDS > 2500				R		NR	
		R		NR		R		NR		R		NR	
ANTIMONY	7440360	6	M	6	M	600	M	600	M	6,000	M	6,000	M
ARSENIC	7440382	50	M	50	M	5,000	M	5,000	M	50,000	M	50,000	M
ASBESTOS	1.2E+07	7,000,000 fibers/L	M	7,000,000 fibers/L	M	7,000,000 fibers/L	M	7,000,000 fibers/L	M	7,000,000 fibers/L	M	7,000,000 fibers/L	M
BARIUM AND COMPOUNDS	7440393	2,000	M	2,000	M	200,000	M	200,000	M	2,000,000	M	2,000,000	M
BERYLLIUM	7440417	4	M	4	M	400	M	400	M	4,000	M	4,000	M
BORON AND COMPOUNDS	7440428	600	H	600	H	60,000	H	60,000	H	600,000	H	600,000	H
CADMIUM	7440439	5	M	5	M	500	M	500	M	5,000	M	5,000	M
CHROMIUM (III)	1.6E+07	100	M	100	M	10,000	M	10,000	M	100,000	M	100,000	M
CHROMIUM (VI)	1.9E+07	180	G	510	G	18,000	G	51,000	G	180,000	G	510,000	G
COBALT	7440484	2,200	G	6,100	G	220,000	G	610,000	G	2,200,000	G	6,100,000	G
COPPER	7440508	1,000	M	1,000	M	100,000	M	100,000	M	1,000,000	M	1,000,000	M
CYANIDE, FREE	57125	200	M	200	M	20,000	M	20,000	M	200,000	M	200,000	M
LEAD	7439921	5	M	5	M	500	M	500	M	5,000	M	5,000	M
MERCURY	7439976	2	M	2	M	200	M	200	M	2,000	M	2,000	M
NICKEL	7440020	100	H	100	H	10,000	H	10,000	H	100,000	H	100,000	H
NITRATE NITROGEN	1.5E+07	10,000	M	10,000	M	1,000,000	M	1,000,000	M	10,000,000	M	10,000,000	M
NITRITE NITROGEN	1.5E+07	1,000	M	1,000	M	100,000	M	100,000	M	1,000,000	M	1,000,000	M
SELENIUM	7782492	50	M	50	M	5,000	M	5,000	M	50,000	M	50,000	M
SILVER	7440224	100	H	100	H	10,000	H	10,000	H	100,000	H	100,000	H
SULFATE		500,000	M	500,000	M	50,000,000	M	50,000,000	M	500,000,000	M	500,000,000	M

All concentrations in µg/L (except asbestos)

M = Maximum Contaminant Level

H = Lifetime Health Advisory Level

SMCL = Secondary Maximum Contaminant Level

G = Ingestion

N = Inhalation

**APPENDIX A**  
**Table 2—Medium-Specific Concentrations (MSCs) for Inorganic Regulated Substances in Groundwater**

REGULATED SUBSTANCE	CASRN	USE AQUIFERS								NON-USE AQUIFERS			
		TDS ≤ 2500				TDS > 2500				R		NR	
		R		NR		R		NR		R		NR	
THALLIUM	7440280	2	M	2	M	200	M	200	M	2,000	M	2,000	M
TIN	7440315	22,000	G	61,000	G	2,200,000	G	6,100,000	G	22,000,000	G	61,000,000	G
VANADIUM	7440622	2.1	G	5.8	G	210	G	580	G	2,100	G	5,800	G
ZINC AND COMPOUNDS	7440666	2,000	H	2,000	H	200,000	H	200,000	H	2,000,000	H	2,000,000	H

**Secondary Contaminants**

REGULATED SUBSTANCE	SMCL
ALUMINUM	200
CHLORIDE	250,000
FLUORIDE	2,000
IRON	300
MANGANESE	50

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**APPENDIX A**  
**Table 3—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Soil**  
**A. Direct Contact Numeric Values**

REGULATED SUBSTANCE	CASRN	Residential		Non-Residential			
		0-15 feet		Surface Soil 0-2 feet		Subsurface Soil 2-15 feet	
ACENAPHTHENE	83329	13,000	G	170,000	G	190,000	C
ACENAPHTHYLENE	208968	13,000	G	170,000	G	190,000	C
ACETALDEHYDE	75070	140	N	520	N	600	N
ACETONE	67641	10,000	C	10,000	C	10,000	C
ACETONITRILE	75058	400	N	1,100	N	1,300	N
ACETOPHENONE	98862	10,000	C	10,000	C	10,000	C
ACETYLAMINOFLUORENE, 2- (2AAF)	53963	4.7	G	21	G	190,000	C
ACROLEIN	107028	0.38	N	1.1	N	1.2	N
ACRYLAMIDE	79061	4	G	18	G	190,000	C
ACRYLIC ACID	79107	19	N	53	N	60	N
ACRYLONITRILE	107131	4.7	N	24	N	28	N
ALACHLOR	15972608	220	G	990	G	190,000	C
ALDICARB	116063	220	G	2,800	G	190,000	C
ALDRIN	309002	1.1	G	4.7	G	190,000	C
ALLYL ALCOHOL	107186	330	N	930	N	1,100	N
AMINOBIHENYL, 4-	92671	0.85	G	3.8	G	190,000	C
AMITROLE	61825	19	G	84	G	190,000	C
ANILINE	62533	19	N	53	N	60	N
ANTHRACENE	120127	66,000	G	190,000	C	190,000	C
ATRAZINE	1912249	81	G	360	G	190,000	C
BENZENE	71432	38	N	200	N	230	N
BENZO[ A ]ANTHRACENE	56553	25	G	110	G	190,000	C
BENZO[ A ]PYRENE	50328	2.5	G	11	G	190,000	C
BENZO[ B ]FLUORANTHENE	205992	25	G	110	G	190,000	C
BENZO[ GHI ]PERYLENE	191242	13,000	G	170,000	G	190,000	C
BENZO[ K ]FLUORANTHENE	207089	250	G	1,100	G	190,000	C
BENZOIC ACID	65850	190,000	C	190,000	C	190,000	C
BENZYL ALCOHOL	100516	10,000	C	10,000	C	10,000	C

All concentrations in mg/kg

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**APPENDIX A**  
**Table 3—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Soil**  
**A. Direct Contact Numeric Values**

REGULATED SUBSTANCE	CASRN	Residential		Non-Residential			
		0-15 feet		Surface Soil 0-2 feet		Subsurface Soil 2-15 feet	
BENZYL CHLORIDE	100447	6.4	N	33	N	38	N
BHC, ALPHA	319846	2.8	G	13	G	190,000	C
BHC, BETA-	319857	9.9	G	44	G	190,000	C
BHC, DELTA-	319868	66	G	840	G	190,000	C
BHC, GAMMA (LINDANE)	58899	16	G	72	G	190,000	C
BIS(2-CHLORO-ISOPROPYL)ETHER	108601	2,700	N	7,400	N	8,500	N
BIS(2-CHLOROETHYL)ETHER	111444	0.96	N	5	N	5.7	N
BIS(CHLOROMETHYL)ETHER	542881	0.0051	N	0.027	N	0.031	N
BIS[ 2-ETHYLHEXYL ] PHTHALATE	117817	1,300	G	5,700	G	10,000	C
BROMODICHLOROMETHANE	75274	8.6	N	45	N	51	N
BROMOMETHANE	74839	95	N	270	N	300	N
BUTYL ALCOHOL, N-	71363	6,600	N	10,000	C	10,000	C
BUTYL PHTHALATE, DI-N-	84742	10,000	C	10,000	C	10,000	C
BUTYLBENZYL PHTHALATE	85687	10,000	C	10,000	C	10,000	C
CAPTAN	133062	5,100	G	23,000	G	190,000	C
CARBARYL	63252	22,000	G	190,000	C	190,000	C
CARBOFURAN	1563662	1,100	G	14,000	G	190,000	C
CARBON DISULFIDE	75150	10,000	C	10,000	C	10,000	C
CARBON TETRACHLORIDE	56235	21	N	110	N	120	N
CHLORDANE	57749	13	G	61	G	190,000	C
CHLORO-1-PROPENE, 3- (ALLYL CHLORIDE)	107051	19	N	53	N	61	N
CHLOROANILINE, P-	106478	880	G	11,000	G	190,000	C
CHLOROBENZENE	108907	4,400	G	10,000	C	10,000	C
CHLOROBENZILATE	510156	66	G	290	G	10,000	C
CHLORODIBROMOMETHANE	124481	12	N	61	N	70	N
CHLOROETHANE	75003	10,000	C	10,000	C	10,000	C
CHLOROETHYL VINYL ETHER, 2-	110758	1,700	N	4,700	N	5,400	N
CHLOROFORM	67663	14	N	72	N	82	N

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**Table 3—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Soil**  
**A. Direct Contact Numeric Values**

REGULATED SUBSTANCE	CASRN	Residential		Non-Residential			
		0-15 feet		Surface Soil 0-2 feet		Subsurface Soil 2-15 feet	
CHLORONAPHTHALENE, 2-	91587	18,000	G	190,000	C	190,000	C
CHLOROPHENOL, 2-	95578	330	N	920	N	1,100	N
CHLOROPRENE	126998	130	N	370	N	430	N
CHLORPYRIFOS	2921882	660	G	8,400	G	190,000	C
CHRYSENE	218019	2,500	G	11,000	G	190,000	C
CRESOL(S)	1319773	330	N	920	N	1,100	N
CRESOL, P-CHLORO-M-	59507	1,100	G	14,000	G	190,000	C
CROTONALDEHYDE	4170303	9.4	G	42	G	10,000	C
CUMENE	98828	170	N	480	N	550	N
CYCLOHEXANONE	108941	10,000	C	10,000	C	10,000	C
DDD, 4,4'-	72548	75	G	330	G	190,000	C
DDE, 4,4'-	72559	53	G	230	G	190,000	C
DDT, 4,4'-	50293	53	G	230	G	190,000	C
DIALLATE	2303164	18	N	93	N	110	N
DIAZINON	333415	200	G	2,500	G	190,000	C
DIBENZO[ A,H ]ANTHRACENE	53703	2.5	G	11	G	190,000	C
DIBROMO-3-CHLOROPROPANE, 1,2-	96128	3.8	N	11	N	12	N
DIBROMOETHANE, 1,2- (ETHYLENE DIBROMIDE)	106934	0.21	G	0.93	G	8.6	N
DIBROMOMETHANE	74953	670	N	1,900	N	2,100	N
DICHLOROBENZENE, 1,2-	95501	3,800	N	10,000	C	10,000	C
DICHLOROBENZENE, 1,3-	541731	5,900	N	10,000	C	10,000	C
DICHLOROBENZENE, P-	106467	750	G	3,300	G	190,000	C
DICHLOROBENZIDINE, 3,3'-	91941	40	G	180	G	190,000	C
DICHLORODIFLUOROMETHANE (FREON 12)	75718	3,800	N	10,000	C	10,000	C
DICHLOROETHANE, 1,1-	75343	200	N	1,000	N	1,200	N
DICHLOROETHANE, 1,2-	107062	12	N	63	N	73	N
DICHLOROETHYLENE, 1,1-	75354	6.4	N	33	N	38	N
DICHLOROETHYLENE, CIS-1,2-	156592	670	N	1,900	N	2,100	N

All concentrations in mg/kg

G = Ingestion

N = Inhalation

C = Cap

**APPENDIX A**  
**Table 3—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Soil**  
**A. Direct Contact Numeric Values**

REGULATED SUBSTANCE	CASRN	Residential		Non-Residential			
		0-15 feet		Surface Soil 0-2 feet		Subsurface Soil 2-15 feet	
DICHLOROETHYLENE, TRANS-1,2-	156605	1,300	N	3,700	N	4,300	N
DICHLOROMETHANE (METHYLENE CHLORIDE)	75092	670	N	3,500	N	4,000	N
DICHLOROPHENOL, 2,4-	120832	660	G	8,400	G	190,000	C
DICHLOROPHENOXYACETIC ACID, 2,4- (2,4-D)	94757	2,200	G	28,000	G	190,000	C
DICHLOROPROPANE, 1,2-	78875	16	N	85	N	97	N
DICHLOROPROPIONIC ACID (DALAPON), 2,2-	75990	2,000	N	5,500	N	6,300	N
DICHLORVOS	62737	62	G	270	G	190,000	C
DIELDRIN	60571	1.1	G	5	G	10,000	C
DIETHYL PHTHALATE	84662	10,000	C	10,000	C	10,000	C
DIMETHOATE	60515	44	G	560	G	190,000	C
DIMETHYLAMINOAZOBENZENE, P-	60117	3.9	G	17	G	190,000	C
DIMETHYLHYDRAZINE, 1,1-	57147	0.64	N	3.3	N	3.8	N
DIMETHYLPHENOL, 2,4-	105679	4,400	G	10,000	C	10,000	C
DINITROBENZENE, 1,3-	99650	22	G	280	G	190,000	C
DINITROPHENOL, 2,4-	51285	440	G	5,600	G	190,000	C
DINITROTOLUENE, 2,4-	121142	58	G	260	G	190,000	C
DINITROTOLUENE, 2,6- (2,6-DNT)	606202	220	G	2,800	G	190,000	C
DINOSEB	88857	220	G	2,800	G	190,000	C
DIOXANE, 1,4-	123911	41	N	210	N	240	N
DIPHENYLAMINE	122394	5,500	G	70,000	G	190,000	C
DIPHENYLHYDRAZINE, 1,2-	122667	22	G	99	G	190,000	C
DIQUAT	85007	480	G	6,200	G	190,000	C
DISULFOTON	298044	2.7	N	7.6	N	8.7	N
DIURON	330541	440	G	5,600	G	190,000	C
ENDOSULFAN I (ALPHA)	959988	1,300	G	17,000	G	190,000	C
ENDOSULFAN II (BETA)	33213659	1,300	G	17,000	G	190,000	C
ENDOSULFAN SULFATE	1031078	1,300	G	17,000	G	190,000	C
ENDOTHALL	145733	4,400	G	56,000	G	190,000	C

All concentrations in mg/kg  
 G = Ingestion  
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 C = Cap



**APPENDIX A**  
**Table 3—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Soil**  
**A. Direct Contact Numeric Values**

REGULATED SUBSTANCE	CASRN	Residential		Non-Residential			
		0-15 feet		Surface Soil 0-2 feet		Subsurface Soil 2-15 feet	
ENDRIN	72208	66	G	840	G	190,000	C
EPICHLOROHYDRIN	106898	19	N	53	N	60	N
ETHION	563122	110	G	1,400	G	10,000	C
ETHOXYETHANOL, 2- (EGEE)	110805	10,000	C	10,000	C	10,000	C
ETHYL ACETATE	141786	10,000	C	10,000	C	10,000	C
ETHYL ACRYLATE	140885	23	N	120	N	140	N
ETHYL BENZENE	100414	10,000	C	10,000	C	10,000	C
ETHYL ETHER	60297	10,000	C	10,000	C	10,000	C
ETHYLENE GLYCOL	107211	10,000	C	10,000	C	10,000	C
FENAMIPHOS	22224926	55	G	700	G	190,000	C
FLUORANTHENE	206440	8,800	G	110,000	G	190,000	C
FLUORENE	86737	8,800	G	110,000	G	190,000	C
FLUOROTRICHLOROMETHANE (FREON 11)	75694	10,000	C	10,000	C	10,000	C
FONOFOS	944229	140	N	380	N	440	N
FORMALDEHYDE	50000	24	N	130	N	150	N
FORMIC ACID	64186	10,000	C	10,000	C	10,000	C
FURFURAL	98011	660	G	2,600	N	3,000	N
GLYPHOSATE	1071836	22,000	G	190,000	C	190,000	C
HEPTACHLOR	76448	4	G	18	G	190,000	C
HEPTACHLOR EPOXIDE	1024573	2	G	8.7	G	190,000	C
HEXACHLOROBENZENE	118741	11	G	50	G	190,000	C
HEXACHLOROBUTADIENE	87683	44	G	560	G	10,000	C
HEXACHLOROCYCLOPENTADIENE	77474	1,500	G	10,000	C	10,000	C
HEXACHLOROETHANE	67721	220	G	2,800	G	190,000	C
HEXANE	110543	3,800	N	10,000	C	10,000	C
INDENO[ 1,2,3-CD ]PYRENE	193395	25	G	110	G	190,000	C
ISOBUTYL ALCOHOL	78831	10,000	C	10,000	C	10,000	C
ISOPHORONE	78591	10,000	C	10,000	C	10,000	C
KEPONE	143500	1.1	G	5	G	190,000	C

All concentrations in mg/kg

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**APPENDIX A**  
**Table 3—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Soil**  
**A. Direct Contact Numeric Values**

REGULATED SUBSTANCE	CASRN	Residential		Non-Residential			
		0-15 feet		Surface Soil 0-2 feet		Subsurface Soil 2-15 feet	
MALATHION	121755	1,300	N	4,000	N	4,600	N
MALEIC HYDRAZIDE	123331	110,000	G	190,000	C	190,000	C
METHACRYLONITRILE	126987	13	N	37	N	43	N
METHANOL	67561	10,000	C	10,000	C	10,000	C
METHOMYL	16752775	5,500	G	70,000	G	190,000	C
METHOXYCHLOR	72435	1,100	G	14,000	G	190,000	C
METHYL CHLORIDE	74873	180	N	920	N	1,000	N
METHYL ETHYL KETONE	78933	10,000	C	10,000	C	10,000	C
METHYL ISOBUTYL KETONE	108101	1,500	N	4,300	N	4,900	N
METHYL METHACRYLATE	80626	5,300	N	10,000	C	10,000	C
METHYL METHANESULFONATE	66273	180	G	800	G	190,000	C
METHYL PARATHION	298000	17	N	48	N	55	N
METHYL TERT-BUTYL ETHER (MTBE)	1634044	10,000	C	10,000	C	10,000	C
METHYLNAPHTHALENE, 2-	91576	8,800	G	10,000	C	10,000	C
NAPHTHALENE	91203	8,800	G	110,000	G	190,000	C
NAPHTHYLAMINE, 1-	134327	9.9	G	44	G	190,000	C
NAPHTHYLAMINE, 2-	91598	9.9	G	44	G	190,000	C
NITROANILINE, M-	99092	13	G	160	G	190,000	C
NITROANILINE, O-	88744	13	G	160	G	190,000	C
NITROANILINE, P-	100016	13	G	160	G	190,000	C
NITROBENZENE	98953	110	G	1,400	G	10,000	C
NITROPHENOL, 2-	88755	14,000	G	170,000	G	190,000	C
NITROPHENOL, 4-	100027	14,000	G	170,000	G	190,000	C
NITROPROPANE, 2-	79469	0.12	N	0.61	N	0.69	N
NITROSODI-N-PROPYLAMINE, N-	621647	2.6	G	11	G	10,000	C
NITROSODIETHYLAMINE, N-	55185	0.0073	N	0.038	N	0.043	N
NITROSODIMETHYLAMINE, N-	62759	0.023	N	0.12	N	0.13	N
NITROSODIPHENYLAMINE, N-	86306	3,700	G	16,000	G	190,000	C
OCTYL PHTHALATE, DI-N-	117840	4,400	G	10,000	C	10,000	C

All concentrations in mg/kg

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**APPENDIX A**  
**Table 3—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Soil**  
**A. Direct Contact Numeric Values**

REGULATED SUBSTANCE	CASRN	Residential		Non-Residential			
		0-15 feet		Surface Soil 0-2 feet		Subsurface Soil 2-15 feet	
OXAMYL (VYDATE)	23135220	5,500	G	70,000	G	190,000	C
PARATHION	56382	1,300	G	10,000	C	10,000	C
PCB-1016 (AROCLOR)	12674112	15	G	200	G	10,000	C
PCB-1221 (AROCLOR)	11104282	36	G	160	G	10,000	C
PCB-1232 (AROCLOR)	11141165	36	G	160	G	10,000	C
PCB-1242 (AROCLOR)	53469219	36	G	160	G	10,000	C
PCB-1248 (AROCLOR)	12672296	9.9	G	44	G	10,000	C
PCB-1254 (AROCLOR)	11097691	4.4	G	44	G	10,000	C
PCB-1260 (AROCLOR)	11096825	30	G	130	G	190,000	C
PENTACHLOROBENZENE	608935	180	G	2,200	G	190,000	C
PENTACHLORONITROBENZENE	82688	69	G	310	G	190,000	C
PENTACHLOROPHENOL	87865	150	G	660	G	190,000	C
PHENACETIN	62442	8,100	G	36,000	G	190,000	C
PHENANTHRENE	85018	66,000	G	190,000	C	190,000	C
PHENOL	108952	130,000	G	190,000	C	190,000	C
PHENYLENEDIAMINE, M-	108452	1,300	G	17,000	G	190,000	C
PHORATE	298022	13	N	37	N	43	N
PHTHALIC ANHYDRIDE	85449	190,000	C	190,000	C	190,000	C
PRONAMIDE	23950585	17,000	G	190,000	C	190,000	C
PROPYLENE OXIDE	75569	75	G	330	G	500	N
PYRENE	129000	6,600	G	84,000	G	190,000	C
PYRIDINE	110861	67	N	190	N	210	N
SIMAZINE	122349	150	G	660	G	190,000	C
STRYCHNINE	57249	66	G	840	G	190,000	C
STYRENE	100425	10,000	C	10,000	C	10,000	C
TERBUFOS	13071799	1.7	N	4.6	N	5.3	N
TETRACHLORODIBENZO-P-DIOXIN, 2,3,7,8- (TCDD)	1746016	0.00012	G	0.00053	G	190000	C
TETRACHLOROETHANE, 1,1,2,2-	79345	5.5	N	28	N	33	N
TETRACHLOROETHYLENE (PCE)	127184	340	G	1,500	G	3,300	N

All concentrations in mg/kg

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**APPENDIX A**  
**Table 3—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Soil**  
**A. Direct Contact Numeric Values**

REGULATED SUBSTANCE	CASRN	Residential		Non-Residential			
		0-15 feet		Surface Soil 0-2 feet		Subsurface Soil 2-15 feet	
TETRACHLOROPHENOL, 2,3,4,6-	58902	6,600	G	84,000	G	190,000	C
TETRAETHYL LEAD	78002	0.022	G	0.28	G	10,000	C
THIRAM	137268	1,100	G	14,000	G	190,000	C
TOLUENE	108883	7,600	N	10,000	C	10,000	C
TOLUIDINE, M-	108441	75	G	330	G	10,000	C
TOLUIDINE, O-	95534	99	G	440	G	10,000	C
TOLUIDINE, P-	106490	94	G	420	G	190,000	C
TOXAPHENE	8001352	16	G	72	G	190,000	C
TRIBROMOMETHANE (BROMOFORM)	75252	290	N	1,500	N	1,700	N
TRICHLOROBENZENE, 1,2,4-	120821	2,200	G	10,000	C	10,000	C
TRICHLOROBENZENE, 1,3,5-	108703	2,200	G	28,000	G	190,000	C
TRICHLOROETHANE, 1,1,1-	71556	10,000	C	10,000	C	10,000	C
TRICHLOROETHANE, 1,1,2-	79005	20	N	100	N	120	N
TRICHLOROETHYLENE (TCE)	79016	190	N	970	N	1,100	N
TRICHLOROPHENOL, 2,4,5-	95954	22,000	G	190,000	C	190,000	C
TRICHLOROPHENOL, 2,4,6-	88062	1,600	G	7,200	G	190,000	C
TRICHLOROPHENOXYACETIC ACID, 2,4,5- (2,4,5-T)	93765	2,200	G	28,000	G	190,000	C
TRICHLOROPHENOXYPROPIONIC ACID, 2,4,5- (2,4,5-TP)(SILVEX)	93721	1,800	G	22,000	G	190,000	C
TRICHLOROPROPANE, 1,2,3-	96184	0.16	N	0.82	N	0.95	N
VINYL ACETATE	108054	3,800	N	10,000	C	10,000	C
VINYL CHLORIDE	75014	3.8	N	20	N	22	N
WARFARIN	81812	66	G	840	G	190,000	C
XYLENES (TOTAL)	1330207	10,000	C	10,000	C	10,000	C

All concentrations in mg/kg

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**APPENDIX A**  
**Table 3—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Soil**  
**B. Soil to Groundwater Numeric Values<sup>1</sup>**

REGULATED SUBSTANCE	CASRN	Used Aquifers											Non-Use Aquifers						Soil Buffer Distance (feet)	
		TDS ≤ 2500						TDS > 2500												
		Residential			Non-Residential			Residential			Non-Residential		Residential			Non-Residential				
		100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value		E
ACENAPHTHENE	83329	220	2700	E	350	4,300	E	350	4,300	E	350	4,300	E	350	4,300	E	350	4,300	E	15
ACENAPHTHYLENE	208968	220	2,500	E	390	4,400	E	390	4,400	E	390	4,400	E	390	4,400	E	390	4,400	E	15
ACETALDEHYDE	75070	1.9	0.23	E	5.7	0.69	E	190	23	E	570	69	E	1.9	0.23	E	5.7	0.69	E	NA
ACETONE	67641	370	41	E	1,000	110	E	10,000	4,100	E	10,000	10,000	C	3,700	410	E	10,000	1,100	E	NA
ACETONITRILE	75058	5.8	0.65	E	12	1.3	E	580	65	E	1200	130	E	58	6.5	E	120	13	E	NA
ACETOPHENONE	98862	370	200	E	1000	550	E	10,000	10,000	C	1,000	10,000	C	370	200	E	1,000	550	E	NA
ACETYLAMINOFLUORENE, 2- (2AAF)	53963	0.017	0.069	E	0.068	0.28	E	1.7	6.9	E	6.8	28	E	17	69	E	68	280	E	20
ACROLEIN	107028	0.0055	0.00062	E	0.012	0.0014	E	0.55	0.062	E	1.2	0.14	E	0.055	0.0062	E	0.12	0.014	E	NA
ACRYLAMIDE	79061	0.0033	0.00057	E	0.014	0.0024	E	0.33	0.057	E	1.4	0.24	E	0.0033	0.00057	E	0.014	0.0024	E	NA
ACRYLIC ACID	79107	0.28	0.051	E	0.58	0.11	E	28	5.1	E	58	11	E	28	5.1	E	58	11	E	NA
ACRYLONITRILE	107131	0.063	0.0088	E	0.27	0.038	E	6.3	0.88	E	27	3.8	E	6.3	0.88	E	27	3.8	E	NA
ALACHLOR	15972608	0.2	0.077	E	0.2	0.077	E	20	7.7	E	20	7.7	E	0.2	0.077	E	0.2	0.077	E	NA
ALDICARB	116063	0.7	0.12	E	0.7	0.12	E	70	12	E	70	12	E	700	120	E	700	120	E	NA
ALDRIN	309002	0.00087	0.1	E	0.0037	0.44	E	0.087	10	E	0.37	44	E	0.087	10	E	0.37	44	E	10
ALLYL ALCOHOL	107186	4.9	0.58	E	10	1.2	E	490	58	E	1000	120	E	490	58	E	1,000	120	E	NA
AMINOBIHENYL, 4-	92671	0.0031	0.0012	E	0.012	0.0045	E	0.31	0.12	E	1.2	0.45	E	3.1	1.2	E	12	4.5	E	NA
AMITROLE	61825	0.07	0.028	E	0.28	0.11	E	7	2.8	E	28	11	E	70	28	E	280	110	E	NA
ANILINE	62533	0.28	0.16	E	0.58	0.34	E	28	16	E	58	34	E	0.28	0.16	E	0.58	0.34	E	NA

<sup>1</sup> For other options see Section 250.308

All concentrations in mg/kg

E = Number calculated by the soil to groundwater equation in Section 250.308

C = Cap

NA = The soil buffer distance option is not available for this substance

**APPENDIX A**  
**Table 3—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Soil**  
**B. Soil to Groundwater Numeric Values<sup>1</sup>**

REGULATED SUBSTANCE	CASRN	Used Aquifers											Non-Use Aquifers				Soil Buffer Distance (feet)			
		TDS ≤ 2500						TDS > 2500												
		Residential			Non-Residential			Residential			Non-Residential		Residential		Non-Residential					
		100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E		100 X GW MSC	Generic Value	E
ANTHRACENE	120127	4.3	230	E	4.3	230	E	4.3	230	E	4.3	230	E	4.3	230	E	4.3	230	E	10
ATRAZINE	1912249	0.3	0.13	E	0.3	0.13	E	30	13	E	30	13	E	0.3	0.13	E	0.3	0.13	E	NA
BENZENE	71432	0.5	0.13	E	0.5	0.13	E	50	13	E	50	13	E	50	13	E	50	13	E	NA
BENZO[A]ANTHRACENE	56553	0.09	80	E	0.36	320	E	1.4	1,200	E	1.4	1,200	E	1.4	1,200	E	1.4	1,200	E	5
BENZO[A]PYRENE	50328	0.02	46	E	0.02	46	E	0.38	870	E	0.38	870	E	0.38	870	E	0.38	870	E	5
BENZO[B]FLUORANTHENE	205992	0.09	120	E	0.12	160	E	0.12	160	E	0.12	160	E	0.12	160	E	0.12	160	E	5
BENZO[GHI]PERYLENE	191242	0.026	180	E	0.026	180	E	0.026	180	E	0.026	180	E	0.026	180	E	0.026	180	E	5
BENZO[K]FLUORANTHENE	207089	0.055	600	E	0.055	600	E	0.055	600	E	0.055	600	E	0.055	600	E	0.055	600	E	5
BENZOIC ACID	65850	15000	2,900	E	41,000	7,900	E	190,000	65,000	E	190,000	65,000	E	15,000	2,900	E	41,000	7,900	E	NA
BENZYL ALCOHOL	100516	1100	400	E	3100	1100	E	10000	10000	C	10000	10,000	C	1,100	400	E	3,100	1,100	E	NA
BENZYL CHLORIDE	100447	0.087	0.051	E	0.37	0.22	E	8.7	5.1	E	37	22	E	8.7	5.1	E	37	22	E	NA
BHC, ALPHA	319846	0.01	0.046	E	0.041	0.19	E	1	4.6	E	4.1	19	E	10	46	E	41	190	E	20
BHC, BETA-	319857	0.037	0.22	E	0.14	0.82	E	3.7	22	E	14	82	E	37	220	E	140	820	E	15
BHC, DELTA-	319868	1.1	5.4	E	3.1	15	E	110	540	E	310	1,500	E	1,100	5,400	E	2,100	10,000	E	20
BHC, GAMMA (LINDANE)	58899	0.02	0.071	E	0.02	0.071	E	2	7.1	E	2	7.1	E	20	71	E	20	71	E	20
BIS(2-CHLORO-ISOPROPYL)ETHER	108601	30	8	E	30	8	E	3,000	800	E	3,000	800	E	3,000	800	E	3,000	800	E	NA
BIS(2-CHLOROETHYL)ETHER	111444	0.013	0.0039	E	0.055	0.017	E	1.3	0.39	E	5.5	1.7	E	1.3	0.39	E	5.5	1.7	E	NA

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REGULATED SUBSTANCE	CASRN	Used Aquifers												Non-Use Aquifers				Soil Buffer Distance (feet)		
		TDS ≤ 2500						TDS > 2500												
		Residential			Non-Residential			Residential			Non-Residential			Residential		Non-Residential				
		100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC		Generic Value	E
BIS(CHLOROMETHYL) ETHER	542881	0.000069	0.00001	E	0.00029	0.000044	E	0.0069	0.001	E	0.029	0.0044	E	0.0069	0.001	E	0.029	0.0044	E	NA
BIS[2-ETHYLHEXYL] PHTHALATE	117817	0.6	130	E	0.6	130	E	34	7400	E	34	7,400	E	34	7,400	E	34	7,400	E	10
BROMODICHLORO-METHANE	75274	10	3.4	E	10	3.4	E	1,000	340	E	1,000	340	E	10	3.4	E	10	3.4	E	NA
BROMOMETHANE	74839	1	0.54	E	1	0.54	E	100	54	E	100	54	E	100	54	E	100	54	E	NA
BUTYL ALCOHOL, N-	71363	97	12	E	200	24	E	9,700	1,200	E	10,000	2,400	E	970	120	E	2,000	240	E	NA
BUTYL PHTHALATE, DI-N-	84742	370	1,500	E	1,000	4,100	E	1,300	5,300	E	1,300	5,300	E	1,300	5,300	E	1,300	5,300	E	20
BUTYLBENZYL PHTHALATE	85687	270	10,000	C	270	10,000	C	270	10,000	C	270	10,000	C	270	10,000	C	270	10,000	C	10
CAPTAN	133062	19	12	E	74	45	E	330	200	E	330	200	E	330	200	E	330	200	E	NA
CARBARYL	63252	70	42	E	70	42	E	7,000	4,200	E	7,000	4,200	E	8,300	5,000	E	8,300	5,000	E	NA
CARBOFURAN	1563662	4	0.87	E	4	0.87	E	400	87	E	400	87	E	4	0.87	E	4	0.87	E	NA
CARBON DISULFIDE	75150	190	160	E	410	350	E	10,000	10,000	C	10,000	10,000	C	190	160	E	410	350	E	NA
CARBON TETRACHLORIDE	56235	0.5	0.26	E	0.5	0.26	E	50	26	E	50	26	E	5	2.6	E	5	2.6	E	NA
CHLORDANE	57749	0.2	49	E	0.2	49	E	5.6	1,400	E	5.6	1,400	E	5.6	1,400	E	5.6	1,400	E	10
CHLORO-1-PROPENE, 3-(ALLYL CHLORIDE)	107051	0.28	0.065	E	0.58	0.13	E	28	6.5	E	58	13	E	28	6.5	E	58	13	E	NA
CHLOROANILINE, P-	106478	15	19	E	41	51	E	390	490	E	390	490	E	15	19	E	41	51	E	NA
CHLOROBENZENE	108907	5.5	3.4	E	12	7.5	E	550	340	E	1,200	750	E	550	340	E	1,200	750	E	NA
CHLOROBENZILATE	510156	0.24	1.6	E	0.96	6.4	E	24	160	E	96	640	E	240	1,600	E	960	6,400	E	15

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		TDS ≤ 2500						TDS > 2500												
		Residential			Non-Residential			Residential			Non-Residential		Residential			Non-Residential				
		100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value		E
CHLORODIBROMO-METHANE	124481	10	3.2	E	10	3.2	E	1,000	320	E	1,000	320	E	1,000	320	E	1,000	320	E	NA
CHLOROETHANE	75003	2,800	600	E	5,800	1,200	E	10,000	10,000	C	10,000	10,000	C	10,000	10,000	C	10,000	10,000	C	NA
CHLOROETHYL VINYL ETHER, 2-	110758	24	3.1	E	51	6.5	E	2,400	310	E	5,100	650	E	24	3.1	E	51	6.5	E	NA
CHLOROFORM	67663	10	2.5	E	10	2.5	E	1,000	250	E	1,000	250	E	100	25	E	100	25	E	NA
CHLORONAPHTHALENE, 2-	91587	290	6,200	E	670	14,000	E	670	14,000	E	670	14,000	E	290	6,200	E	670	14,000	E	15
CHLOROPHENOL, 2-	95578	4	4.4	E	4	4.4	E	400	440	E	400	440	E	4	4.4	E	4	4.4	E	NA
CHLOROPRENE	126998	1.9	0.45	E	4.1	0.97	E	190	45	E	410	97	E	190	45	E	410	97	E	NA
CHLORPYRIFOS	2921882	2	23	E	2	23	E	130	1,500	E	130	1,500	E	2	23	E	2	23	E	15
CHRYSENE	218019	0.18	220	E	0.18	220	E	0.18	220	E	0.18	220	E	0.18	220	E	0.18	220	E	5
CRESOL	1319773	4.9	0.85	E	10	1.7	E	490	85	E	1,000	170	E	490	85	E	1000	170	E	NA
CRESOL, P-CHLORO-M-	59507	18	37	E	51	100	E	1,800	3,700	E	5,100	10,000	E	18	37	E	51	100	E	30
CROTONALDEHYDE	4170303	0.0079	0.00099	E	0.034	0.0043	E	0.79	0.099	E	3.4	0.43	E	0.79	0.099	E	3.4	0.43	E	NA
CUMENE	98828	2.5	18	E	5.2	37	E	250	1,800	E	520	3,700	E	250	1,800	E	520	3,700	E	15
CYCLOHEXANONE	108941	4,900	1,400	E	10,000	2,800	E	10,000	10,000	C	10,000	10,000	C	4,900	1,400	E	10,000	2,800	E	NA
DDD, 4,4'-	72548	0.062	6.8	E	0.27	29	E	6.2	680	E	16	1,700	E	6.2	680	E	16	1,700	E	10
DDE, 4,4'-	72559	0.13	28	E	0.13	28	E	0.13	28	E	0.13	28	E	0.13	28	E	0.13	28	E	10
DDT, 4,4'-	50293	0.17	100	E	0.17	100	E	0.17	100	E	0.17	100	E	0.17	100	E	0.17	100	E	5
DIALATE	2303164	0.25	0.15	E	1	0.59	E	25	15	E	100	59	E	25	15	E	100	59	E	NA

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REGULATED SUBSTANCE	CASRN	Used Aquifers												Non-Use Aquifers				Soil Buffer Distance (feet)		
		TDS ≤ 2500						TDS > 2500												
		Residential			Non-Residential			Residential			Non-Residential			Residential		Non-Residential				
		100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC		Generic Value	E
DIAZINON	333415	0.06	0.082	E	0.06	0.082	E	6	8.2	E	6	8.2	E	0.06	0.082	E	0.06	0.082	E	30
DIBENZO[A,H]ANTHRACENE	53703	0.009	41	E	0.036	160	E	0.05	230	E	0.05	230	E	0.05	230	E	0.05	230	E	5
DIBROMO-3-CHLOROPRO-PANE, 1,2-	96128	0.02	0.0091	E	0.02	0.0091	E	2	0.91	E	2	0.91	E	2	0.91	E	2	0.91	E	NA
DIBROMOETHANE, 1,2-(ETHYLENE DIBROMIDE)	106934	0.005	0.0012	E	0.005	0.0012	E	0.5	0.12	E	0.5	0.12	E	0.5	0.12	E	0.5	0.12	E	NA
DIBROMOMETHANE	74953	9.7	3.7	E	20	7.7	E	970	370	E	2,000	770	E	970	370	E	2,000	770	E	NA
DICHLOROBENZENE, 1,2-	95501	60	60	E	60	60	E	6,000	6,000	E	6,000	6,000	E	6,000	6,000	E	6,000	6,000	E	NA
DICHLOROBENZENE, 1,3-	541731	60	61	E	60	61	E	6,000	6,100	E	6,000	6,100	E	6,000	6,100	E	6,000	6,100	E	NA
DICHLOROBENZENE, P-	106467	7.5	10	E	7.5	10	E	750	1,000	E	750	1,000	E	750	1,000	E	750	1,000	E	30
DICHLOROBENZIDINE, 3,3'-	91941	0.15	8.4	E	0.58	33	E	15	840	E	58	3,300	E	150	8,400	E	580	33,000	E	10
DICHLORODIFLUORO-METHANE (FREON 12)	75718	100	100	E	100	100	E	10,000	10,000	C	10,000	10,000	C	10,000	10,000	C	10,000	10,000	C	NA
DICHLOROETHANE, 1,1-	75343	2.7	0.65	E	11	2.7	E	270	65	E	1,100	270	E	27	6.5	E	110	27	E	NA
DICHLOROETHANE, 1,2-	107062	0.5	0.1	E	0.5	0.1	E	50	10	E	50	10	E	5	1	E	5	1	E	NA
DICHLOROETHYLENE, 1,1-	75354	0.7	0.19	E	0.7	0.19	E	70	19	E	70	19	E	7	1.9	E	7	1.9	E	NA
DICHLOROETHYLENE, CIS-1,2-	156592	7	1.6	E	7	1.6	E	700	160	E	700	160	E	70	16	E	70	16	E	NA
DICHLOROETHYLENE, TRANS-1,2-	156605	10	2.3	E	10	2.3	E	1,000	230	E	1,000	230	E	100	23	E	100	23	E	NA
DICHLOROMETHANE (METHYLENE CHLORIDE)	75092	0.5	0.075	E	0.5	0.075	E	50	7.5	E	50	7.5	E	50	7.5	E	50	7.5	E	NA

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		Residential			Non-Residential		Residential			Non-Residential		Residential			Non-Residential					
		100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC		Generic Value	E
DICHLOROPHENOL, 2,4-	120832	2	1	E	2	1	E	200	100	E	200	100	E	2,000	1,000	E	2,000	1,000	E	NA
DICHLOROPHENOXYACETIC ACID, 2,4- (2,4-D)	94757	7	1.8	E	7	1.8	E	700	180	E	700	180	E	700	180	E	700	180	E	NA
DICHLOROPROPANE, 1,2-	78875	0.5	0.11	E	0.5	0.11	E	50	11	E	50	11	E	5	1.1	E	5	1.1	E	NA
DICHLOROPROPIONIC ACID (DALAPON), 2,2-	75990	20	5.3	E	20	5.3	E	2,000	530	E	2,000	530	E	2,000	530	E	2,000	530	E	NA
DICHLORVOS	62737	0.052	0.012	E	0.22	0.052	E	5.2	1.2	E	22	5.2	E	0.052	0.012	E	0.22	0.052	E	NA
DIELDRIN	60571	0.0041	0.11	E	0.016	0.44	E	0.41	11	E	1.6	44	E	4.1	110	E	16	440	E	15
DIETHYL PHTHALATE	84662	500	160	E	500	160	E	10,000	10,000	C	10,000	10,000	C	10,000	10,000	C	10,000	10,000	C	NA
DIMETHOATE	60515	0.73	0.28	E	2	0.77	E	73	28	E	200	77	E	730	280	E	2000	770	E	NA
DIMETHYLAMINOAZO-BENZENE, P-	60117	0.014	0.037	E	0.057	0.15	E	1.4	3.7	E	5.7	15	E	14	37	E	23	60	E	20
DIMETHYLHYDRAZINE, 1,1-	57147	0.0087	0.00097	E	0.037	0.0041	E	0.87	0.097	E	3.7	0.41	E	0.087	0.0097	E	0.37	0.041	E	NA
DIMETHYLPHENOL, 2,4-	105679	73	31	E	200	85	E	7,300	3,100	E	10,000	8,500	E	10,000	10,000	C	10,000	10,000	C	NA
DINITROBENZENE, 1,3-	99650	0.1	0.049	E	0.1	0.049	E	10	4.9	E	10	4.9	E	100	49	E	100	49	E	NA
DINITROPHENOL, 2,4-	51285	1.9	0.21	E	4.1	0.46	E	190	21	E	410	46	E	19	2.1	E	41	4.6		NA
DINITROTOLUENE, 2,4-	121142	0.21	0.05	E	0.84	0.2	E	21	5	E	84	20	E	210	50	E	840	200	E	NA
DINITROTOLUENE, 2,6- (2,6-DNT)	606202	3.7	1.1	E	10	3	E	370	110	E	1,000	300	E	3700	1,100	E	10,000	3,000	E	NA
DINOSEB	88857	0.7	0.29	E	0.7	0.29	E	70	29	E	70	29	E	70	29	E	70	29	E	NA
DIOXANE, 1,4-	123911	0.56	0.073	E	2.4	0.31	E	56	7.3	E	240	31	E	5.6	0.73	E	24	3.1	E	NA

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		Residential			Non-Residential			Residential			Non-Residential			Residential			Non-Residential							
		100 X GW MSC	Generic Value		100 X GW MSC	Generic Value		100 X GW MSC	Generic Value		100 X GW MSC	Generic Value		100 X GW MSC	Generic Value		100 X GW MSC	Generic Value						
DIPHENYLAMINE	122394	20	12	E	20	12	E		2,000	1,200	E		2,000	1,200	E		20,000	12,000	E		20,000	12,000	E	NA
DIPHENYLHYDRAZINE, 1,2-	122667	0.083	0.15	E	0.33	0.58	E		8.3	15	E		33	58	E		83	150	E		330	580	E	30
DIQUAT	85007	2	0.24	E	2	0.24	E		200	24	E		200	24	E		2	0.24	E		2	0.24	E	NA
DISULFOTON	298044	0.03	0.08	E	0.03	0.08	E		3	8	E		3	8	E		3	8	E		3	8	E	20
DIURON	330541	1	0.87	E	1	0.87	E		100	87	E		100	87	E		1	0.87	E		1	0.87	E	NA
ENDOSULFAN I (ALPHA)	959988	22	110	E	53	280	E		53	280	E		53	280	E		22	110	E		53	280	E	15
ENDOSULFAN II (BETA)	33213659	22	130	E	28	170	E		28	170	E		28	170	E		22	130	E		28	170	E	15
ENDOSULFAN SULFATE	1031078	12	72	E	12	72	E		12	72	E		12	72	E		12	72	E		12	72	E	15
ENDOTHALL	145733	10	4.2	E	10	4.2	E		1,000	420	E		1,000	420	E		10	4.2	E		10	4.2	E	NA
ENDRIN	72208	0.2	5.4	E	0.2	5.4	E		20	540	E		20	540	E		0.2	5.4	E		0.2	5.4	E	15
EPICHLOROHYDRIN	106898	0.28	0.056	E	0.58	0.12	E		28	5.6	E		58	12	E		28	5.6	E		58	12	E	NA
ETHION	563122	1.8	39	E	5.1	110	E		60	1300	E		60	1300	E		1.8	39	E		5.1	110	E	15
ETHOXYETHANOL, 2-(EGEE)	110805	390	55	E	820	120	E		10,000	5,500	E		10,000	10000	C		10,000	5,500	E		10,000	10,000	C	NA
ETHYL ACETATE	141786	870	220	E	1,800	460	E		10,000	10,000	C		10,000	10000	C		10,000	10,000	C		10,000	10,000	C	NA
ETHYL ACRYLATE	140885	0.31	0.12	E	1.3	0.49	E		31	12	E		130	49	E		31	12	E		130	49	E	NA
ETHYL BENZENE	100414	70	46	E	70	46	E		7,000	4,600	E		7,000	4,600	E		7,000	4,600	E		7,000	4,600	E	NA
ETHYL ETHER	60297	190	53	E	410	110	E		10,000	5,300	E		10,000	10,000	C		190	53	E		410	110	E	NA
ETHYLENE GLYCOL	107211	700	85	E	700	85	E		10,000	8,500	E		10,000	8,500	E		10,000	8,500	E		10,000	8,500	E	NA

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		Residential		Non-Residential			Residential		Non-Residential			Residential		Non-Residential						
		100 X GW MSC	Generic Value	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value		E	
FENAMIPHOS	22224926	0.2	0.17	E	0.2	0.17	E	20	17	E	20	17	E	0.2	0.17	E	0.2	0.17	E	NA
FLUORANTHENE	206440	27	3,300	E	27	3,300	E	27	3,300	E	27	3,300	E	27	3,300	E	27	3,300	E	10
FLUORENE	86737	19	380	E	19	380	E	19	380	E	19	380	E	19	380	E	19	380	E	15
FLUOROTRICHLO- METHANE (FREON 11)	75694	200	90	E	200	90	E	10,000	9,000	E	10,000	9,000	E	10,000	9,000	E	10,000	9,000	E	NA
FONOFOS	944229	1	2.8	E	1	2.8	E	100	280	E	100	280	E	1	2.8	E	1	2.8	E	20
FORMALDEHYDE	50000	100	12	E	100	12	E	10,000	1,200	E	10,000	1,200	E	10,000	1,200	E	10,000	1,200	E	NA
FORMIC ACID	64186	1,900	210	E	4,100	460	E	10,000	10,000	C	10,000	10,000	C	10,000	2,100	E	10,000	4,600	E	NA
FURFURAL	98011	11	1.4	E	29	3.7	E	1,100	140	E	2,900	370	E	11	1.4	E	29	3.7	E	NA
GLYPHOSATE	1071836	70	630	E	70	630	E	7,000	63,000	E	7,000	63,000	E	70	630	E	70	630	E	15
HEPTACHLOR	76448	0.04	0.68	E	0.04	0.68	E	4	68	E	4	68	E	18	310	E	18	310	E	15
HEPTACHLOR EPOXIDE	1024573	0.02	1	E	0.02	1	E	2	100	E	2	100	E	20	1,000	E	20	1,000	E	10
HEXACHLOROBENZENE	118741	0.1	0.96	E	0.1	0.96	E	0.62	6	E	0.62	6	E	0.62	6	E	0.62	6	E	15
HEXACHLOROBUTADIENE	87683	0.1	1.2	E	0.1	1.2	E	10	120	E	10	120	E	100	1,200	E	100	1,200	E	15
HEXACHLOROCYCLO- PENTADIENE	77474	5	91	E	5	91	E	340	6,200	E	340	6,200	E	340	6,200	E	340	6,200	E	15
HEXACHLOROETHANE	67721	0.1	0.56	E	0.1	0.56	E	10	56	E	10	56	E	10	56	E	10	56	E	15
HEXANE	110543	55	510	E	120	1,100	E	950	8,700	E	950	8,700	E	55	510	E	120	1,100	E	15
INDENO[1,2,3-CD]PYRENE	193395	0.09	7,000	E	0.36	28,000	E	6.2	190,000	C	6.2	190,000	C	6	190,000	C	6	190,000	C	5
ISOBUTYL ALCOHOL	78831	290	76	E	610	160	E	10,000	7,600	E	10,000	10,000	C	10,000	7,600	E	10,000	10,000	C	NA

<sup>1</sup> For other options see Section 250.308

All concentrations in mg/kg

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**APPENDIX A**  
**Table 3—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Soil**  
**B. Soil to Groundwater Numeric Values<sup>1</sup>**

REGULATED SUBSTANCE	CASRN	Used Aquifers										Non-Use Aquifers						Soil Buffer Distance (feet)			
		TDS ≤ 2500					TDS > 2500														
		Residential			Non-Residential		Residential			Non-Residential		Residential			Non-Residential						
		100 X GW MSC	Generic Value		100 X GW MSC	Generic Value	100 X GW MSC	Generic Value		100 X GW MSC	Generic Value	100 X GW MSC	Generic Value		100 X GW MSC	Generic Value					
ISOPHORONE	78591	10	1.9	E	10	1.9	E		1,000	190	E	1,000	190	E	10,000	1,900	E	10,000	1,900	E	NA
KEPONE	143500	0.0041	0.56	E	0.016	2.2	E		0.41	56	E	1.6	220	E	4.1	560	E	16	2,200	E	10
MALATHION	121755	20	67	E	20	67	E		2,000	6,700	E	2,000	6,700	E	2,000	6,700	E	2,000	6,700	E	20
MALEIC HYDRAZIDE	123331	400	47	E	400	47	E		40,000	4,700	E	40,000	4,700	E	400	47	E	400	47	E	NA
METHACRYLONITRILE	126987	0.19	0.031	E	0.41	0.067	E		19	3.1	E	41	6.7	E	0.19	0.031	E	0.41	0.067	E	NA
METHANOL	67561	490	58	E	1,000	120	E		10,000	5,800	E	10,000	10,000	C	10,000	5,800	E	10,000	10,000	C	NA
METHOMYL	16752775	20	3.2	E	20	3.2	E		2,000	320	E	2,000	320	E	20	3.2	E	20	3.2	E	NA
METHOXYCHLOR	72435	4	630	E	4	630	E		10	1,600	E	10	1,600	E	10	1,600	E	10	1,600	E	10
METHYL CHLORIDE	74873	0.3	0.038	E	0.3	0.038	E		30	3.8	E	30	3.8	E	30	3.8	E	30	3.8	E	NA
METHYL ETHYL KETONE	78933	280	53	E	580	110	E		10,000	5,300	E	10,000	10,000	C	10,000	5,300	E	10,000	10,000	C	NA
METHYL ISOBUTYL KETONE	108101	22	3.4	E	47	7.3	E		2,200	340	E	4,700	730	E	2,200	340	E	4,700	730	E	NA
METHYL METHACRYLATE	80626	78	11	E	160	22	E		7,800	1,100	E	10,000	2,200	E	7,800	1,100	E	10,000	2,200	E	NA
METHYL METHANESULFONATE	66273	0.67	0.083	E	2.6	0.32	E		67	8.3	E	260	32	E	0.67	0.083	E	2.6	0.32	E	NA
METHYL PARATHION	298000	0.2	0.42	E	0.2	0.42	E		20	42	E	20	42	E	20	42	E	20	42	E	30
METHYL TERT-BUTYL ETHER (MTBE)	1634044	2	0.28	E	2	0.28	E		200	28	E	200	28	E	20	2.8	E	20	2.8	E	NA
METHYLNAPHTHALENE, 2-	91576	150	6,000	E	410	10,000	C		2500	10,000	C	2,500	10,000	C	150	6,000	E	410	10,000	C	15
NAPHTHALENE	91203	2	5	E	2	5	E		200	500	E	200	500	E	2,000	5,000	E	2,000	5,000	E	30
NAPHTHYLAMINE, 1-	134327	0.037	0.3	E	0.14	1.1	E		3.7	30	E	14	110	E	37	300	E	140	1,100	E	15

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All concentrations in mg/kg

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**APPENDIX A**  
**Table 3—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Soil**  
**B. Soil to Groundwater Numeric Values<sup>1</sup>**

REGULATED SUBSTANCE	CASRN	Used Aquifers											Non-Use Aquifers						Soil Buffer Distance (feet)	
		TDS ≤ 2500						TDS > 2500												
		Residential			Non-Residential			Residential			Non-Residential		Residential			Non-Residential				
		100 X GW MSC	Generic Value		100 X GW MSC	Generic Value		100 X GW MSC	Generic Value		100 X GW MSC	Generic Value		100 X GW MSC	Generic Value		100 X GW MSC	Generic Value		
NAPHTHYLAMINE, 2-	91598	0.037	0.012	E	0.14	0.046	E	3.7	1.2	E	14	4.6	E	37	12	E	140	46	E	NA
NITROANILINE, M-	99092	0.21	0.033	E	0.58	0.091	E	21	3.3	E	58	9.1	E	0.21	0.033	E	0.58	0.091	E	NA
NITROANILINE, O-	88744	0.21	0.037	E	0.58	0.1	E	21	3.7	E	58	10	E	0.21	0.037	E	0.58	0.1	E	NA
NITROANILINE, P-	100016	0.21	0.031	E	0.58	0.086	E	21	3.1	E	58	8.6	E	0.21	0.031	E	0.58	0.086	E	NA
NITROBENZENE	98953	1.8	0.79	E	5.1	2.2	E	180	79	E	510	220	E	1,800	790	E	5,100	2,200	E	NA
NITROPHENOL, 2-	88755	230	47	E	630	130	E	23,000	4,700	E	63,000	13,000	E	190,000	43,000	E	190,000	43,000	E	NA
NITROPHENOL, 4-	100027	6	4.2	E	6	4.2	E	600	420	E	600	420	E	6,000	4,200	E	6,000	4,200	E	NA
NITROPROPANE, 2-	79469	0.0016	0.00026	E	0.0068	0.0011	E	0.16	0.026	E	0.68	0.11	E	0.016	0.0026	E	0.068	0.011	E	NA
NITROSODI-N-PROPYLAMINE, N-	621647	0.0094	0.0013	E	0.037	0.0051	E	0.94	0.13	E	3.7	0.51	E	9.4	1.3	E	37	5.1	E	NA
NITROSODIETHYLAMINE, N-	55185	0.0001	0.000018	E	0.00043	0.000075	E	0.01	0.0018	E	0.043	0.0075	E	0.001	0.00018	E	0.0043	0.00075	E	NA
NITROSODIMETHYLAMINE, N-	62759	0.00031	0.000041	E	0.0013	0.00017	E	0.031	0.0041	E	0.13	0.017	E	0.0031	0.00041	E	0.013	0.0017	E	NA
NITROSODIPHENYLAMINE, N-	86306	13	20	E	53	82	E	1,300	2,000	E	3,500	5,400	E	3,500	5,400	E	3,500	5,400	E	30
OCTYL PHTHALATE, DI-N-	117840	73	10,000	C	200	10,000	C	300	10,000	C	300	10,000	C	300	10,000	C	300	10,000	C	5
OXAMYL (VYDATE)	23135220	20	2.6	E	20	2.6	E	2000	260	E	2,000	260	E	20	2.6	E	20	2.6	E	NA
PARATHION	56382	22	130	E	61	360	E	650	3,900	E	650	3,900	E	22	130	E	61	360	E	15
PCB-1016 (AROCLOR)	12674112	0.26	70	E	0.72	190	E	4.9	1,300	E	4.9	1,300	E	0.26	70	E	0.72	190	E	10
PCB-1221 (AROCLOR)	11104282	0.13	0.62	E	0.52	2.5	E	13	62	E	20	95	E	0.13	0.62	E	0.52	2.5	E	20

<sup>1</sup> For other options see Section 250.308

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**APPENDIX A**  
**Table 3—Medium-Specific Concentrations (MSCs) for Organic Regulated Substances in Soil**  
**B. Soil to Groundwater Numeric Values<sup>1</sup>**

REGULATED SUBSTANCE	CASRN	Used Aquifers										Non-Use Aquifers						Soil Buffer Distance (feet)		
		TDS ≤ 2500					TDS > 2500					Residential			Non-Residential					
		Residential		Non-Residential			Residential		Non-Residential			Residential		Non-Residential						
		100 X GW MSC	Generic Value	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value		E	
PCB-1232 (AROCOR)	11141165	0.13	0.52	E	0.52	2.1	E	13	52	E	52	210	E	0.13	0.52	E	0.52	2.1	E	20
PCB-1242 (AROCOR)	53469219	0.13	16	E	0.52	62	E	13	1,600	E	24	2,900	E	0.13	16	E	0.52	62	E	10
PCB-1248 (AROCOR)	12672296	0.037	18	E	0.14	67	E	0.6	290	E	0.6	290	E	0.037	18	E	0.14	67	E	10
PCB-1254 (AROCOR)	11097691	0.037	75	E	0.14	280	E	1.2	2,400	E	1.2	2,400	E	0.037	75	E	0.14	280	E	5
PCB-1260 (AROCOR)	11096825	0.025	110	E	0.11	500	E	2.5	11,000	E	8	36,000	E	0.025	110	E	0.11	500	E	5
PENTACHLOROBENZENE	608935	2.9	230	E	8.2	660	E	24	1,900	E	24	1,900	E	24	1,900	E	24	1,900	E	10
PENTACHLORONITRO-BENZENE	82688	0.25	5	E	1	20	E	25	500	E	59	1,200	E	59	1,200	E	59	1,200	E	15
PENTACHLOROPHENOL	87865	0.1	5	E	0.1	5	E	10	500	E	10	500	E	100	5,000	E	100	5,000	E	10
PHENACETIN	62442	30	12	E	120	47	E	3000	1,200	E	12,000	4,700	E	30,000	12,000	E	76,000	30,000	E	NA
PHENANTHRENE	85018	120	11,000	E	120	11,000	E	120	11,000	E	120	11,000	E	120	11,000	E	120	11,000	E	10
PHENOL	108952	400	66	E	400	66	E	40,000	6,600	E	40,000	6,600	E	40,000	6,600	E	40,000	6,600	E	NA
PHENYLENEDIAMINE, M-	108452	22	3.1	E	61	8.6	E	2200	310	E	6100	860	E	22,000	3,100	E	61,000	8,600	E	NA
PHORATE	298022	0.19	0.41	E	0.41	0.88	E	19	41	E	41	88	E	0.19	0.41	E	0.41	0.88	E	30
PHTHALIC ANHYDRIDE	85449	7,300	2,300	E	20,000	6,200	E	190,000	190,000	C	190,000	190,000	C	190,000	190,000	C	190,000	190,000	C	NA
PRONAMIDE	23950585	5	3	E	5	3	E	500	300	E	500	300	E	5	3	E	5	3	E	NA
PROPYLENE OXIDE	75569	0.28	0.048	E	1.1	0.19	E	28	4.8	E	110	19	E	0.28	0.048	E	1.1	0.19	E	NA
PYRENE	129000	1.3	220	E	1.3	220	E	1.3	220	E	1.3	220	E	1.3	220	E	1.3	220	E	10
PYRIDINE	110861	0.97	0.11	E	2	0.22	E	97	11	E	200	22	E	9.7	1.1	E	20	2.2	E	NA
SIMAZINE	122349	0.4	0.16	E	0.4	0.16	E	40	16	E	40	16	E	0.4	0.16	E	0.4	0.16	E	NA

<sup>1</sup> For other options see Section 250.308

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REGULATED SUBSTANCE	CASRN	Used Aquifers										Non-Use Aquifers						Soil Buffer Distance (feet)		
		TDS ≤ 2500					TDS > 2500					Residential			Non-Residential					
		Residential		Non-Residential			Residential		Non-Residential			Residential		Non-Residential						
		100 X GW MSC	Generic Value	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value	E	100 X GW MSC	Generic Value		E	
STRYCHNINE	57249	1.1	0.9	E	3.1	2.5	E	110	90	E	310	250	E	1,100	900	E	3,100	2,500	E	NA
STYRENE	100425	10	24	E	10	24	E	1,000	2,400	E	1,000	2,400	E	1,000	2,400	E	1,000	2,400	E	30
TERBUFOS	13071799	0.09	0.13	E	0.09	0.13	E	9	13	E	9	13	E	0.09	0.13	E	0.09	0.13	E	30
TETRACHLORODIBENZO-P-DIOXIN, 2,3,7,8- (TCDD)	1746016	0.000003	0.032	E	0.000003	0.032	E	0.0003	3.2	E	0.0003	3.2	E	0.0019	20	E	0.0019	20	E	5
TETRACHLOROETHANE, 1,1,2,2-	79345	0.074	0.023	E	0.32	0.099	E	7.4	2.3	E	32	9.9	E	7.4	2.3	E	32	9.9	E	NA
TETRACHLOROETHYLENE (PCE)	127184	0.5	0.43	E	0.5	0.43	E	50	43	E	50	43	E	5	4.3	E	5	4.3	E	NA
TETRACHLOROPHENOL, 2,3,4,6-	58902	29	450	E	61	950	E	2,900	45,000	E	6,100	95,000	E	2,900	45,000	E	6,100	95,000	E	15
TETRAETHYL LEAD	78002	0.00037	0.0046	E	0.001	0.012	E	0.037	0.46	E	0.1	1.2	E	0.37	4.6	E	1	12	E	15
THIRAM	137268	18	47	E	51	130	E	1,800	4,700	E	3,000	7800	E	18	47	E	51	130	E	20
TOLUENE	108883	100	44	E	100	44	E	10,000	4,400	E	10,000	4,400	E	10,000	4,400	E	10,000	4,400	E	NA
TOLUIDINE, M-	108441	0.28	0.13	E	1.1	0.5	E	28	13	E	110	50	E	0.28	0.13	E	1.1	0.5	E	NA
TOLUIDINE, O-	95534	0.37	0.42	E	1.4	1.6	E	37	42	E	140	160	E	370	420	E	1400	1600	E	NA
TOLUIDINE, P-	106490	0.35	0.32	E	1.4	1.3	E	35	32	E	140	130	E	0.35	0.32	E	1.4	1.3	E	NA
TOXAPHENE	8001352	0.3	1.2	E	0.3	1.2	E	30	120	E	30	120	E	0.3	1.2	E	0.3	1.2	E	20
TRIBROMOMETHANE (BROMOFORM)	75252	10	4.3	E	10	4.3	E	1,000	430	E	1,000	430	E	1000	430	E	1000	430	E	NA
TRICHLOROBENZENE, 1,2,4-	120821	7	28	E	7	28	E	700	2,800	E	700	2,800	E	4,900	10,000	C	4,900	10,000	C	20

<sup>1</sup> For other options see Section 250.308  
All concentrations in mg/kg  
E = Number calculated by the soil to groundwater equation in Section 250.308  
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**B. Soil to Groundwater Numeric Values<sup>1</sup>**

REGULATED SUBSTANCE	CASRN	Used Aquifers										Non-Use Aquifers						Soil Buffer Distance (feet)							
		TDS ≤ 2500					TDS > 2500																		
		Residential			Non-Residential		Residential			Non-Residential		Residential			Non-Residential										
		100 X GW MSC	Generic Value		100 X GW MSC	Generic Value	100 X GW MSC	Generic Value		100 X GW MSC	Generic Value	100 X GW MSC	Generic Value		100 X GW MSC	Generic Value			100 X GW MSC	Generic Value					
TRICHLOROENZENE, 1,3,5-	108703	4	31	E	4	31	E		400	3,100	E		400	3100	E		4	31	E		4	31	E		15
TRICHLOROETHANE, 1,1,1-	71556	20	7.2	E	20	7.2	E		2,000	720	E		2,000	720	E		200	72	E		200	72	E		NA
TRICHLOROETHANE, 1,1,2-	79005	0.5	0.15	E	0.5	0.15	E		50	15	E		50	15	E		5	1.5	E		5	1.5	E		NA
TRICHLOROETHYLENE (TCE)	79016	0.5	0.17	E	0.5	0.17	E		50	17	E		50	17	E		5	1.7	E		5	1.7	E		NA
TRICHLOROPHENOL, 2,4,5-	95954	370	2,300	E	1,000	6,100	E		37,000	190,000	C		100,000	190,000	C		120,000	190,000	C		120,000	190,000	C		15
TRICHLOROPHENOL, 2,4,6-	88062	6	17	E	24	67	E		600	1,700	E		2,400	6,700	E		6,000	17,000	E		24,000	67,000	E		20
TRICHLOROPHENOXYACETIC ACID, 2,4,5- (2,4,5-T)	93765	7	1.5	E	7	1.5	E		700	150	E		700	150	E		7,000	1,500	E		7,000	1,500	E		NA
TRICHLOROPHENOXYPROPIONIC ACID, 2,4,5- (2,4,5-TP)(SILVEX)	93721	5	22	E	5	22	E		500	2,200	E		500	2,200	E		5	22	E		5	22	E		20
TRICHLOROPROPANE, 1,2,3-	96184	4	3.3	E	4	3.3	E		400	330	E		400	330	E		400	330	E		400	330	E		NA
VINYL ACETATE	108054	55	6.5	E	120	14	E		5500	650	E		10,000	1,400	E		55	6.5	E		120	14	E		NA
VINYL CHLORIDE	75014	0.2	0.027	E	0.2	0.027	E		20	2.7	E		20	2.7	E		2	0.27	E		2	0.27	E		NA
WARFARIN	81812	9.2E-08	2.2E-07	E	9.2E-08	2.2E-07	E		9.2E-08	2.2E-07	E		9.2E-08	2.2E-07	E		9.2E-08	2.2E-07	E		9.2E-08	2.2E-07	E		30
XYLENES (TOTAL)	1330207	1,000	850	E	1,000	850	E		10,000	10,000	C		10,000	10,000	C		10,000	10,000	C		10,000	10,000	C		NA

<sup>1</sup> For other options see Section 250.308  
 All concentrations in mg/kg  
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**APPENDIX A**  
**Table 4—Medium-Specific Concentrations (MSCs) for Inorganic Regulated Substances in Soil**  
**A. Direct Contact Numeric Values**

REGULATED SUBSTANCE	CASRN	Residential MSC		Non-Residential MSCs			
		0-15 feet		Surface Soil 0-2 feet		Subsurface Soil 2-15 feet	
ALUMINUM	7429905	190,000	C	190,000	C	190,000	C
ANTIMONY	7440360	88	G	1,100	G	190,000	C
ARSENIC	7440382	12	G	53	G	190,000	C
ASBESTOS	12001295	1,100	N	5,500	N	190,000	C
BARIUM AND COMPOUNDS	7440393	15,000	G	190,000	C	190,000	C
BERYLLIUM	7440417	4.2	G	18	G	190,000	C
BORON AND COMPOUNDS	7440428	20,000	G	190,000	C	190,000	C
CADMIUM	7440439	110	G	1,400	G	190,000	C
CHROMIUM III	16065831	190,000	C	190,000	C	190,000	C
CHROMIUM VI	18540299	1,100	G	14,000	G	190,000	C
COBALT	7440484	13,000	G	170,000	G	190,000	C
COPPER	7440508	190,000	C	190,000	C	190,000	C
CYANIDE, FREE	57125	4,400	G	56,000	G	190,000	C
IRON	7439896	66,000	G	190,000	C	190,000	C
LEAD	7439921	500	U	1,000	S	190,000	C
MANGANESE	7439965	10,000	G	130,000	G	190,000	C
MERCURY	7439976	19	G	240	G	190,000	C
NICKEL	7440020	4,400	G	56,000	G	190,000	C
SELENIUM	7782492	1,100	G	14,000	G	190,000	C
SILVER	7440224	1,100	G	14,000	G	190,000	C
THALLIUM	7440280	18	G	220	G	190,000	C
TIN	7440315	130,000	G	190,000	C	190,000	C
VANADIUM	7440622	13	G	160	G	190,000	C
ZINC	7440666	66,000	G	190,000	C	190,000	C

All concentrations in mg/kg

R—Residential

NR—Non-Residential

G—Ingestion

N—Inhalation

C—Cap

U—UBK Model

S—SEGH Model

NA—Not Applicable

**APPENDIX A**  
**Table 4—Medium-Specific Concentrations (MSCs) for Inorganic Regulated Substances in Soil**  
**B. Soil to Groundwater Numeric Values<sup>1</sup>**

RELATED SUBSTANCE	CASRN	Used Aquifers								Non-use Aquifers				Soil
		TDS ≤ 2500				TDS > 2500								Buffer
		R		NR		R		NR		R		NR		Distance
		100 X GW MSC	Generic Value	100 X GW MSC	Generic Value	100 X GW MSC	Generic Value	100 X GW MSC	Generic Value	100 X GW MSC	Generic Value	100 X GW MSC	Generic Value	(feet)
ALUMINUM	7429905	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ANTIMONY	7440360	0.6	27	0.6	27	60	2,700	60	2,700	600	27,000	600	27,000	15
ARSENIC	7440382	5	150	5	150	500	15,000	500	15,000	5,000	150,000	5,000	150,000	15
ASBESTOS	1.2E+07	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BARIUM AND COMPOUNDS	7440393	200	8,200	200	8,200	20,000	190,000	20,000	190,000	190,000	190,000	190,000	190,000	15
BERYLLIUM	7440417	0.4	320	0.4	320	40	32,000	40	32,000	400	190,000	400	190,000	10
BORON AND COMPOUNDS	7440428	6.0	6.7	60	6.7	6,000	670	6,000	670	60,000	6,700	60,000	6,700	NA
CADMIUM	7440439	0.5	38	0.5	38	50	3,800	50	3,800	500	38,000	500	38,000	15
CHROMIUM III	1.6E+07	10	190,000	10	190,000	1,000	190,000	1,000	190,000	10,000	190,000	10,000	190,000	5
CHROMIUM VI	1.9E+07	18	340	51	970	1,800	34,000	5,100	97,000	18,000	190,000	51,000	190,000	15
COBALT	7440484	220	24	610	68	22,000	2,400	61,000	6,800	190,000	24,000	190,000	68,000	NA
COPPER	7440508	100	36,000	100	36,000	10,000	190,000	10,000	190,000	100,000	190,000	100,000	190,000	10
CYANIDE, FREE	57125	20	200	20	200	2,000	20,000	2,000	20,000	20,000	190,000	20,000	190,000	20
IRON	7439896	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LEAD	7439921	0.5	450	0.5	450	50	45,000	50	45,000	500	190,000	500	190,000	10
MANGANESE	7439965	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MERCURY	7439976	0.2	10	0.2	10	20	1,000	20	1,000	200	10,000	200	10,000	15
NICKEL	7440020	10	650	10	650	1,000	65,000	1,000	65,000	10,000	190,000	10,000	190,000	15

<sup>1</sup> For other options see Section 250.308  
 All concentrations in mg/kg  
 R=Residential  
 NR=Non-Residential  
 G=Ingestion  
 N=Inhalation  
 E=Soil to groundwater equation  
 C=Cap  
 NA=Not Applicable

**APPENDIX A**  
**Table 4—Medium-Specific Concentrations (MSCs) for Inorganic Regulated Substances in Soil**  
**B. Soil to Groundwater Numeric Values<sup>1</sup>**

RELATED SUBSTANCE	CASRN	Used Aquifers								Non-use Aquifers				Soil
		TDS ≤ 2500				TDS > 2500								Buffer
		R		NR		R		NR		R		NR		Distance
		100 X GW MSC	Generic Value	100 X GW MSC	Generic Value	100 X GW MSC	Generic Value	100 X GW MSC	Generic Value	100 X GW MSC	Generic Value	100 X GW MSC	Generic Value	(feet)
SELENIUM	7782492	5	26	5	26	500	2,600	500	2,600	5,000	26,000	5,000	26,000	20
SILVER	7440224	10	84	10	84	1,000	8,400	1,000	8,400	10,000	84,000	10,000	84,000	20
THALLIUM	7440280	0.2	14	0.2	14	20	1,400	20	1,400	200	14,000	200	14,000	15
TIN	7440315	2,200	240	6,100	680	190,000	24,000	190,000	68,000	190,000	190,000	190,000	190,000	NA
VANADIUM	7440622	0.21	210	0.58	580	21	21,000	58	58,000	210	190,000	580	190,000	5
ZINC	7440666	200	12,000	200	12,000	20,000	190,000	20,000	190,000	190,000	190,000	190,000	190,000	15

<sup>1</sup> For other options see Section 250.308

All concentrations in mg/kg

R=Residential

NR=Non-Residential

G=Ingestion

N=Inhalation

E=Soil to groundwater equation

C=Cap

NA=Not Applicable

**APPENDIX A**  
**Table 5—Physical and Toxicological Properties**  
**A. Organic Regulated Substances**

<i>Regulated Substance</i>	<i>CAS</i>	<i>RfDo</i> (mg/kg-d)	<i>CSFo</i> (mg/kg-d) <sup>1</sup>	<i>RfDi</i> (mg/m <sup>3</sup> )	<i>CSFi</i>	<i>Koc</i>	<i>VOC</i>	<i>Aqueous Sol</i> (mg/L)	<i>Aqueous Sol Reference</i>	<i>TF Vol from Surface Soil</i>	<i>TF Vol from Sub-Surface Soil</i>	<i>Or-ganic Liquid</i>	<i>Boiling Point</i> (degrees)	<i>Attenuation lambda</i>
ACENAPHTHENE	83329	0.06		0.06		4900		3.47	5				279	1.24
ACENAPHTHYLENE	208968	0.06		0.06		4500		3.93	5				280	2.11
ACETALDEHYDE	75070	0.0022	0.0077	0.0028	0.0077	4.1	X	1000000	11	13100	15100	X	20.4	
ACETONE	67641	0.1		8.8571428		0.31	X	1000000	11	13100	15000	X	56.07	18.07
ACETONITRILE	75058	0.006		0.006		0.5	X	74000	11	13100	15000	X	81.6	4.50
ACETOPHENONE	98862	0.1		0.1		170		5500	12			X	202.6	
ACETYLAMINOFLUORENE, 2- (2AAF)	53963		3.8		4.55	1600		5.29	11				303	0.69
ACROLEIN	107028	0.02		5.71429E-06		0.56	X	212500	11	13100	15100	X	52.69	4.50
ACRYLAMIDE	79061	0.0002	4.5	0.0002	4.55	25		640000	11				125	
ACRYLIC ACID	79107	0.5		0.0002857		29	X	1000000	11	13000	14900	X	141.2	1.39
ACRYLONITRILE	107131	0.001	0.54	0.0005714	0.238	11	X	74500	11	13100	15100	X	77.3	5.50
ALACHLOR	15972608	0.01	0.08	0.01	0.08	110		140	4				100	
ALDICARB	116063	0.001		0.001		22		6000	9				287	0.40
ALDRIN	309002	0.00003	17	0.00003	17.15	48000		0.18	11				145	0.22
ALLYL ALCOHOL	107186	0.005		0.005		3.2	X	320000	15	13100	15000	X	97	18.07
AMINOBIHENYL, 4-	92671		21		21	110		311	11				302	18.07
AMITROLE	61825		0.94		0.945	120		280000	7				200	0.69
ANILINE	62533	0.0016	0.0057	0.0002857	0.0056	190	X	36000	11	13000	14900	X	184.4	
ANTHRACENE	120127	0.3		0.3		21000		0.0434	11				340	0.28
ATRAZINE	1912249	0.035	0.222	0.035	0.222	130		70	8				200	
BENZENE	71432		0.029		0.02905	58	X	1790	11	13100	15000	X	80.9	0.35
BENZO[A]ANTHRACENE	56553		0.73		0.385	350000		0.014	5				437.6	0.19
BENZO[A]PYRENE	50328		7.3		3.85	910000		0.0038	5				495	0.24
BENZO[B]FLUORANTHENE	205992		0.73		0.385	550000		0.0012	5				357	0.21

<sup>1</sup> Aqueous solubility references are keyed to the numbered list found at 250.304(f)

**APPENDIX A**  
**Table 5—Physical and Toxicological Properties**  
**A. Organic Regulated Substances**

<i>Regulated Substance</i>	<i>CAS</i>	<i>RfDo</i> (mg/kg-d)	<i>CSFo</i> (mg/kg-d) <sup>1</sup>	<i>RfDi</i> (mg/m <sup>3</sup> )	<i>CSFi</i>	<i>Koc</i>	<i>VOC</i>	<i>Aqueous Sol</i> (mg/L)	<i>Aqueous Sol Reference</i>	<i>TF Vol from Surface Soil</i>	<i>TF Vol from Sub-Surface Soil</i>	<i>Or-ganic Liquid</i>	<i>Boiling Point</i> (degrees)	<i>Attenuation lambda</i>
BENZO[GHI]PERYLENE	191242	0.06		0.06		2800000		0.00026	5				500	0.19
BENZO[K]FLUORANTHENE	207089		0.073		0.0385	4400000		0.00055	5				480	0.06
BENZOIC ACID	65850	4		4		32		3400	5				249.2	
BENZYL ALCOHOL	100516	0.3		0.3		100		42900	5			X	205.3	
BENZYL CHLORIDE	100447		0.17		0.1715	190	X	525	11	13000	15000	X	179.4	20.90
BHC, ALPHA	319846	0.0003	6.3	0.0003	6.3	1800		2	5				288	0.94
BHC, BETA-	319857	0.0003	1.8	0.0003	1.855	2300		5	5				60	1.02
BHC, DELTA-	319868	0.0003		0.0003		1900		21.3	12				60	1.26
BHC, GAMMA (LINDANE)	58899	0.0003	1.1	0.0003	1.085	1400		7.3	11				323.4	1.05
BIS(2-CHLORO-ISOPROPYL)ETHER	108601	0.04		0.04		62	X	1700	12	13000	14900	X	189	0.69
BIS(2-CHLOROETHYL)ETHER	111444		1.1		1.155	76	X	17200	11	13000	14900	X	178.75	0.69
BIS(CHLOROMETHYL)ETHER	542881		220		217	16	X	22000	2	13100	15100	X	105	57270.57
BIS[2-ETHYLHEXYL] PHTHALATE	117817	0.02	0.014	0.02	0.0084	87000		0.34	11			X	384	0.65
BROMODICHLOROMETHANE	75274	0.02	0.062	0.02	0.1295	93	X	6735	11	13100	15000	X	87	
BROMOMETHANE	74839	0.0014		0.0014285		170	X	15220	11	13100	15000	X	3.55	6.66
BUTYL ALCOHOL, N-	71363	0.1		0.1		3.2	X	63200	11	13000	14900	X	117.73	4.68
BUTYL PHTHALATE, DI-N-	84742	0.1		0.1		1600		13	11			X	340	11.00
BUTYLBENZYL PHTHALATE	85687	0.2		0.2		34000		2.69	11			X	370	1.39
CAPTAN	133062	0.13	0.0035	0.13	0.00231	200		3.3	11				259	589.39
CARBARYL	63252	0.1		0.1		190		82.6	11				315	4.22
CARBOFURAN	1563662	0.005		0.005		43		700	13				200	
CARBON DISULFIDE	75150	0.1		0.19999		300	X	1185	11	13100	15100	X	46.2	
CARBON TETRACHLORIDE	56235	0.0007	0.13	0.00057	0.0525	160	X	804.8	11	13100	15000	X	76.7	0.07
CHLORDANE	57749	0.00006	1.3	0.00006	1.3	98000		0.056	11				175	0.09

<sup>1</sup> Aqueous solubility references are keyed to the numbered list found at 250.304(f)

**APPENDIX A**  
**Table 5—Physical and Toxicological Properties**  
**A. Organic Regulated Substances**

<i>Regulated Substance</i>	<i>CAS</i>	<i>RfDo</i> (mg/kg-d)	<i>CSFo</i> (mg/kg-d) <sup>1</sup>	<i>RfDi</i> (mg/m <sup>3</sup> )	<i>CSFi</i>	<i>Koc</i>	<i>VOC</i>	<i>Aqueous Sol</i> (mg/L)	<i>Aqueous Sol Reference</i>	<i>TF Vol from Surface Soil</i>	<i>TF Vol from Sub-Surface Soil</i>	<i>Or-ganic Liquid</i>	<i>Boiling Point</i> (degrees)	<i>Attenua-tion lambda</i>
CHLORO-1-PROPENE, 3- (ALLYL CHLORIDE)	107051	0.000286		0.0002857		48	X	3370	11	13100	15000	X	45.1	18.07
CHLOROANILINE, P-	106478	0.004		0.004		460		3.9	2				232	
CHLOROBENZENE	108907	0.02		0.005714		200	X	497	11			X	131.69	0.84
CHLOROBENZILATE	510156	0.02	0.27	0.02	0.273	2600		13	11			X	415	3.60
CHLORODIBROMOMETHANE	124481	0.02	0.084	0.02	0.0945	83	X	4000	2	13100	15100	X	116	1.39
CHLOROETHANE	75003	2.86		2.857		42	X	5678	11	13100	15000	X	12.27	4.50
CHLOROETHYL VINYL ETHER, 2-	110758	0.025		0.025		6.6	X	15000	2	13100	15100	X	108	
CHLOROFORM	67663	0.01	0.0061	0.01	0.0805	56	X	7950	11	13100	15000	X	61.18	0.01
CHLORONAPHTHALENE, 2-	91587	0.08		0.08		8500		6.74	5				256	
CHLOROPHENOL, 2-	95578	0.005		0.005		400	X	28500	5	12900	14900	X	174.9	
CHLOROPRENE	126998	0.02		0.0019999		50	X	2115	11	13100	15000	X	59.4	0.69
CHLORPYRIFOS	2921882	0.003		0.003		4600		1.3	3				200	
CHRYSENE	218019		0.0073		0.00385	490000		0.0018	5				448	0.13
CRESOL(S)	1319773	0.005		0.005		25	X	19320	14	13000	14900	X	138.5	5.16
CRESOL, P-CHLORO-M-	59507	0.005		0.005		780		3850	5				235	
CROTONALDEHYDE	4170303		1.9		1.9	5.6	X	181000	18			X	104	18.07
CUMENE	98828	0.04		0.0025713		2800	X	49.9	11	13100	15100	X	152.4	15.81
CYCLOHEXANONE	108941	5		5		66	X	5000	15	13000	14900	X	157	
DDD, 4,4'-	72548		0.24		0.2415	44000		0.16	5				193	0.02
DDE, 4,4'-	72559		0.34		0.34	87000		0.0013	5				348.1	0.02
DDT, 4,4'-	50293	0.0005	0.34	0.0005	0.34	240000		0.0017	5				260	0.02
DIALATE	2303164		0.061		0.061	190	X	14	11	12900	14900	X	150	1.39
DIAZINON	333415	0.0009		0.0009		500		40	15				306.1	

<sup>1</sup> Aqueous solubility references are keyed to the numbered list found at 250.304(f)

**APPENDIX A**  
**Table 5—Physical and Toxicological Properties**  
**A. Organic Regulated Substances**

<i>Regulated Substance</i>	<i>CAS</i>	<i>RfDo</i> (mg/kg-d)	<i>CSFo</i> (mg/kg-d) <sup>1</sup>	<i>RfDi</i> (mg/m <sup>3</sup> )	<i>CSFi</i>	<i>Koc</i>	<i>VOC</i>	<i>Aqueous Sol</i> (mg/L)	<i>Aqueous Sol Reference</i>	<i>TF Vol from Surface Soil</i>	<i>TF Vol from Sub-Surface Soil</i>	<i>Or-ganic Liquid</i>	<i>Boiling Point</i> (degrees)	<i>Attenua-tion lambda</i>
DIBENZO[A,H]ANTHRACENE	53703		7.3		4.2	1800000		0.0005	5				524	0.13
DIBROMO-3-CHLOROPROPANE, 1,2-	96128	0.0000571	1.4	0.0000571	0.00242	140	X	1230	11	13000	15000	X	196	0.69
DIBROMOETHANE, 1,2- (ETHYLENE DIBROMIDE)	106934	0.0000571	85	0.0000571	0.77	54	X	4152	11	13100	15100	X	131.36	2.11
DIBROMOMETHANE	74953	0.01		0.01		110	X	11930	11	13100	15100	X	96.25	4.50
DICHLOROBENZENE, 1,2-	95501	0.09		0.0571		350	X	83.96	11	13100	15100	X	180.48	0.69
DICHLOROBENZENE, 1,3-	541731	0.089		0.089		360	X	125	11	13100	15100	X	173	0.69
DICHLOROBENZENE, P-	106467	0.229	0.024	0.229	0.0385	510		81.3	11				174.12	0.69
DICHLOROBENZIDINE, 3,3'-	91941		0.45		1.19	22000		12.3	11				368	0.69
DICHLORODIFLUOROMETHANE (FREON 12)	75718	0.2		0.0571		360	X	280	5	13200	15000	X	-29.8	0.69
DICHLOROETHANE, 1,1-	75343	0.1	0.0057	0.143	0.0056	52	X	5060	5	13100	15000	X	57.3	0.16
DICHLOROETHANE, 1,2-	107062		0.091		0.091	38	X	8608	11	13100	15000	X	83.48	0.07
DICHLOROETHYLENE, 1,1-	75354	0.009	0.6	0.009	0.175	65	X	2250	11	13100	15000	X	31.56	0.19
DICHLOROETHYLENE, CIS-1,2-	156592	0.01		0.01		49	X	800	17	13100	15000	X	60	0.01
DICHLOROETHYLENE, TRANS-1,2-	156605	0.02		0.02		47	X	6300	5	13100	15000	X	47.5	0.01
DICHLOROMETHANE (METHYLENE CHLORIDE)	75092	0.06	0.0075	0.857	0.00165	16	X	13030	11	13100	15000	X	39.64	4.50
DICHLOROPHENOL, 2,4-	120832	0.003		0.003		160		4500	11				209.5	5.88
DICHLOROPHENOXYACETIC ACID, 2,4- (2,4-D)	94757	0.01		0.01		59		677	11				160	1.39
DICHLOROPROPANE, 1,2-	78875	0.00123	0.068	0.00123	0.068	47	X	2700	11	13100	15000	X	96	0.10
DICHLOROPROPIONIC ACID (DALAPON), 2,2-	75990	0.03		0.03		62	X	502000	16	13000	14900	X	190	2.11
DICHLORVOS	62737	0.0005	0.29	0.0001429	0.291	50		10000	11				140	
DIELDRIN	60571	0.00005	16	0.00005	16.1	11000		0.2	5			X	385	0.12

<sup>1</sup> Aqueous solubility references are keyed to the numbered list found at 250.304(f)



**APPENDIX A**  
**Table 5—Physical and Toxicological Properties**  
**A. Organic Regulated Substances**

<i>Regulated Substance</i>	<i>CAS</i>	<i>RfDo</i> (mg/kg-d)	<i>CSFo</i> (mg/kg-d) <sup>1</sup>	<i>RfDi</i> (mg/m <sup>3</sup> )	<i>CSFi</i>	<i>Koc</i>	<i>VOC</i>	<i>Aqueous Sol</i> (mg/L)	<i>Aqueous Sol Reference</i>	<i>TF Vol from Surface Soil</i>	<i>TF Vol from Sub-Surface Soil</i>	<i>Or-ganic Liquid</i>	<i>Boiling Point</i> (degrees)	<i>Attenua-tion lambda</i>
DIETHYL PHTHALATE	84662	0.8		0.8		81		896	11			X	298	2.25
DIMETHOATE	60515	0.0002		0.0002		110		25000	13				200	2.26
DIMETHYLAMINOAZOBENZENE, P-	60117		4.6		4.55	1000		0.23	11				200	4.50
DIMETHYLHYDRAZINE, 1,1-	57147		1.72		1.72	0.2	X	1000000	11	13000	15000	X	63	5.75
DIMETHYLPHENOL, 2,4-	105679	0.02		0.02		130		7870	11			X	210.9	18.07
DINITROBENZENE, 1,3-	99650	0.0001		0.0001		150		469	3				300	0.69
DINITROPHENOL, 2,4-	51285	0.002		0.002		0.79		2787	11				113	0.48
DINITROTOLUENE, 2,4-	121142	0.002	0.31	0.002	0.31	51		270	11				300	0.69
DINITROTOLUENE, 2,6- (2,6-DNT)	606202	0.001		0.001		74		182	11				300	0.69
DINOSEB	88857	0.001		0.001		120		52	1				42	1.03
DIOXANE, 1,4-	123911		0.011		0.027	7.8	X	1000000	11	13000	14900	X	101.32	0.69
DIPHENYLAMINE	122394	0.025		0.025		190		300	12				302	4.50
DIPHENYLHYDRAZINE, 1,2-	122667		0.8		0.77	660		68	11				309	0.69
DIQUAT	85007	0.0022		0.0022		2.6		700000	7				355	
DISULFOTON	298044	0.00004		0.00004		1000	X	25	9	13400	15400	X	133	6.02
DIURON	330541	0.002		0.002		300		42	3				155	
ENDOSULFAN I (ALPHA)	959988	0.006		0.006		2000		0.53	5				200	
ENDOSULFAN II (BETA)	33213659	0.006		0.006		2300		0.28	5				390	
ENDOSULFAN SULFATE	1031078	0.006		0.006		2300		0.117	5				200	
ENDOTHALL	145733	0.02		0.02		120		100000	1				200	
ENDRIN	72208	0.0003		0.0003		11000		0.26	5				245	
EPICHLOROHYDRIN	106898	0.002	0.0099	0.0002857	0.0042	35	X	65900	11	13000	14900	X	116.11	4.50
ETHION	563122	0.0005		0.0005		8700		0.6	15			X	200	

<sup>1</sup> Aqueous solubility references are keyed to the numbered list found at 250.304(f)

**APPENDIX A**  
**Table 5—Physical and Toxicological Properties**  
**A. Organic Regulated Substances**

<i>Regulated Substance</i>	<i>CAS</i>	<i>RfDo</i> <i>(mg/kg-d)</i>	<i>CSFo</i> <i>(mg/kg-d)<sup>1</sup></i>	<i>RfDi</i> <i>(mg/m<sup>3</sup>)</i>	<i>CSFi</i>	<i>Koc</i>	<i>VOC</i>	<i>Aqueous Sol</i> <i>(mg/L)</i>	<i>Aqueous Sol Reference</i>	<i>TF Vol from Surface Soil</i>	<i>TF Vol from Sub-Surface Soil</i>	<i>Organic Liquid</i>	<i>Boiling Point (degrees)</i>	<i>Attenuation lambda</i>
ETHOXYETHANOL, 2- (EGEE)	110805	0.4		0.4		12	X	1000000	15	13200	15000	X	135.5	4.50
ETHYL ACETATE	141786	0.9		0.9		59	X	80000	3	13100	15000	X	77.06	18.07
ETHYL ACRYLATE	140885		0.048		0.048	110	X	15000	11	13100	15100	X	100	18.07
ETHYL BENZENE	100414	0.1		0.286		220	X	206	11	13100	15000	X	136.19	1.11
ETHYL ETHER	60297	0.2		0.2		68	X	69000	3	13100	15100	X	34.5	
ETHYLENE GLYCOL	107211	2		2		4.4	X	1000000	11	13100	15100	X	197.5	10.54
FENAMIPHOS	22224926	0.00025		0.00025		300		700	9				200	
FLUORANTHENE	206440	0.04		0.04		49000		0.265	5				375	0.29
FLUORENE	86737	0.04		0.04		7900		0.19	5				298	2.11
FLUOROTRICHLOROMETHANE (FREON 11)	75694	0.3		0.2		130	X	1240	5	13100	15000	X	23.63	0.35
FONOFOS	944229	0.002		0.002		1100	X	13	9	13400	15500	X	130	
FORMALDEHYDE	50000	0.2	0.0455	0.2	0.0455	3.6	X	50000	11	13100	15100	X	-21	18.07
FORMIC ACID	64186	2		2		0.54	X	1000000	15	13000	14900	X	100.7	18.07
FURFURAL	98011	0.003		0.0143		6.3	X	83000	3	13000	14900	X	161.7	
GLYPHOSATE	1071836	0.1		0.1		3500		12000	4				186	
HEPTACHLOR	76448	0.0005	4.5	0.0005	4.55	6800		0.18	11				310	46.84
HEPTACHLOR EPOXIDE	1024573	0.000013	9.1	0.000013	9.1	21000		0.275	5				200	0.23
HEXACHLOROBENZENE	118741	0.0008	1.6	0.0008	1.61	3800		0.0062	11				319.3	0.06
HEXACHLOROBUTADIENE	87683	0.0002	0.078	0.0002	0.077	4700		3.2	11			X	215	0.69
HEXACHLOROCYCLOPENTADIENE	77474	0.007		0.00002		7200		3.4	11			X	239	4.50
HEXACHLOROETHANE	67721	0.001	0.014	0.001	0.014	2200		50	11				186.8	0.69
HEXANE	110543	0.06		0.0571		3600	X	9.47	3	13100	15000	X	69	
INDENO[1,2,3-CD]PYRENE	193395		0.73		0.385	31000000		0.062	5				536	0.17

<sup>1</sup> Aqueous solubility references are keyed to the numbered list found at 250.304(f)

**APPENDIX A**  
**Table 5—Physical and Toxicological Properties**  
**A. Organic Regulated Substances**

<i>Regulated Substance</i>	<i>CAS</i>	<i>RfDo</i> (mg/kg-d)	<i>CSFo</i> (mg/kg-d) <sup>1</sup>	<i>RfDi</i> (mg/m <sup>3</sup> )	<i>CSFi</i>	<i>Koc</i>	<i>VOC</i>	<i>Aqueous Sol</i> (mg/L)	<i>Aqueous Sol Reference</i>	<i>TF Vol from Surface Soil</i>	<i>TF Vol from Sub-Surface Soil</i>	<i>Or-ganic Liquid</i>	<i>Boiling Point</i> (degrees)	<i>Attenuation lambda</i>
ISOBUTYL ALCOHOL	78831	0.3		0.3		60	X	95000	3	13000	14900	X	108.1	17.57
ISOPHORONE	78591	0.2	0.00095	0.2	0.00095	31		12000	5			X	215.2	4.50
KEPONE	143500		16		16.1	55000		7.6	3				350	0.17
MALATHION	121755	0.02	0.00095	0.02	0.00095	1300	X	145	3	14000	16300	X	156.5	2.46
MALEIC HYDRAZIDE	123331	0.5		0.5		2.8		6000	15				260	
METHACRYLONITRILE	126987	0.0001		0.0002		21	X	25000	12	13100	15100	X	90.3	
METHANOL	67561	0.5		0.5		2.8	X	1000000	11	13100	15100	X	64.55	36.14
METHOMYL	16752775	0.025		0.025		20		58000	9				144	
METHOXYCHLOR	72435	0.005	0.00095	0.005	0.00095	63000		0.1	11				346	0.69
METHYL CHLORIDE	74873		0.013		0.0063	6	X	5325	11	13200	15000	X	-24.2	4.50
METHYL ETHYL KETONE	78933	0.6		0.286		32	X	223000	11	13100	15100	X	79.6	2.57
METHYL ISOBUTYL KETONE	108101	0.08		0.0229		17	X	19000	11	13100	15100	X	117.4	18.07
METHYL METHACRYLATE	80626	0.08		0.08		10	X	15000	11	13100	15100	X	100.3	4.50
METHYL METHANESULFONATE	66273		0.099		0.098	5.2		200000	12				203	
METHYL PARATHION	298000	0.00025		0.00025		790	X	50	9	13500	15600	X	133	3.61
METHYL TERT-BUTYL ETHER (MTBE)	1634044	0.857		0.857		12	X	51000	11	13100	15100	X	55.2	
METHYLNAPHTHALENE, 2-	91576	0.04		0.00286		16000		24.6	5			X	241.05	
NAPHTHALENE	91203	0.04		0.00286		950		31	11				217.9	0.98
NAPHTHYLAMINE, 1-	134327		1.8		1.8	3200		1698	11				301	0.69
NAPHTHYLAMINE, 2-	91598		1.8		1.8	87		263	11				306	0.69
NITROANILINE, M-	99092	0.0000571		5.714E-05		18		890	5				306.4	
NITROANILINE, O-	88744	0.0000571		5.714E-05		27		1260	5				284.1	
NITROANILINE, P-	100016	0.0000571		5.714E-05		15		800	5				331.7	

<sup>1</sup> Aqueous solubility references are keyed to the numbered list found at 250.304(f)

**APPENDIX A**  
**Table 5—Physical and Toxicological Properties**  
**A. Organic Regulated Substances**

<i>Regulated Substance</i>	<i>CAS</i>	<i>RfDo</i> <i>(mg/kg-d)</i>	<i>CSFo</i> <i>(mg/kg-d)<sup>1</sup></i>	<i>RfDi</i> <i>(mg/m<sup>3</sup>)</i>	<i>CSFi</i>	<i>Koc</i>	<i>VOC</i>	<i>Aqueous Sol</i> <i>(mg/L)</i>	<i>Aqueous Sol Reference</i>	<i>TF Vol from Surface Soil</i>	<i>TF Vol from Sub-Surface Soil</i>	<i>Or-ganic Liquid</i>	<i>Boiling Point (degrees)</i>	<i>Attenuation lambda</i>
NITROBENZENE	98953	0.0005		0.0005714		130		1900	11			X	210.8	0.64
NITROPHENOL, 2-	88755	0.062		0.062		37		2100	13				215	9.01
NITROPHENOL, 4-	100027	0.062		0.062		230		16000	11				279	25.81
NITROPROPANE, 2-	79469	0.00571	9.45	0.00571	9.45	20	X	17000	11	13000	14900	X	120.25	0.69
NITROSODI-N-PROPYLAMINE, N-	621647	0.095	7	0.095	7	11		9894	11			X	206	0.69
NITROSODIETHYLAMINE, N-	55185		150		151	26	X	93000	11	13000	14900	X	176	0.69
NITROSODIMETHYLAMINE, N-	62759		51		49	8.5	X	1000000	11	13000	14900	X	154	0.69
NITROSODIPHENYLAMINE, N-	86306		0.0049		0.0091	580		35	11				268.7	3.72
OCTYL PHTHALATE, DI-N-	117840	0.02		0.02		980000000		3	11			X	234	0.69
OXAMYL (VYDATE)	23135220	0.025		0.025		7.1		280000	9				101	
PARATHION	56382	0.006		0.006		2300		6.54	11			X	375	
PCB-1016 (AROCLOR)	12674112	0.00007	0.09	0.00007	0.09	110000		0.049	5			X	340	
PCB-1221 (AROCLOR)	11104282		0.5		0.5	1900		0.2	5			X	340	
PCB-1232 (AROCLOR)	11141165		0.5		0.5	1500		1.45	5			X	340	
PCB-1242 (AROCLOR)	53469219		0.5		0.5	48000		0.24	5			X	340	
PCB-1248 (AROCLOR)	12672296		1.8		1.8	190000		0.006	5			X	340	
PCB-1254 (AROCLOR)	11097691	0.00002	1.8	0.00002	1.8	810000		0.012	5			X	340	
PCB-1260 (AROCLOR)	11096825		0.6		0.6	1800000		0.08	5				31	
PENTACHLOROBENZENE	608935	0.0008		0.0008		32000		0.24	3				277	0.37
PENTACHLORONITROBENZENE	82688	0.003	0.26	0.003	0.26	7900		0.59	11				328	0.36
PENTACHLOROPHENOL	87865	0.03	0.12	0.03	0.12	20000		14	11				309.5	0.17
PHENACETIN	62442		0.0022		0.0022	110		760	12				200	4.50
PHENANTHRENE	85018	0.3		0.3		38000		1.18	5				341.2	0.63
PHENOL	108952	0.6		0.6		22		82800	11				181.84	36.14

<sup>1</sup> Aqueous solubility references are keyed to the numbered list found at 250.304(f)

**APPENDIX A**  
**Table 5—Physical and Toxicological Properties**  
**A. Organic Regulated Substances**

<i>Regulated Substance</i>	<i>CAS</i>	<i>RfDo</i> (mg/kg-d)	<i>CSFo</i> (mg/kg-d) <sup>1</sup>	<i>RfDi</i> (mg/m <sup>3</sup> )	<i>CSFi</i>	<i>Koc</i>	<i>VOC</i>	<i>Aqueous Sol</i> (mg/L)	<i>Aqueous Sol Reference</i>	<i>TF Vol from Surface Soil</i>	<i>TF Vol from Sub-Surface Soil</i>	<i>Or-ganic Liquid</i>	<i>Boiling Point</i> (degrees)	<i>Attenuation lambda</i>
PHENYLENEDIAMINE, M-	108452	0.006		0.006		12		447974					286	4.50
PHORATE	298022	0.0002		0.0002		810	X	50	12	13100	15100	X	118	
PHTHALIC ANHYDRIDE	85449	2		0.0343		79		6200	11				284.5	13490.40
PRONAMIDE	23950585	0.075		0.075		200		15	12				321	
PROPYLENE OXIDE	75569	0.00857	0.24	0.008571	0.0132	25	X	590000	11	13100	15000	X	34.23	
PYRENE	129000	0.03		0.03		68000		0.013	5				393	0.07
PYRIDINE	110861	0.001		0.001		0.0066	X	1000000	11	13100	15000	X	115.25	18.07
SIMAZINE	122349	0.005	0.12	0.005	0.12	110		5	4				225	
STRYCHNINE	57249	0.0003		0.0003		280		300	13				270	4.50
STYRENE	100425	0.2		0.286		910	X	320	11	13100	15100	X	145.14	1.20
TERBUFOS	13071799	0.000025		0.000025		510	X	4.5	7	13000	15000	X	69	
TETRACHLORODIBENZO-P-DIOXIN, 2,3,7,8- (TCDD)	1746016		150000		116000	4300000		0.0000193	12				412.2	0.21
TETRACHLOROETHANE, 1,1,2,2-	79345		0.27		0.203	79	X	2962	11	13100	15100	X	146.5	0.56
TETRACHLOROETHYLENE (PCE)	127184	0.01	0.052	0.0857	0.00203	300	X	200	11	13100	15000	X	121.07	0.03
TETRACHLOROPHENOL, 2,3,4,6-	58902	0.03		0.03		6200		1000	15				150	0.69
TETRAETHYL LEAD	78002	0.0000001		0.0000001		4900		0.21	15			X	200	4.50
THIRAM	137268	0.005		0.005		1000		30	3				200	
TOLUENE	108883	0.2		0.114		130	X	526	11	13100	15000	X	110.63	9.01
TOLUIDINE, M-	108441		0.24		0.24	140		15114	18			X	203.3	
TOLUIDINE, O-	95534		0.18		0.1785	410		16600	11			X	200.4	18.07
TOLUIDINE, P-	106490		0.19		0.19	320		6640	6				200.4	
TOXAPHENE	8001352	0.001	1.1	0.001	1.12	1500		0.55	11				431.8	
TRIBROMOMETHANE (BROMOFORM)	75252	0.02	0.0079	0.02	0.00385	130	X	3010	11	13100	15100	X	149.2	0.69

<sup>1</sup> Aqueous solubility references are keyed to the numbered list found at 250.304(f)

**APPENDIX A**  
**Table 5—Physical and Toxicological Properties**  
**A. Organic Regulated Substances**

<i>Regulated Substance</i>	<i>CAS</i>	<i>RfDo</i> <i>(mg/kg-d)</i>	<i>CSFo</i> <i>(mg/kg-d)<sup>1</sup></i>	<i>RfDi</i> <i>(mg/m<sup>3</sup>)</i>	<i>CSFi</i>	<i>Koc</i>	<i>VOC</i>	<i>Aqueous Sol</i> <i>(mg/L)</i>	<i>Aqueous Sol Reference</i>	<i>TF Vol from Surface Soil</i>	<i>TF Vol from Sub-Surface Soil</i>	<i>Or-ganic Liquid</i>	<i>Boiling Point (degrees)</i>	<i>Attenuation lambda</i>
TRICHLOROBENZENE, 1,2,4-	120821	0.01		0.0571		1500		49	11			X	213	0.69
TRICHLOROBENZENE, 1,3,5-	108703	0.01		0.0571		3100		6.01	3				208	
TRICHLOROETHANE, 1,1,1-	71556	0.571		0.571		100	X	1495	11	13100	15000	X	74.08	0.05
TRICHLOROETHANE, 1,1,2-	79005	0.004	0.057	0.004	0.056	76	X	4420	11	13100	15100	X	113.5	0.03
TRICHLOROETHYLENE (TCE)	79016	0.002	0.011	0.143	0.00595	93	X	1100	11	13100	15000	X	86.7	0.02
TRICHLOROPHENOL, 2,4,5-	95954	0.1		0.1		2400		1200	11				245.5	0.14
TRICHLOROPHENOL, 2,4,6-	88062	0.042	0.011	0.042	0.01085	1100		800	11				246	0.14
TRICHLOROPHENOXYACETIC ACID, 2,4,5- (2,4,5-T)	93765	0.01		0.01		43		240	3				278.8	1.39
TRICHLOROPHENOXYPROPIONIC ACID, 2,4,5- (2,4,5-TP)(SILVEX)	93721	0.008		0.008		1700		140	1				200	
TRICHLOROPROPANE, 1,2,3-	96184	0.006	7	0.0005714	7	280	X	1800	15	13100	15100	X	156.8	0.35
VINYL ACETATE	108054	1		0.0571		2.8	X	20000	11	13200	15000	X	72.5	
VINYL CHLORIDE	75014		1.9		0.294	10	X	8800	11	13200	15000	X	-13.37	0.09
WARFARIN	81812	0.0003		0.0003		910		9.17E-09	9				356	4.50
XYLENES (TOTAL)	1330207	2		2		350	X	175	10	13100	15000	X	140	0.69

<sup>1</sup> Aqueous solubility references are keyed to the numbered list found at 250.304(f)

**APPENDIX A**  
**Table 5—Physical and Toxicological Properties**  
**B. Inorganic Regulated Substances**

<i>Regulated Substance</i>	<i>CAS</i>	<i>RfDo</i> <i>(mg/kg-d)</i>	<i>CSFo</i> <i>(mg/kg-d)<sup>-1</sup></i>	<i>RfDi</i> <i>(mg/m<sup>3</sup>)</i>	<i>CSFi</i>	<i>Kd</i>
ANTIMONY	7440360	0.0004		0.0004		45
ARSENIC	7440382	0.0003	1.5	0.0003	15.05	29
ASBESTOS	12001295				805	
BARIUM AND COMPOUNDS	7440393	0.07		0.000143		41
BERYLLIUM	7440417	0.005	4.3	0.005	8.4	790
BORON AND COMPOUNDS	7440428	0.09		0.005714		
CADMIUM	7440439	0.0005		0.0005	6.3	75
CHROMIUM III	16065831	1		5.71E-06		1,800,000
CHROMIUM VI	18540299	0.005		0.005	42	19
COBALT	7440484	0.06		8.57E-06		
COPPER	7440508	2,600				360
CYANIDE, TOTAL	57125	0.02		0.02		9.9
LEAD	7439921					890
MERCURY	7439976	8.57E-05		8.57E-05		52
NICKEL	7440020	0.02		0.02		65
SELENIUM	7782492	0.005		0.005		5
SILVER	7440224	0.005		0.005		8.3
THALLIUM	7440280	0.00008		0.00008		71
TIN	7440315	0.6		0.6		
VANADIUM	7440622	5.71E-05		5.71E-05		1000
ZINC	7440666	0.3		0.3		62

**APPENDIX A**  
**Table 6—Threshold of Regulation Compounds**

REGULATED SUBSTANCE	CASRN	ALL AQUIFER GROUNDWATER MSC (ug/L)	Residential Soil MSC (mg/kg) 0-15 feet	Non-Residential Soil MSCs		Soil to Groundwater <sup>1</sup> (mg/kg)
				Surface Soil (mg/kg) 0-2 feet	Subsurface Soil (mg/kg) 2-15 feet	
ACETIC ACID	64197	5	100	100	100	0.5
ACETIC ANHYDRIDE	108247	5	100	100	100	0.5
AMYL ACETATE, N-	628637	5	100	100	100	0.5
AMYL ACETATE, SEC-	626380	5	100	100	100	0.5
ANTU (ALPHA-NAPHTHYLTHIOUREA)	86884	5	100	100	100	0.5
AZINPHOS-METHYL (GUTHION)	86500	5	100	100	100	0.5
BETA PROPIOLACTONE	57578	5	100	100	100	0.5
BIS(2-CHLORO-1-METHYL- ETHYL)ETHER	108601	5	100	100	100	0.5
BIS(2-CHLOROETHOXY)METHANE	111911	5	100	100	100	0.5
BROMOPHENYL PHENYL ETHER, 4-	101553	5	100	100	100	0.5
BUTYL ACETATE, N-	123864	5	100	100	100	0.5
BUTYL ACETATE, SEC-	105464	5	100	100	100	0.5
BUTYL ACETATE, TERT-	540885	5	100	100	100	0.5
BUTYLAMINE, N-	109739	5	100	100	100	0.5
CALCIUM CHROMATE	13765190	5	100	100	100	0.5
CALCIUM CYANAMIDE	156627	5	100	100	100	0.5
CARBONYL FLUORIDE	353504	5	100	100	100	0.5
CATECHOL	120809	5	100	100	100	0.5
CHLOROACETALDEHYDE	107200	5	100	100	100	0.5
CHLOROPHENYL PHENYL ETHER, 4-	7005723	5	100	100	100	0.5
CYCLOHEXANE	110827	5	100	100	100	0.5

<sup>1</sup> The value in the table is 100 times the groundwater MSC.  
The option to use the SPLP is also available to calculate the soil to groundwater numeric value.  
(See Section 250.308)



**APPENDIX A**  
**Table 6—Threshold of Regulation Compounds**

REGULATED SUBSTANCE	CASRN	ALL AQUIFER GROUNDWATER MSC (ug/L)	Residential Soil MSC (mg/kg) 0-15 feet	Non-Residential Soil MSCs		Soil to Groundwater <sup>1</sup> (mg/kg)
				Surface Soil (mg/kg) 0-2 feet	Subsurface Soil (mg/kg) 2-15 feet	
DECABORANE	17702419	5	100	100	100	0.5
DIBENZOFURAN	132649	5	100	100	100	0.5
DICHLORO-2-BUTENE, TRANS-1,3-	110576	5	100	100	100	0.5
DIETHANOLAMINE	111422	5	100	100	100	0.5
DIETHYLAMINE	109897	5	100	100	100	0.5
DIGLYCIDYL ETHER (DGE)	2238075	5	100	100	100	0.5
DIMETHYL PHTHALATE	131113	5	100	100	100	0.5
DIMETHYL SULFATE	77781	5	100	100	100	0.5
DIMETHYLPHENETHYLAMINE, ALPHA, ALPHA-	122098	5	100	100	100	0.5
DINITRO-O-CRESOL, 4,6-	534521	5	100	100	100	0.5
DIOXATHION	78342	5	100	100	100	0.5
ETHYL METHANESULFONATE	62500	5	100	100	100	0.5
ETHYLAMINE	75047	5	100	100	100	0.5
ETHYLENE CHLORHYDRIN	107073	5	100	100	100	0.5
FAMPUR	52857	5	100	100	100	0.5
FENSULFOTHION	115902	5	100	100	100	0.5
HEXACHLOROPROPENE	1888717	5	100	100	100	0.5
HEXANONE, 2- (METHYL N-BUTYL KETONE)	591786	5	100	100	100	0.5
IODOMETHANE	74884	5	100	100	100	0.5
ISOAMYL ACETATE	123922	5	100	100	100	0.5
ISOBUTYL ACETATE	110190	5	100	100	100	0.5
ISODRIN	465736	5	100	100	100	0.5

<sup>1</sup> The value in the table is 100 times the groundwater MSC.  
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(See Section 250.308)

**APPENDIX A**  
**Table 6—Threshold of Regulation Compounds**

REGULATED SUBSTANCE	CASRN	ALL AQUIFER GROUNDWATER MSC (ug/L)	Residential Soil MSC (mg/kg) 0-15 feet	Non-Residential Soil MSCs		Soil to Groundwater <sup>1</sup> (mg/kg)
				Surface Soil (mg/kg) 0-2 feet	Subsurface Soil (mg/kg) 2-15 feet	
ISOPHORONE DIISOCYANATE	4098719	5	100	100	100	0.5
ISOSAFROLE	120581	5	100	100	100	0.5
LITHIUM	7439932	5	100	100	100	0.5
LITHIUM HYDRIDE	7580678	5	100	100	100	0.5
MANGANESE CYCLOPENTADIENYL TRICARBONYL	12079651	5	100	100	100	0.5
METHYL HYDRAZINE	60344	5	100	100	100	0.5
METHYL ISOAMYL KETONE	110123	5	100	100	100	0.5
METHYL ISOCYANATE	624839	5	100	100	100	0.5
METHYL MERCAPTAN	74931	5	100	100	100	0.5
METHYLAMINE	74895	5	100	100	100	0.5
METHYLCHLOROPHOXYACETIC ACID (MCPA)	94749	5	100	100	100	0.5
MEVINPHOS	7786347	5	100	100	100	0.5
MONOCROTOPHOS	6923224	5	100	100	100	0.5
NAPHTHOQUINONE, 1,4-	130154	5	100	100	100	0.5
NITRIC ACID	7697372	5	100	100	100	0.5
NITROQUINOLINE-1-OXIDE, 4-	56575	5	100	100	100	0.5
OSMIUM TETROXIDE	20816120	5	100	100	100	0.5
PENTABORANE	19624227	5	100	100	100	0.5
PENTACHLOROETHANE	76017	5	100	100	100	0.5
PERCHLOROMETHYL MERCAPTAN	594423	5	100	100	100	0.5
PHENYL MERCAPTAN	108985	5	100	100	100	0.5

<sup>1</sup> The value in the table is 100 times the groundwater MSC.  
The option to use the SPLP is also available to calculate the soil to groundwater numeric value.  
(See Section 250.308)

**APPENDIX A**  
**Table 6—Threshold of Regulation Compounds**

REGULATED SUBSTANCE	CASRN	ALL AQUIFER GROUNDWATER MSC (vg/L)	Residential Soil MSC (mg/kg) 0-15 feet	Non-Residential Soil MSCs		Soil to Groundwater <sup>1</sup> (mg/kg)
				Surface Soil (mg/kg) 0-2 feet	Subsurface Soil (mg/kg) 2-15 feet	
PICOLINE, 2-	109068	5	100	100	100	0.5
PROPANOL, 1-	71238	5	100	100	100	0.5
PROPANOL, 2- (ISOPROPYL ALCOHOL)	67630	5	100	100	100	0.5
PROPIONIC ACID	79094	5	100	100	100	0.5
PROPIONITRILE (ETHYL CYANIDE)	107120	5	100	100	100	0.5
PROPYLENE IMINE	75558	5	100	100	100	0.5
PYRETHRUM	8003347	5	100	100	100	0.5
QUINONE (p-BENZOQUINONE)	106514	5	100	100	100	0.5
RESORCINOL	108463	5	100	100	100	0.5
SELENIUM HEXAFLUORIDE	7783791	5	100	100	100	0.5
SODIUM BISULFITE	7631905	5	100	100	100	0.5
SULFIDE	18496258	5	100	100	100	0.5
SULFUR MONOCHLORIDE	10025679	5	100	100	100	0.5
SULFURIC ACID	7664939	5	100	100	100	0.5
TELLURIUM	13494809	5	100	100	100	0.5
TELLURIUM HEXAFLUORIDE	7783804	5	100	100	100	0.5
TEPP (TETRAETHYL PYROPHOSPHATE)	107493	5	100	100	100	0.5
TETRAHYDROFURAN	109999	5	100	100	100	0.5
TETRANITROMETHANE	509148	5	100	100	100	0.5
THIONAZIN	297972	5	100	100	100	0.5
TRIETHYLAMINE	121448	5	100	100	100	0.5

<sup>1</sup> The value in the table is 100 times the groundwater MSC.  
The option to use the SPLP is also available to calculate the soil to groundwater numeric value.  
(See Section 250.308)

**APPENDIX A**  
**Table 6—Threshold of Regulation Compounds**

<i>REGULATED SUBSTANCE</i>	<i>CASRN</i>	<i>ALL AQUIFER GROUNDWATER MSC (ug/L)</i>	<i>Residential Soil MSC (mg/kg) 0-15 feet</i>	<i>Non-Residential Soil MSCs</i>		<i>Soil to Groundwater<sup>1</sup> (mg/kg)</i>
				<i>Surface Soil (mg/kg) 0-2 feet</i>	<i>Subsurface Soil (mg/kg) 2-15 feet</i>	
TRIETHYLPHOSPHOROTHIOATE, O,O,O-	126681	5	100	100	100	0.5
TRINITROGLYCEROL (NITROGLYCERIN)	55630	5	100	100	100	0.5

<sup>1</sup> The value in the table is 100 times the groundwater MSC.  
The option to use the SPLP is also available to calculate the soil to groundwater numeric value.  
(See Section 250.308)

**APPENDIX A**  
**Table 7**  
**DEFAULT VALUES FOR CALCULATING MEDIUM-SPECIFIC CONCENTRATIONS FOR LEAD**

<b>Input Values Used in UBK Model for Lead (for residential exposure scenario)</b>			
Geometric Standard Deviation (GSD)	1.42 (default)	Drinking water intake	Model default
Outdoor air lead concentration	0.2 µg/m <sup>3</sup> (default)	Soil lead level	495 µg/g
Indoor air lead concentration (% of outdoor)	30	Indoor dust lead level	495 µg/g
Time spent outdoors	Model default	Soil/dust ingestion weighting factor (%)	45
Ventilation rate	Model default	Paint lead intake	Model default
Lung absorption	Model default	Maternal contribution method	Infant model
Dietary lead intake	Model default	Mother's blood lead at birth	7.5 µg/dL blood (model default)
GI method/bioavailability	Non-linear	Target blood lead level	10 µg/dL blood
Lead concentration in drinking water	4.00 µg/L (default)		
<b>Input Values Used in SEGH Equation (for nonresidential exposure scenario)</b>			
Concentration of lead in soil (S)	987 µg/g		
Target blood lead level in adults (T)	20 µg/dL blood		
Geometric standard deviation of blood lead distribution (G)	1.4		
Baseline blood lead level in target population (B)	4 µg/dL blood		
Number of standard deviations corresponding to degree of protection required for the target population (n)	1.645 (for 95% of population)		
Slope of blood lead to soil lead relationship (δ)	7.5 µg/dL blood per µg/g soil		

REFERENCE

WIXSON, B.G. (1991). The Society for Environmental Geochemistry and Health (SEGH) Task Force Approach to the Assessment of Lead in Soil. *Trace Substances in Environmental Health*. 11-20.

APPENDIX A

TABLE 8  
 CONSTITUENTS OF POTENTIAL ECOLOGICAL CONCERN

<i>METALS</i>	<i>ORGANICS cont'd</i>
Arsenic III	Dichlorobenzene, 1,3-
Arsenic V	Dichlorobenzene, 1,4-
Barium	Dichloroethane, 1,1-
Beryllium	Dieldrin
Cadmium	Diethyl phthalate
Chromium III	Di-n-butyl phthalate
Chromium VI	Endosulfan (mixed isomers)
Cobalt	Endosulfan, alpha
Copper	Endosulfan, beta
Iron	Endrin
Lead	Ethylbenzene
Manganese	Fluoranthene
Mercury, inorganic	Fluorene
Mercury, methyl	Heptachlor
Molybdenum	Hexachloroethane
Nickel	Hexachlorocyclohexane (Lindane)
Selenium	Kepone *
Vanadium	Malathion
Zinc	Methoxychlor
Cyanide	Mirex *
<i>ORGANICS</i>	Naphthalene
Acenaphthene	Pentachlorobenzene
Aldrin *	Pentachlorophenol
Benzene	Polynuclear aromatic hydrocarbons
Benzo(a)pyrene	Polychlorinated biphenyls (PCB)
Biphenyl	Phenanthrene
Bis(2-ethylhexyl)phthalate	Pyrene
Bromophenyl phenyl ether, 4-	Tetrachloroethane, 1,1,2,2-
Butylbenzyl phthalate	Tetrachloroethylene
Chlordane *	Tetrachloromethane
Chlorobenzene	Toluene
DDT (and metabolites)	Toxaphene
Diazinon	Tribromomethane
Dibenzofuran	Trichlorobenzene, 1,2,4-
Dichlorobenzene, 1,2-	Trichloroethane, 1,1,1-
	Trichloroethylene
	Xylene, m-

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