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Compliance Calendar/Logbook for Bulk Gasoline Plants: Less than 19,999 Gallons/Day Throughput

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2016/2017

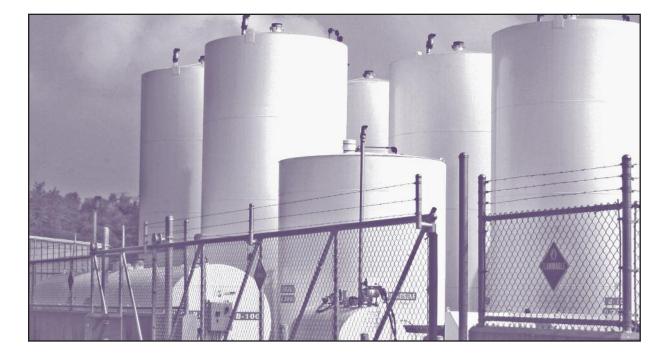
Compliance Calendar/Logbook for Bulk Gasoline Plants

(Less Than 19,999 gallons/day throughput)









Created by the Iowa Waste Reduction Center Iowa / University of Northern Iowa

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Definitions and Terms Used In This Calendar

Gasoline:

means any petroleum distillate or petroleum distillate/alcohol blend that has a Reid vapor pressure of 27.6 kilopascals or greater and which is used as a fuel for internal combustion engines.

NESHAP 6B:

National Emission Standards for Hazardous Air Pollutants 40 CFR, Part 63, Subpart BBBBBB. On December 20, 2007, the Environmental Protection Agency (EPA) issued air toxic standards for smaller emitting sources, called Area Sources, that distribute and store gasoline. Area Sources are those with the potential to emit less than 10 tons of a single toxic air pollutant or 25 tons per year of any combination of toxic air pollutants. The rule limits air toxic emissions from bulk gasoline distribution facilities and storage tanks at gasoline dispensing facilities, pumping stations, terminals and break out stations.

Bulk Gasoline Plant (EPA General Definition):

means any gasoline storage and distribution facility that receives gasoline by pipeline, ship or barge, or cargo tank, and subsequently loads the gasoline into gasoline cargo tanks for transport to gasoline dispensing facilities, and has a gasoline throughput of less than 20,000 gallons per day. Gasoline throughput shall be the maximum calculated design throughput as may be limited by compliance with an enforceable condition under Federal, State or local law, and discoverable by the Administrator and any other person.

Small Bulk Gasoline Plant: (Iowa DNR Definition)

means any gasoline bulk plant that has been designated by the lowa Department of Natural Resources, Air Quality Bureau, as a small bulk gasoline plant because it has a construction permit that limits its <u>monthly</u> throughput to 19,999 gallons/month or less. A small bulk gasoline plant is subject to all requirements of NESHAP Subpart 6B. Please Contact the Iowa Air Emissions Program at 1-800-422-3109 for assistance in completing a permit application.

Large Bulk Gasoline Plant: (Iowa DNR Definition)

means any gasoline bulk plant that has been designated by the lowa Department of Natural Resources, Air Quality Bureau, as a large bulk gasoline plant because it has a construction permit that limits it <u>daily</u> throughput to less than 19,999 gallons/day. A large bulk plant is subject to all requirements of NESHAP Subpart 6B. Please contact the lowa Air Emissions Assistance Program at 1-800-422-3109 for assistance in completing a permit application.

Equipment:

means each valve, pump, pressure relief device, sampling connection system, openended valve or line, flange, or other connector used in the gasoline liquid transfer and vapor collection systems.

Gasoline Cargo Tank:

means a delivery tank truck or railcar which loads gasoline into the plant or which is loaded with gasoline or gasoline blends at the plant.

In Gasoline Service:

means that a piece of equipment is used in a system that transfers gasoline or gasoline vapor.

Submerged Filling:

means the filling of a gasoline cargo tank or a stationary storage tank through a submerged fill pipe that discharges: 1.) no more than 12 inches from the bottom of the tank if the fill pipe was installed on or before November 9, 2006; or 2.) no more than 6 inches from the bottom of the tank if the fill pipe was installed after November 9, 2006. Bottom filling of gasoline cargo tanks or storage tanks is included in this definition.

Gasoline Distribution Bulk Terminal:

means any gasoline storage and distribution facility that receives gasoline by pipeline, ship or barge, or cargo tank and has a gasoline throughput of 20,000 gallons per day or greater. Gasoline throughput shall be the maximum calculated design throughput as may be limited by compliance with an enforceable condition under Federal, State, or local law and discoverable by the Administrator and other person. A Bulk Gasoline Terminal has additional 6B requirements and may need an air construction permit from the lowa Department of Natural Resources. Please contact the Air Quality Bureau Construction Permit Helpline at 1-877-AIR-IOWA for questions on construction permit requirements.

Monthly:

means once per calendar month at regular intervals of no less than 28 days and no more than 35 days.

Daily:

means once per calendar day.

Other Regulatory Programs That Require Leak Detection Monitoring and Description of Facility Equipment

Spill Prevention and Control Countermeasure (SPCC)

Spill Prevention Control Countermeasure (SPCC) plans are required by EPA. If your facility is covered under this regulation you are required to have an SPCC plan that includes among other things, periodic monitoring and leak detection of storage tanks. SPCC also requires records to be kept of the monitoring and leak detection. There may be some overlap in SPCC plan requirements with the NESHAP 6B monitoring program if all of the required areas and equipment are inspected on a monthly basis. Please consult your facility-specific SPCC plan to determine if monitoring and recordkeeping does indeed cover the same equipment and if SPCC monitoring and recordkeeping can be utilized to comply with the requirements of NESHAP 6B. For more information on SPCC plans, see information below:

Spill Prevention, Control, and Countermeasure (SPCC) Plan • 40 CFR 112

Contact the Iowa Waste Reduction Center / University of Northern Iowa 319-273-8905 or 1-800-422-3109 for more information.

Do these regulations apply to my operation?

The Spill Prevention, Control, and Countermeasures (SPCC) regulations apply to facilities that store petroleum products (i.e., crude oil, animal and vegetable oils, gasoline, etc.) in excess of the following limit and from which a leak or spill could ultimately discharge to a surface water (i.e., storm sewer, ditch, drainage tile, river or lake).

• Total facility aboveground storage capacity greater than 1,320 gallons (in containers with a capacity of 55 gallons or more).

General Requirements/Summary (SPCC)

SPCC plans are designed to minimize the potential for a release to occur and mitigate any environmental impacts in the event one does occur.

What are the benefits of implementing an SPCC plan?

The SPCC regulations were established to reduce the likelihood and severity of petroleum product leaks and spills. By preparing and implementing a plan, the facility assures it has installed effective spill prevention equipment/secondary containment, established emergency response plans, and provides employee training to prevent

and/or respond to oil spills. These proactive activities will reduce emergency response and environmental liability costs associated with spills. Likewise, reduced fire risks and worker exposure can be realized. Finally, federal law requires SPCC plans for facilities that exceed the storage limit listed above and thus, should be implemented from a strict compliance standpoint.

Preparation and Amendment (SPCC)

- A copy of the Plan must be maintained at the facility or property where petroleum product is stored or the nearest attended facility if the storage area is not normally attended at least four hours per working day.
- SPCC Plans must be amended within six months whenever there is a change in facility design, construction, operation, or maintenance, which affects potential for discharge. The plan must be reviewed and recertified every five years either by a professional engineer or self-certification.

Facilities with greater than 10,000 gallons of petroleum product storage capacity (SPCC)

• SPCC Plans must be reviewed and certified by a licensed Professional Engineer

Facilities with less than 10,000 gallons of petroleum product storage capacity (SPCC)

"Qualified Facilities" have the *optiow* to prepare a self-certified SPCC Plan instead of one that is reviewed and certified by a Professional Engineer (PE). A Qualified Facility must meet all of the following criteria:

- The facility must have 10,000 gallons or less in aggregate aboveground petroleum product storage capacity and;
- The facility must not have had a single discharge of petroleum product to navigable waters exceeding 1,000 U.S. gallons for three years prior to the SPCC Plan certification date and;
- The facility must not have had two discharges of petroleum product to navigable waters each exceeding 42 U.S. gallons within any twelve-month period for three years prior to the SPCC Plan certification date.

Note:

A. The gallon amount(s) specified (either 1,000 or 42) refer to the amount of petroleum product that actually reaches navigable waters or adjoining shorelines, not the total amount spilled.

B. Discharges that result from natural disasters, acts of war, or terrorism are not included in this qualification determination.

An owner/operator that certifies a facility's SPCC Plan attests that he/she is familiar with the requirements of 40 CFR 112 and has visited and examined the facility. The owner/operator also certifies that:

- The Plan has been prepared in accordance with sound industry practices and standards and with the rule requirements.
- Procedures for required inspections and testing have been established.
- The Plan is being fully implemented.
- The facility meets the qualifying criteria.
- The Plan does not deviate from rule requirements except as allowed and certified by a PE.
- Management approves the Plan and has committed resources to implement it.

THE SPCC PLAN MUST INCLUDE

- Written descriptions of any spill events in the preceding twelve months, including corrective action and plans to prevent recurrence.
- Physical layout of facility, including a diagram marking location(s) and contents of each storage container and any completely buried tanks, transfer stations and connecting pipes.
- Predictions of the direction, rate of flow, and total quantity of petroleum product that could be discharged.
- A complete discussion of the spill containment and/or diversionary structures or equipment used at the facility, including:
- □ Dikes, berms, or retaining walls
- □ Curbing
- □ Culverts, gutters, or other drainage systems
- □ Weirs or booms
- □ Spill diversion/retention ponds
- Double-wall tanks with interstitial monitors (i.e., electronic, manual or visual means)
- $\hfill\square$ Sorbent materials
- A discussion of how the facility manages containment area drainage, including:

 D Storm water in dikes (i.e., restrained by locked valves)
- Dike drainage practices (i.e., inspection procedure and manual discharge)
- □ Management of undiked areas (i.e., diversion to a retention area)

- Bulk storage practices, including:
- Verification that tank material and construction are compatible with material stored
- □ Secondary containment means (i.e., double walled tanks with interstitial monitoring, dikes with capacity equal to the largest tank plus 10%, holding ponds, etc.)
- Procedure to ensure that drainage of containment area does not release petroleum product and the record keeping system to document compliance (i.e., diked area drain valve locked closed; area inspected for product before the valve is opened; valve opened to drain precipitation; valve locked closed; valve operator signs inspection/drainage record for that event)
- □ Integrity testing procedures and record keeping (i.e., hydrostatic testing, visual inspection, and/or nondestructive shell thickness testing)
- Facility transfer practices, including:
- □ Means to limit corrosion of buried piping
- □ Means to inspect and maintain aboveground valves and piping
- □ Procedures to warn vehicles to avoid damaging aboveground piping and storage, where appropriate
- Tank truck loading and unloading practices, including:
- Documentation that loading and unloading procedures meet Department of Transportation (DOT) requirements
- □ Loading/unloading area containment capacity (i.e., at least the capacity of the largest single compartment of the vehicle being loaded or unloaded) and containment method
- $\hfill\square$ Means to prevent vehicle departure before transfer lines are disconnected
- Inspection and documentation means to assure the plan is being implemented. Records must be kept for at least three years.
- Site security, including:
- □ Restriction of access to petroleum product handling and storage areas
- □ Means to secure tank valves, pumps, and loading and unloading connections when in standby status
- SPCC training programs conducted, including:
 - □ Operation and maintenance of equipment
- $\hfill\square$ Applicable environmental regulations and requirements overview
- □ Designation of an SPCC Plan coordinator
- □ Training schedule
- Personnel training records

Reporting (SPCC)

Facilities must provide a written report to the Region VII Environmental Protection Agency (EPA) and Iowa Department of Natural Resources (DNR) within 60 days if more than 1,000 gallons of petroleum product are discharged or a discharge of more than 42 gallons in each of two spill events within a 12-month period.

THE REPORT SHOULD INCLUDE:

- · Name of facility
- · Name of facility owner or operator
- · Location of the facility
- · Date and year of initial facility operation
- Maximum storage or handling capacity and normal daily throughput
- Description of the facility including maps and flow diagrams
- Cause(s) of the spill including failure analysis
- Corrective actions and/or countermeasures including any equipment repair or replacement
- · Additional preventive measures to minimize recurrence

SEND REPORT TO:

 USA EPA Region 7 SPCC 11202 Renner Blvd Lenexa, KS 66219

DNR: Emergency Response
 502 East 9th Street
 Des Moines, IA 50319-0034

Aboveground Storage Tanks

The lowa State Fire Marshal has jurisdiction over aboveground storage tanks of petroleum products and requires that all sites submit plans to the Fire Marshall for approval. This plan includes information regarding the number, size and location of equipment (i.e., storage tanks, arms, valves, etc.) located at the facility.

Note:

This information may be helpful in identifying locations for monthly leak detection and recordkeeping requirement of Area Source Rules NESHAP 6B for Small Bulk Gasoline Plants.

Notification of Hazardous Conditions

(Iowa Administrative Code Chapter 131)

lowa regulations require the reporting of an actual or probable spillage, leakage or release of a hazardous substance onto the land, into the water of the state or into the atmosphere, where the release would create an immediate or potential danger to the public health or safety or to the environment.

Petroleum products, such as gasoline and oil, would be considered hazardous substances under this regulation.

A bulk plant should notify the lowa DNR at (515) 281-8694 and the local police department or the office of the sheriff of the occurrence of a hazardous condition as soon as possible but not later than six hours after the onset of the hazardous condition or the discovery of the hazardous condition. A written report is required within 30 days of the verbal notification. The written report should be sent to: DNR Emergency Response, 502 E. 9th Street, Des Moines, IA 50319-0034. Reports can be faxed in at (515) 281-7229.



Among the situations where a report should be submitted include:

- Gasoline or oil has the potential to leave the property by run-off, sewers, culverts, drains or some other conduit; or
- Gasoline or oil has the potential to reach a water of the state either surface water or groundwater; or
- · Gasoline or oil can be detected in the air at the boundaries of the facility; or
- There is a potential threat to the public health or safety; or
- Local officials (e.g. fire department, law enforcement, Hazmat) have responded to the incident; or
- The release exceeds a federal Reportable Quantity (RQ).

Among the information that should be reported (both verbally and in writing) include:

- The location of the hazardous condition;
- · The time and date of the onset or discovery of the hazardous condition; and
- The name of the material released and the volume of each material released.

Complete information on what would need to be reported and this regulation can be found at: <u>http://www.iowadnr.gov/InsideDNR/RegulatoryLand/</u> EmergencyPlanningEPCRA/SpillReporting.aspx

Resources

- State Fire Marshal: 515-281-5918, for questions on Aboveground and Underground Tanks and SPCC rules.
- Iowa DNR Air Quality Bureau: 515-725-9500
- Iowa DNR Air Quality Bureau, Construction Permit Helpline: 1-877-AIR-IOWA, for questions on air construction permits and NESHAP requirements.
- Iowa DOT: 515-239-1101, for information on the rules applicable to Iowa's transportation laws as well as access to Iowa's Hazardous Material Transportation Specialists.
- Iowa Bureau of Weights and Measures: 515-281-5321, for information regarding meter repair, meter calibration, and fuel quality sampling.
- US Motor Carrier Office: 515-233-7400, United States Department of Transportation Office located in Ames.
- Pipeline and Hazardous Materials Safety Administration: 202-366-4433, Federal Agency focused on the safe transportation of hazardous materials.
- Federal Motor Carrier Safety Administration: 1-800-832-5660, Government Agency overseeing federal Motor Carrier and Hazardous Material regulations.
- EPA Region VII: 931-551-7003/ 1-800-223-0425, for questions on SPCC rules.
- National Response Center: 1-800-424-8802 Hazardous Material transportation and pipeline accidents must be reported directly to the National Response Center.
- PMCI: 877-IOWA-OIL, State Trade Association representing petroleum marketers and convenience store operators across the state of Iowa.
- Iowa Waste Reduction Center: 319-273-8905/ 1-800-422-3109, for assistance with air permitting and SPCC rules.
 - Emergency Response Provider: ______
 - Local Fire Department: ______
 - Spill Reporting Hotline: 800-943-0003

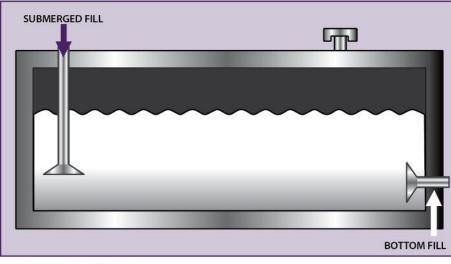
Understanding the NESHAP 6B Regulations Affecting Bulk Gasoline Plants

EPA has new requirements for Gasoline Distribution Bulk Terminals, Bulk Gasoline Plants and Pipeline Facilities under 40 CFR Part 63 Subpart BBBBBB (NESHAP 6B) to reduce air pollution. This calendar has been developed to assist Bulk Gasoline Plants in complying with NESHAP 6B. Additional Iowa specific NESHAP 6B rules are discussed later.

All reports and notifications required by this rule should be sent to the DNR at: Compliance Unit Supervisor, Air Quality Bureau: 7900 Hickman Rd., Suite 1 • Windsor Heights, IA 50324

NESHAP 6B Requirements for Bulk Gasoline Plants

- Storage tanks > 250 gallon capacity must be filled using the submerged fill with a discharge that is no more than the following from the bottom of the tank:
 - a. 12 inches for pipes installed on or before 11-9-2006
 - b. 6 inches for pipes installed after 11-9-2006



• Cargo Tank Loading Racks must also use submerged fill or drop tube designed tanks. A gasoline cargo tank means a delivery tank truck or railcar which is loaded at a bulk gasoline plant.

Equipment Leak Inspections - Bulk Gasoline Plants

• Monthly checks for leaks are required. This may be done by using the sense of smell, hearing and visual inspections of all pieces of equipment in gasoline or vapor service.

Operating Limits – Bulk Gasoline Plants

- The gasoline throughput at a bulk gasoline plant shall be limited to less than 20,000 gallons per day including all gasoline and gasoline blends loaded into cargo tanks.
- Each gasoline storage tank with a capacity of 250 gallons or greater and each gasoline cargo tank shall be loaded by means of submerged filling or bottom filling.
- Gasoline shall not be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
- 1. Minimize gasoline spills;
- 2. Clean up spills as expeditiously as practicable;
- 3. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
- 4. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

Compliance Date - Bulk Gasoline Plants:

- If your plant started up on or before November 9, 2006, it is considered an Existing Source and must comply by January 10, 2011.
- If your plant started up between November 9, 2006 and January 10, 2008, it is considered a New Source and must comply by January 10th, 2008.
- New facilities that start up after January 10, 2008 must comply with requirements upon startup.

FIGURE 1: Submerged fill tank. Note: Bottom Filling is considered a type of submerged filling.

Monitoring and Records - Bulk Gasoline Plants

- All throughput records must be kept on-site for a minimum of two (2) years.
- All leak inspections records must be kept for five (5) years. All records shall be available for inspection by an authorized representative of a federal, state, or local air pollution regulatory agency. Records shall be legible and maintained in an orderly manner. The permittee may maintain records off-site provided that the records are available within 24 hours or one business day of a request by an authorized representative of a federal, state, or local air pollution regulatory agency.
- These records shall show the following:
- □ At a minimum, a record of the quantity of all gasoline and gasoline blends loaded into cargo tanks each calendar month.
- Maintain an up-to-date list of the loading arms and storage tanks located at this facility. This information shall include the name and description, the capacity, the installation date, and the associated control equipment. For gasoline storage tanks and loading arms for gasoline and gasoline blends, information must be maintain on the type of loading method (i.e., submerged fill or bottom filling).
- A monthly leak inspection must be performed on all equipment in gasoline service. Equipment in gasoline service includes, but is not limited to, pumps, valves, open-ended lines, and connectors. For this inspection, detection methods incorporating sight, sound and smell are acceptable. The Compliance Calendar may be used to record inspections and retain the following information:
- 1. Types and locations of all equipment in gasoline service. For facilities electing to implement an instrument program for leak monitoring, the record shall contain a full description of the program.
- 2. Monthly monitoring inspection reports signed by the owner or operator at the completion of each inspection.
- 3. Each detection of a liquid or vapor leak must be recorded in the calendar. When a leak is detected, an initial attempt to repair must be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment will be

allowed if the repair is not feasible within 15 days. The owner or operator must provide in its semiannual report the reason(s) why the repair was not feasible and the date each repair was completed.

- 4. For each leak that is detected, the following information is required:
 - a. The equipment type, location and name;
 - b. The nature of the leak (i.e., vapor or liquid) and the method of detection;
 - c. The date the leak was detected and the date of each attempt to repair the leak;
 - d. The repair methods applied in each attempt to repair the leak;
 - e. If the leak is not repaired within 15 calendar days of detection, the reason for the delay;
 - f. The expected date of successful repair of the leak if the leak is not repaired within 15 days; and
 - g. The date of the successful repair of the leak.



Reporting - Bulk Gasoline Plants

DAILY THROUGHPUT EXCEEDANCE

The owner or operator shall submit a report to the DNR, Air Quality Bureau for any day in which the gasoline throughput exceeded their daily limit no later than 30 days after the exceedance and shall include the following information: facility identification, day of the exceedence and the gasoline throughput (gallons).

If no throughput exceedence occurs, no report is required.

SEMIANNUAL EXCESS EMISSIONS REPORT

The owner or operator shall submit a semiannual excess emissions report to the DNR, Air Quality Bureau: 7900 Hickman Road, Suite 1, Windsor Heights, IA 50324, which includes the following information:

1. For equipment leak detections, the number of equipment leaks not repaired within 15 days after detection; and

SEMIANNUAL EXCESS EMISSIONS REPORT

(copy as needed)

REPORTING PERIOD:

- 2. For each occurrence of an equipment leak for which no repair attempt was made within 5 days or for which repair was not completed with 15 days after detection:
 - a. Equipment name or identification;
 - b. The date on which the leak was detected;
 - c. The date of each attempt to repair the leak;
 - d. The reasons for the delay of repair; and
- e. The date of successful repair.

The semiannual reports shall cover the period from January 1 to June 30 and from July 1 to December 31 of each calendar year. The reports shall be submitted by no later than 30 days from the end of the 6-month period.

If no excess emission events occurred during the 6-month period, no report is required to be submitted.

Month:		Year	n					
Inspector Name:	Inspector Name: Inspector Signature:							
^(a) Equipment Name/ Identification	^(b) Date Equipment Leak Detected	^(c) Date of Each Attempt to Repair Leak (if applicable)	^(d) Reason for Delay of Repair (if applicable)	^(e) Date of Successful Repair				

Iowa's Implementation of NESHAP 6B Requirements for Bulk Gasoline Plants

In Iowa, Bulk Gasoline Plants have the option to be covered under a permit template for two separate categories of Bulk Gasoline Plants. The purpose of the permit template is to establish enforceable limits on the daily throughput of the plants. With this limit, the plants will avoid more stringent emissions controls and work practices required by EPA on plants that have a potential throughput of more than 20,000 gallons of gasoline per day. The permit template categories are based on plant throughput.

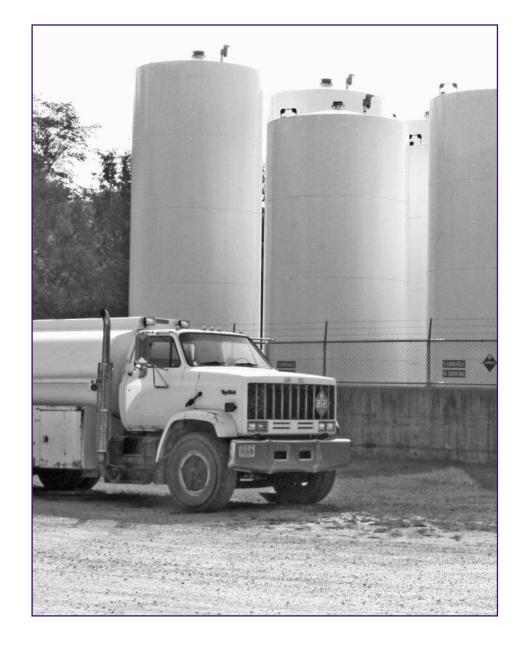
In Iowa:

- Small Bulk Gasoline Plants are plants with a monthly gasoline and gasoline blend throughput of less than 19,999 gallon/*month*. If more than one exceedance occurs in any 12 month period, the permitee will be required to apply for a construction permit that will allow for the gasoline throughput to be increased above 19,999 gallons per month.
- Large Bulk Gasoline Plants are plants with a daily gasoline and gasoline blend throughput of less than 19,999 gallons/*day*.

The designation of "Small" Bulk Gasoline Plant and "Large" Bulk Gasoline Plant is unique to Iowa and is intended to provide Bulk Gasoline Plants the opportunity to limit their emissions, via the permit template, while maintaining compliance with all EPA rules.

Iowa's Small and Large Bulk Gasoline Plants must meet all of the NESHAP 6B requirements for a bulk gasoline plant including equipment leak inspections, operating limits, compliance dates, monitoring and record keeping, and reporting.

The following two tables: Loading Rack Equipment List and Storage Tank Equipment List contain information required in Iowa's permit template.



Equipment Lists for Storage Tanks, Equipment in Gasoline Service and Loading Rack Arms

You are required to maintain a current list of the types, identification numbers and locations of all equipment in gasoline service. For facilities electing to implement an instrument program for leak monitoring, the record shall contain a full description of the program. If there are more loading arms (or storage tanks) than the following table allows, make copies of this table and attach to the calendar.

LOADING RACK – EQUIPMENT LIST

Arm ID	Date of Construction	Rated Pump Capacity (gallons per minute)	Monthly Throughput (gallons)	Materials Loaded (check all that apply)	⁽¹⁾ Loading Method (check one)
				 Gasoline⁽²⁾ Fuel Oil⁽³⁾ Other liquid: 	 Top load, splash fill Submerged fill⁽⁴⁾ (i.e., drop tube) to within 12" of bottom Submerged fill⁽⁴⁾ to within 6" of bottom
				Gasoline ⁽²⁾ Fuel Oil Garage	 Top load, splash fill Submerged fill⁽⁴⁾ (i.e., drop tube) to within 12" of bottom Submerged fill⁽⁴⁾ to within 6" of bottom
				 □ Gasoline⁽²⁾ □ Fuel Oil⁽³⁾ □ Other liquid: 	 Top load, splash fill Submerged fill⁽⁴⁾ (i.e., drop tube) to within 12" of bottom Submerged fill⁽⁴⁾ to within 6" of bottom
				□ Gasoline ⁽²⁾ □ Fuel Oil ⁽³⁾ □ Other liquid:	 Top load, splash fill Submerged fill⁽⁴⁾ (i.e., drop tube) to within 12" of bottom Submerged fill⁽⁴⁾ to within 6" of bottom
				□ Gasoline ⁽²⁾ □ Fuel Oil ⁽³⁾ □ Other liquid:	 Top load, splash fill Submerged fil⁽⁴⁾ (i.e., drop tube) to within 12" of bottom Submerged fill⁽⁴⁾ to within 6" of bottom
				□ Gasoline ⁽²⁾ □ Fuel Oil ⁽³⁾ □ Other liquid:	 Top load, splash fill Submerged fill⁽⁴⁾ (i.e., drop tube) to within 12" of bottom Submerged fill⁽⁴⁾ to within 6" of bottom
				 □ Gasoline⁽²⁾ □ Fuel Oil ⁽³⁾ □ Other liquid: 	 Top load, splash fill Submerged fill⁽⁴⁾ (i.e., drop tube) to within 12" of bottom Submerged fill⁽⁴⁾ to within 6" of bottom
				□ Gasoline ⁽²⁾ □ Fuel Oil ⁽³⁾ □ Other liquid:	 Top load, splash fill Submerged fill⁽⁴⁾ (i.e., drop tube) to within 12" of bottom Submerged fill⁽⁴⁾ to within 6" of bottom

(1) Bottom filling is considered to be a type of submerged filling.

(2) Includes all blends of gasoline (i.e., E10, E85, gasohol).

(3) Includes fuel oil grades No. 1 through No.6, kerosene, and diesel fuels.

⁽⁴⁾ For arms loading gasoline, submerged fill pipes installed before November 9, 2006 must be no more than 12" from the bottom of the tank. Submerged fill pipes installed after November 9, 2006 must be no more than 6" from the bottom of the tank.

If there are more loading arms (or storage tanks) than the following table allows, make copies of this table and attach to the calendar.

STORAGE TANK – EQUIPMENT LIST

*Table includes tanks of >250 gallons

Tank ID	Material Stored	Tank Capacity (gallons)	Date of Installation	Loading Method ⁽¹⁾
	□ Gasoline ⁽²⁾ □ Fuel Oil ⁽³⁾ □ Other liquid:			 Top load, splash fill Submerged fill⁽⁴⁾ (i.e., drop tube) to within 12" of bottom Submerged fill⁽⁴⁾ to within 6" of bottom
	□ Gasoline ⁽²⁾ □ Fuel Oil ⁽³⁾ □ Other liquid:			 Top load, splash fill Submerged fill⁽⁴⁾ (i.e., drop tube) to within 12" of bottom Submerged fill⁽⁴⁾ to within 6" of bottom
	□ Gasoline ⁽²⁾ □ Fuel Oil ⁽³⁾ □ Other liquid:			 Top load, splash fill Submerged fill⁽⁴⁾ (i.e., drop tube) to within 12" of bottom Submerged fill⁽⁴⁾ to within 6" of bottom
	□ Gasoline ⁽²⁾ □ Fuel Oil ⁽³⁾ □ Other liquid:			 Top load, splash fill Submerged fill⁽⁴⁾ (i.e., drop tube) to within 12" of bottom Submerged fill⁽⁴⁾ to within 6" of bottom
	Gasoline ⁽²⁾ Fuel Oil ⁽³⁾ Other liquid:			 Top load, splash fill Submerged fill⁽⁴⁾ (i.e., drop tube) to within 12" of bottom Submerged fill⁽⁴⁾ to within 6" of bottom
	 □ Gasoline⁽²⁾ □ Fuel Oil⁽³⁾ □ Other liquid: 			 Top load, splash fill Submerged fill⁽⁴⁾ (i.e., drop tube) to within 12" of bottom Submerged fill⁽⁴⁾ to within 6" of bottom
	□ Gasoline ⁽²⁾ □ Fuel Oil ⁽³⁾ □ Other liquid:			 Top load, splash fill Submerged fill⁽⁴⁾ (i.e., drop tube) to within 12" of bottom Submerged fill⁽⁴⁾ to within 6" of bottom
	 Gasoline⁽²⁾ Fuel Oil⁽³⁾ Other liquid: 			 Top load, splash fill Submerged fill⁽⁴⁾ (i.e., drop tube) to within 12" of bottom Submerged fill⁽⁴⁾ to within 6" of bottom

(1) Bottom filling is considered to be a type of submerged filling.

(2) Includes all blends of gasoline (i.e., E10, E85, gasohol)

(3) Includes fuel oil grades No.1 through No.6, kerosene, and diesel fuels.

(4) For tanks storing gasoline, submerged fill pipes installed before November 9, 2006 must be no more than 12" from the bottom of the tank. Submerged fillpipes installed after November 9, 2006 must be no more than 6" from the bottom of the tank.

Instructions for Using the Record Keeping Pages in this Calendar

This calendar was developed for use by Large Bulk Gasoline Plants in Iowa. If you are a Small Bulk Gasoline Plant please contact the Iowa Air Emissions Assistance Program at 1-800-422-3109 for more information and assistance. Each month you are required to check for leaks. You are also required to record your daily gasoline and gasoline blend throughput to document if you are a Large Bulk Gasoline Plant.

This calendar has been developed to help with monthly leak detection monitoring and recordkeeping and recording daily gasoline and gasoline blend throughput at a Large Bulk Gasoline Plant. Each calendar page has charts to record and document compliance with NESHAP 6B.

Throughput Log

Large Bulk Gasoline Plants (less than 19,999 gallons/day) are required to record gasoline and gasoline blend throughput daily. The daily throughput is the total amount of gasoline and gasoline blends loaded out from your facility at the loading rack. To track daily throughput, record gasoline and gasoline blend totals (gallons/day) on each day of the monthly calendar.

Monthly Leak Detection Monitoring

Each calendar month you must inspect all equipment in gasoline operation for leaks. Inspection methods can be sight, sound or smell. If an instrument program is used for leak detection, the log should include a full description of the program.

WHEN TO MONITOR FOR LEAKS

The Calendar includes a reminder shown on the last working day of each month, however, you may wish to monitor for leaks whenever it is most likely for a leak to occur. In any case, you must monitor at least once each month (30 day interval).

WHERE TO MONITOR FOR LEAKS: WHERE AND HOW LEAKS MIGHT OCCUR

Pumps are used to move fluids from one point to another. Two types of pumps extensively used in petroleum refineries and chemical plants are centrifugal pumps and positive displacement, or reciprocating pumps. Leaks from pumps typically occur at the seal.

Valves are used to either restrict or allow the movement of fluids. Valves come in numerous varieties and with the exception of connectors, are the most common piece

of process equipment. Leaks from valves usually occur at the stem or gland area of the valve body and are commonly caused by a failure of the valve packing or O-ring.

Connectors are components such as flanges and fittings used to join piping and process equipment together. Gaskets and blinds are usually installed between flanges. Leaks from connectors are commonly caused from gasket failure and improperly torqued bolts on flanges.

Sampling connections are utilized to obtain samples from within a process. Leaks from sampling connections usually occur at the outlet of the sampling valve when the sampling line is purged to obtain the sample.

Compressors are designed to increase the pressure of a fluid and provide motive force. They can have rotary or reciprocating designs. Leaks from compressors most often occur from the seals.

Pressure relief devices are safety devices designed to protect equipment from exceeding the maximum allowable working pressure. Pressure relief valves and rupture disks are examples of pressure relief devices. Leaks from pressure relief valves can occur if the valve is not seated properly, operating too close to the set point, or if the seal is worn or damaged. Leaks from rupture disks can occur around the disk gasket if not properly installed.

Open-ended lines are pipes or hoses open to the atmosphere or surrounding environment. Leaks from open-ended lines occur at the point of the line open to the atmosphere and are usually controlled by using caps, plugs, and flanges. Leaks can also be caused by the incorrect implementation of the block and bleed procedure.

To help you identify where to look for leaks, refer to the Loading Rack and Tank Equipment Lists found in this calendar on Pages 9 and 10. Your air permit requires that you provide individual Tank ID numbers and Arm ID numbers. These can be used to reference which pump, valve, etc. has been checked for leaks.

- Generally, all equipment in gasoline service must be monitored including but not limited to all pumps, valves, open-ended lines, connectors, etc.
- Refer to the equipment list that contains ID numbers for each Loading Rack Arm and Storage Tank. Use the respective numbers to identify which pump, valve, connector, etc. you have inspected for leaks.

HOW CAN YOU TELL THERE HAS BEEN A LEAK?

You can use the following checklist to help pinpoint signs there might have been a leak. You should modify the checklist so that it meets the specific conditions at your Bulk Plant.

Leak Detection Monitoring – Sample Checklist

(Some of items in the checklist may not apply to all facilities)

Check Storage Tanks and Containers for leaks, specifically looking for:

- Drips, marks and stains
- Discolorations of containers
- Puddles of stored material
- Corrosion
- Cracks
- Localized dead vegetation
- Note findings on the Log include Equipment type, Location & ID Number, and the results of your inspection

Check Loading Rack & Arms for:

- Discoloration
- Corrosion
- □ Bowing of pipes between supports
- Presence of stored material seepage on valves
- Evidence of leakage at joints and seams
- Localized dead vegetation
- $\hfill\square$ Presence of stored material within dike or berm
- $\hfill\square$ Standing water with a sheen within dike or berm
- Drips marks and stains

Note findings on the Log – include Equipment type, Location and Tank and/or Arm ID, and the results of your inspection

Check Pipes and Valves for:

- Droplets of stored material
- Discoloration
- $\hfill\square$ Corrosion
- Bowing of pipes between supports
- Presence of stored material seepage on valves
- □ Evidence of leakage at joints and seams
- Localized dead vegetation

Note findings on the Log – include Equipment type, Location and Tank and/or Arm ID, and the results of your inspection.

Check Secondary Containment for indication of a leak:

- $\hfill\square$ Presence of stored material within dike or berm
- $\hfill\square$ Standing water with a sheen within dike or berm

Note findings on the Log – include Equipment type, Location and Tank and/or Arm ID, and the results of your inspection.





Record Your Monthly Monitoring for Leaks

For each month, the calendar contains a log that can be used to record your monthly leak detection findings. Each person who conducts the leak inspection should initial their entries in the table and also sign the monthly log. The Monthly Leak Inspection Log is used to record equipment inspected and whether or not leaks were found. In the event a leak is detected, the information should be recorded on one of the Monthly Leak Detection <u>Repair</u> Forms.

SAMPLE MONTHLY LEAK INSPECTION MONITORING LOG

(leak inspection monitoring should be conducted when fluid is being circulated for all equipment in gasoline service at the facility, and inspection date recorded on the calendar each month)

Inspector Name: Matthew Coolstein	Inspector Signature:	
(I) List Equipment Type/Name	⁽²⁾ <u>NO</u> Leaks Detected:	⁽³⁾ YES Leak Detected:
	Add Date and Inspector Initials	Add Date, then go to <i>Leak Detection</i> Repair Form(s) in back of calendar
Pump/Gas		y - 8/14/13 mc
Pump/E85		y - 8/14/13 mc
Connectors/Gas	n-8/14/13 mc	
Connectors/E85	n-8/14/13 mc	
Valve/Gas	n-8/14/13 mc	
Valve/E85	n-8/14/13 mc	
Open-ended Lines/Gas	n-8/14/13 mc	
Open-ended Lines/E85	N-8/14/13 MC	
Other (add as needed)	n-8/14/13 mc	

(1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc.

(2) If no leak is detected, enter "N", date inspected and inspector's initials.

A sample Monthly Leak Inspection Monitoring Log has been created to help you understand what types of information should be included in the monthly inspection log:

What to do when a Leak is Detected?

You must make an initial attempt to repair the equipment as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment must be completed within 15 calendar days after the detection of each leak. Delay of repair of leaking equipment will be allowed if the repair is not feasible within 15 days however, the owner or operator must provide information regarding the reason(s) why the repair was not feasible and the date each repair was successfully completed in a Semiannual Report. The report covers the period from January 1 to June 30 and from July 1 to December 31 of each calendar year and must be submitted to DNR no later than 30 days from the end of the 6-month period.

If a leak is detected, use one of the Monthly Leak Detection Repair Forms (Work Order, Tag ID, Written Description, Maps or Photographs) to document leak detection monitoring, repair activity and status.

A sample for each type of Monthly Leak Detection Repair Form has been created to help you understand what types of information should be included in the repair form:

Inspector Name: Saw Brown				_ Inspector Signature:	x-fr-	
⁽¹⁾ List Equipment Type	Leak detected (y/n) & Date	⁽²⁾ Location & ID of Leak	(3) Leak type (V/L)	^(#) Method used & Inspector Initials	⁽⁵⁾ Work Order # and Issue Date	⁽⁶⁾ Repair Complete Date*
Pump/Gas	Y - 8/14/13	Arm 2	L	Sight - SB	WO 1254 8-14-13	8-24-13
Pump/E85	Y - 8/14/13	Tank 3	٧	Smell - SB	WO 1255 8-14-13	8-24-13
Valve/E85	Y - 9/10/13	Valve closest to pump	L	Sight - SB	WO-1256 9-10-13	9-11-13

SAMPLE MONTHLY LEAK DETECTION REPAIR FORM – WORK ORDER

(1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc.

(2) If a leak is discovered, enter the Arm or Tank ID Number where the leak was discovered (use ID numbers required in the air permit). Be specific on which component is leaking if there is more than one component.

(3) Enter "V" for a vapor leak or "L" for a liquid leak.

(4) Enter method used: "Sight" or "Smell" or "Sound" and the initials of the inspector. If leak detection instrument is used enter "Instrument"...

(${\bf 5}$) Enter Work Order ${\it \#}$ and issue date.

(6) Enter repair complete date.

A Tag is placed on leaking equipment to document repair(s). The Tag must identify the equipment type, include leak detection date, location and ID of leak and leak type. The Tag must have a unique number to identify itself and the leaking equipment indefinitely. Tag closure date (date repair completed) must be documented on the Tag. If using a 'Tag System' to document repairs is not an option at your facility, choose one of the other methods suggested to document leak repair.

SAMPLE MONTHLY LEAK DETECTION REPAIR FORM - TAG SYSTEM

Inspector Name: Saw Brown				Inspector Signature:	Jank -	
⁽¹⁾ List Equipment Type	Leak detected (y/n) & Date	Location & ID of Leak	⁽³⁾ Leak type (V/L)	⁽⁺⁾ Method used & Inspector Initials	(5) Tag ID # and Issue Date	(6) Repair Complete Date*
Pump/Gas	Y - 8/14/13	Arm 2	L	Sight – SB	P3-G10 8-14-13	8-24-13
Pump/E85	Y - 8/14/13	Tank 3	٧	Smell - SB	PI-90F 8-14-13	8-24-13
Valve/E85	Y - 9/10/13	Valve closest to pump	L	Sight - SB	V2-8A3 9-10-13	9-11-13

(1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc

(2) If a leak is discovered, enter the Arm or Tank ID Number where the leak was discovered (use ID numbers required in the air permit). Be specific on which component is leaking if there is more than one component. (3) Enter "V" for a vapor leak or "L" for a liquid leak.

(4) Enter method used: "Sight" or "Smell" or "Sound" and the initials of the inspector. If leak detection instrument is used enter "Instrument".

(5) Enter Written Description and issue date.

(6) Enter repair complete date.

A 'Written Description' for leaking equipment is created to document repair(s). The Written Description must identify the equipment type, include leak detection date, location and ID of leak and leak type, method used to detect the leaks, a written description and a repair completed date. If using a 'Written Description' to document repairs is not an option at your facility, choose one of the other methods suggested to document leak repair.

SAMPLE MONTHLY LEAK DETECTION REPAIR FORM – WRITTEN DESCRIPTION

Inspector Name: Saw Brown				Inspector Signature:	Jan france	
⁽¹⁾ List Equipment Type	Leak detected (y/n) & Date	⁽²⁾ Location & ID of Leak	⁽³⁾ Leak type (V/L)	⁽⁴⁾ Method used & Inspector Initials	⁽⁵⁾ Written Description and Issue Date	(6) Repair Complete Date*
Pump/Gas	Y - 8/14/13	Arm 2	L	Sight - SB	Pump taken out of service. 8-14-09 Pump Replaced.	8-24-13
Pump/E85	Y - 8/14/13	Tank 3	٧	Smell - SB	Pump turned off. New Pump ordered. 8-14-09 Pump Replaced.	8-24-13
Valve/E85	y - 9/10/13	Valve closest to pump	L	Sight – SB	Valve closed. New valve ordered 9-10-09	9-11-13

(1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc

(2) If a leak is discovered, enter the Arm or Tank ID Number where the leak was discovered (use ID numbers required in the air permit). Be specific on which component is leaking if there is more than one component. (3) Enter "V" for a vapor leak or "L" for a liquid leak.

(4) Enter method used: "Sight" or "Smell" or "Sound" and the initials of the inspector. If leak detection instrument is used enter "Instrument".

(5) Enter Written Description and issue date.

(6) Enter repair complete date.

A 'Map or Photographs' may be used for leaking equipment to document repair(s). The Map or Photographs must identify the equipment type and include leak detection date, location and ID of leak and leak type. The Map or Photographs must be accompanied by a closure date (completed repair date). If using 'Map or Photographs' to document repairs is not an option at your facility, choose one of the other methods suggested to document leak repair.

SAMPLE MONTHLY LEAK DETECTION REPAIR FORM – MAP OR PHOTOGRAPHS

Inspector Name: Saw Brown				Inspector Signature:	Jan france	
⁽¹⁾ List Equipment Type	Leak detected (y/n) & Date	(2) Location & ID of Leak	(3) Leak type (V/L)	(⁴⁾ Method used & Inspector Initials	Map or Photographs and Issue Date	(6) Repair Complete Date*
Pump/Gas	Y - 8/14/13	Arm 2	L	Sight – SB	See attached map.	8-24-13
Pump/E85	Y - 8/14/13	Tank 3	٧	Smell - SB	See attached photograph.	8-24-13
Valve/E85	Y - 9/10/13	Valve closest to pump	L	Sight – SB	See attached photograph.	9-11-13

(1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc

(2) If a leak is discovered, enter the Arm or Tank ID Number where the leak was discovered (use ID numbers required in the air permit). Be specific on which component is leaking if there is more than one component.

(3) Enter "V" for a vapor leak or "L" for a liquid leak.

(4) Enter method used: "Sight" or "Smell" or "Sound" and the initials of the inspector. If leak detection instrument is used enter "Instrument".

(5) Enter Map or Photographs and issue date.

(6) Enter repair complete date.

A 'Work Order' is issued to document repair(s). The Work Order must identify the equipment type, include leak detection date, location and ID of leak and leak type. The Work Order must have a unique number to identify itself and be kept on file indefinitely. Work Order closure date (i.e., repair completed date) must be documented on the Work Order. If using a Work Order to document repairs is not an option at your facility, choose one of the other methods suggested to document leak repairs.

Daily Gasoline and Gasoline Blends Throughput - Large Bulk Gasoline Plant

Each day you are required to track the quantity of gasoline and gasoline blends loaded into cargo tanks at your facility.



MONTHLY LEAK INSPECTION MONITORING LOG

(leak inspection monitoring should be conducted when fluid is being circulated for all equipment in gasoline service at the facility, and inspection date recorded on the calendar each month)

Inspector Name:	Inspector Signature:					
⁽¹⁾ List Equipment Type/Name	⁽²⁾ NO Leaks Detected: Add Date and Inspector Initials	 ⁽³⁾ YES Leak Detected: Add Date, then go to Leak Detection Repair Form(s) in back of calendar 				

Need Help?

Sample Monthly Leak Detection Monitoring Log, page 14 (1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc.

(2) If no leak is detected, enter "N", date inspected and inspector's initials.

Iowa Waste Reduction Center



Iowa Air Emissions Assistance Program

2016/2017 Compliance Calendar for Large Bulk Gasoline Plants January 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
REMINDER: A space is blend throughput.	is provided on each day of th	ne monthly calendar for rec	ording daily gasoline and ga	asoline	Gallons per day	2 Gallons per day
Gallons per day	Gallons per day	Gallons per day	Gallons per day	7 Gallons per day	Gallons per day	Gallons per day
Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day
Gallons per day	18 Gallons per day	19 Gallons per day	20 Gallons per day	21 Gallons per day	22 Gallons per day	23 Gallons per day
Gallons per day 24	25 Gallons per day	26 Gallons per day	27 Gallons per day	28 Gallons per day	29 Gallons per day	30 Gallons per day
Gallons per day					Monthly Inspection Conducted Record Results in Logs	



MONTHLY LEAK INSPECTION MONITORING LOG

(leak inspection monitoring should be conducted when fluid is being circulated for all equipment in gasoline service at the facility, and inspection date recorded on the calendar each month)

Inspector Name:	Inspector Signature:					
⁽¹⁾ List Equipment Type/Name	⁽²⁾ NO Leaks Detected: Add Date and Inspector Initials	 (3) YES Leak Detected: Add Date, then go to Leak Detection Repair Form(s) in back of calendar 				
	1	I				

Need Help?

Sample Monthly Leak Detection Monitoring Log, page 14 (1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc.

(2) If no leak is detected, enter "N", date inspected and inspector's initials.

Iowa Air Emissions Assistance Program

2016/2017 Compliance Calendar for Large Bulk Gasoline Plants **February** 2016

Sunday Saturday Monday Wednesday Tuesday Thursday Friday 2 3 4 5 1 6 Gallons per day 12 7 8 9 10 11 13 Gallons per day 15 16 17 18 19 20 14 Gallons per day 22 23 25 26 21 24 27 Gallons per day 28 29 Gallons per day Gallons per day **REMINDER:** A space is provided on each day of the monthly calendar for recording daily gasoline and gasoline blend throughput. Monthly Inspection Conducted Record Results in Logs

Iowa Waste Reduction Center The State of Center University of Northern Iowa



MONTHLY LEAK INSPECTION MONITORING LOG

(leak inspection monitoring should be conducted when fluid is being circulated for all equipment in gasoline service at the facility, and inspection date recorded on the calendar each month)

Inspector Name: Inspector Signature:					
⁽¹⁾ List Equipment Type/Name	⁽²⁾ NO Leaks Detected: Add Date and Inspector Initials	 (3) YES Leak Detected: Add Date, then go to Leak Detection Repair Form(s) in back of calendar 			

Need Help?

Sample Monthly Leak Detection Monitoring Log, page 14 (1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc.

(2) If no leak is detected, enter "N", date inspected and inspector's initials.

Iowa Waste Reduction Center



Iowa Air Emissions Assistance Program

2016/2017 Compliance Calendar for Large Bulk Gasoline Plants March 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
REMINDER: A space day of the monthly ca daily gasoline and gas throughput.	lendar for recording	Gallons per day	2 Gallons per day	Gallons per day	Gallons per day	5 Gallons per day
Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day
Gallons per day 13	Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day
Gallons per day	21 Gallons per day	Gallons per day	Callons per day	Gallons per day	Callons per day	26 Gallons per day
Gallons per day	28 Gallons per day	Gallons per day	30 Gallons per day	Gallons per day Monthly Inspection Conducted Record Results in Logs		



MONTHLY LEAK INSPECTION MONITORING LOG

(leak inspection monitoring should be conducted when fluid is being circulated for all equipment in gasoline service at the facility, and inspection date recorded on the calendar each month)

Inspector Name:	Inspector Signature:			
^(I) List Equipment Type/Name	⁽²⁾ NO Leaks Detected: Add Date and Inspector Initials	 (3) YES Leak Detected: Add Date, then go to Leak Detection Repair Form(s) in back of calendar 		

Need Help?

Sample Monthly Leak Detection Monitoring Log, page 14 (1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc.

(2) If no leak is detected, enter "N", date inspected and inspector's initials.

Iowa Waste Reduction Center



Iowa Air Emissions Assistance Program

2016/2017 Compliance Calendar for Large Bulk Gasoline Plants April 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
REMINDER: A space blend throughput.	is provided on each day of	the monthly calendar for re	ecording daily gasoline and g	jasoline	Gallons per day	Gallons per day
Gallons per day	4 Gallons per day	Gallons per day	Gallons per day	7 Gallons per day	Gallons per day	B Gallons per day 9
Gallons per day	11 Gallons per day	Gallons per day	Gallons per day	14 Gallons per day	Gallons per day	5 Gallons per day
17 Gallons per day	18 Gallons per day	Gallons per day	20 Gallons per day	21 Gallons per day	Gallons per day	2 23 Gallons per day
24 Gallons per day	25 Gallons per day	26 Gallons per day	27 Gallons per day	28 Gallons per day	Gallons per day Monthly Inspection Conducted	Gallons per day



MONTHLY LEAK INSPECTION MONITORING LOG

(leak inspection monitoring should be conducted when fluid is being circulated for all equipment in gasoline service at the facility, and inspection date recorded on the calendar each month)

Inspector Name:	Inspector Signature:				
⁽¹⁾ List Equipment Type/Name	⁽²⁾ NO Leaks Detected: Add Date and Inspector Initials	 (3) YES Leak Detected: Add Date, then go to Leak Detection Repair Form(s) in back of calendar 			

Need Help?

Sample Monthly Leak Detection Monitoring Log, page 14 (1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc.

(2) If no leak is detected, enter "N", date inspected and inspector's initials.

Iowa Waste Reduction Center



INVERSITY OF Northern Iowa

2016/2017 Compliance Calendar for Large Bulk Gasoline Plants May 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Gallons per day	2 Gallons per day	Gallons per day	4 Gallons per day	5 Gallons per day	Gallons per day	7 Gallons per day
Gallons per day	Gallons per day	10 Gallons per day	11 Gallons per day	12 Gallons per day	13 Gallons per day	14 Gallons per day
Gallons per day	Gallons per day	Gallons per day	18 Gallons per day	Gallons per day	Gallons per day 20	Gallons per day 21
Gallons per day	23 Gallons per day	24 Gallons per day	25 Gallons per day	26 Gallons per day	27 Gallons per day	28 Gallons per day
29 Gallons per day	30 Gallons per day	Gallons per day Gallons per day Monthly Inspection Conducted Record Results in Logs	REMINDER: A space is gasoline blend throughp	provided on each day of th out.	e monthly calendar for reco	ording daily gasoline and



MONTHLY LEAK INSPECTION MONITORING LOG

(leak inspection monitoring should be conducted when fluid is being circulated for all equipment in gasoline service at the facility, and inspection date recorded on the calendar each month)

Inspector Name:	Inspector Signature:				
⁽¹⁾ List Equipment Type/Name	⁽²⁾ NO Leaks Detected: Add Date and Inspector Initials	 ⁽³⁾ YES Leak Detected: Add Date, then go to <i>Leak Detection</i> <i>Repair Form(s)</i> in back of calendar 			

Need Help?

Sample Monthly Leak Detection Monitoring Log, page 14 (1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc.

(2) If no leak is detected, enter "N", date inspected and inspector's initials.

Iowa Waste Reduction Center



Iowa Air Emissions Assistance Program

2016/2017 Compliance Calendar for Large Bulk Gasoline Plants June 2016

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
-	-	allons per day	2 Gallons per day	3 Gallons per day	4 Gallons per day
Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day	11 Gallons per day
Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day
Gallons per day	21 Gallons per day	22 Gallons per day	23 Gallons per day	24 Gallons per day	25 Gallons per day
27 Gallons per day	28 Gallons per day	29 Gallons per day	Gallons per day		
p	provided on each day of the be and gasoline blend throu Gallons per day Gallons per day 20 Gallons per day 27	provided on each day of the monthly calendar ne and gasoline blend throughput. Gallons per day 6 Gallons per day 7 Gallons per day 13 Gallons per day 14 Gallons per day 20 Gallons per day 21 Gallons per day 27 28	provided on each day of the monthly calendar he and gasoline blend throughput. Gallons per day Gallons per day	provided on each day of the monthly calendar e and gasoline blend throughput. Gallons per day Gallons per day	provided on each day of the monthly calendar Gallons per day Ga



(leak inspection monitoring should be conducted when fluid is being circulated for all equipment in gasoline service at the facility, and inspection date recorded on the calendar each month)

Inspector Name:	Inspector Signature:				
⁽¹⁾ List Equipment Type/Name	(2) NO Leaks Detected: Add Date and Inspector Initials	 (3) YES Leak Detected: Add Date, then go to Leak Detection Repair Form(s) in back of calendar 			
	I	I			

Need Help?

Sample Monthly Leak Detection Monitoring Log, page 14 (1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc.

(2) If no leak is detected, enter "N", date inspected and inspector's initials.



Iowa Air Emissions Assistance Program

2016/2017 Compliance Calendar for Large Bulk Gasoline Plants July 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
REMINDER: A space i blend throughput.	is provided on each day of t	he monthly calendar for rec	ording daily gasoline and ga	asoline	Gallons per day	2 Gallons per day
Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day
Gallons per day	Gallons per day	12 Gallons per day	Gallons per day	Gallons per day	15 Gallons per day	Gallons per day
Gallons per day	Gallons per day	19 Gallons per day	20 Gallons per day	21 Gallons per day	22 Gallons per day	Gallons per day
Gallons per day 24	25 Gallons per day	26 Gallons per day	27 Gallons per day	28 Gallons per day	29 Gallons per day Monthly Inspection	30 Gallons per day
Gallons per day 31					Conducted Record Results in Logs	



(leak inspection monitoring should be conducted when fluid is being circulated for all equipment in gasoline service at the facility, and inspection date recorded on the calendar each month)

Inspector Name:	Inspector Signature:				
⁽¹⁾ List Equipment Type/Name	⁽²⁾ NO Leaks Detected: Add Date and Inspector Initials	 (3) YES Leak Detected: Add Date, then go to Leak Detection Repair Form(s) in back of calendar 			

Need Help?

Sample Monthly Leak Detection Monitoring Log, page 14 (1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc.

(2) If no leak is detected, enter "N", date inspected and inspector's initials.



Iowa Air Emissions Assistance Program

2016/2017 Compliance Calendar for Large Bulk Gasoline Plants August 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	Gallons per day	2 Gallons per day	3 Gallons per day	4 Gallons per day	Gallons per day	Gallons per day
Gallons per day	Gallons per day	Gallons per day	10 Gallons per day	11 Gallons per day	Gallons per day	Gallons per day
Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day 20
Gallons per day	22 Gallons per day	23 Gallons per day	24 Gallons per day	25 Gallons per day	Callons per day	Gallons per day
Callons per day	29 Gallons per day	30 Gallons per day	Gallons per day		s provided on each day of the line and gasoline blend through	-
			Monthly Inspection Conducted Record Results in Logs		-	



(leak inspection monitoring should be conducted when fluid is being circulated for all equipment in gasoline service at the facility, and inspection date recorded on the calendar each month)

Inspector Name:	Inspector Signature:				
^(I) List Equipment Type/Name	⁽²⁾ NO Leaks Detected: Add Date and Inspector Initials	(3) YES Leak Detected: Add Date, then go to Leak Detection Repair Form(s) in back of calendar			

Need Help?

Sample Monthly Leak Detection Monitoring Log, page 14 (1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc.

(2) If no leak is detected, enter "N", date inspected and inspector's initials.

Iowa Waste Reduction Center



2016/2017 Compliance Calendar for Large Bulk Gasoline Plants **September** 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
REMINDER: A space is gasoline blend throughp	provided on each day of th ut.	e monthly calendar for rec	ording daily gasoline and	allons per day	2 Gallons per day	Gallons per day
4 Gallons per day	Gallons per day 5	Gallons per day	7 Gallons per day	Gallons per day	Gallons per day	Gallons per day
Gallons per day 11	Gallons per day	Gallons per day	14 Gallons per day	Gallons per day	Gallons per day	Gallons per day
18 Gallons per day	19 Gallons per day	20 Gallons per day	21 Gallons per day	22 Gallons per day	23 Gallons per day	24 Gallons per day
25 Gallons per day	26 Gallons per day	27 Gallons per day	28 Gallons per day	29 Gallons per day	Gallons per day Monthly Inspection Conducted Record Results in Logs	



(leak inspection monitoring should be conducted when fluid is being circulated for all equipment in gasoline service at the facility, and inspection date recorded on the calendar each month)

Inspector Name:	Inspector Signature:				
⁽¹⁾ List Equipment Type/Name	⁽²⁾ NO Leaks Detected: Add Date and Inspector Initials	 (3) YES Leak Detected: Add Date, then go to Leak Detection Repair Form(s) in back of calendar 			

Need Help?

Sample Monthly Leak Detection Monitoring Log, page 14 (1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc.

(2) If no leak is detected, enter "N", date inspected and inspector's initials.



Iowa Air Emissions Assistance Program

2016/2017 Compliance Calendar for Large Bulk Gasoline Plants **October** 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
REMINDER: A space i blend throughput.	is provided on each day of t	he monthly calendar for rec	ording daily gasoline and ga	asoline		1 Gallons per day
2 Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day
Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day
Gallons per day	Gallons per day	Gallons per day	19 Gallons per day	20 Gallons per day	21 Gallons per day	22 Gallons per day
Gallons per day 23 Gallons per day 30	Gallons per day 24 Gallons per day 31	Gallons per day	Gallons per day	Gallons per day	Gallons per day 28	Gallons per day 29
	Monthly Inspection Conducted Record Results in Logs					



(leak inspection monitoring should be conducted when fluid is being circulated for all equipment in gasoline service at the facility, and inspection date recorded on the calendar each month)

Inspector Name:	Inspector Signature:				
⁽¹⁾ List Equipment Type/Name	⁽²⁾ NO Leaks Detected: Add Date and Inspector Initials	 (3) YES Leak Detected: Add Date, then go to Leak Detection Repair Form(s) in back of calendar 			
	1	I			

Need Help?

Sample Monthly Leak Detection Monitoring Log, page 14 (1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc.

(2) If no leak is detected, enter "N", date inspected and inspector's initials.

2016/2017 Compliance Calendar for Large Bulk Gasoline Plants **November** 2016

Iowa Waste Reduction Center



Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		Gallons per day	2 Gallons per day	Gallons per day	4. Gallons per day	5 Gallons per day
Gallons per day	7 Gallons per day	8 Gallons per day	9 Gallons per day	10 Gallons per day	11 Gallons per day	12 Gallons per day
Gallons per day 13	Gallons per day	Gallons per day 15	Gallons per day	Gallons per day 17	Gallons per day 18	Gallons per day 19
20 Gallons per day	21 Gallons per day	22 Gallons per day	23 Gallons per day	24 Gallons per day	25 Gallons per day	26 Gallons per day
Gallons per day	Callons per day	29 Gallons per day	Gallons per day 30	-	s provided on each day of th line and gasoline blend thro	-
			Conducted Record Results in Logs			



(leak inspection monitoring should be conducted when fluid is being circulated for all equipment in gasoline service at the facility, and inspection date recorded on the calendar each month)

Inspector Name:	Inspector Signature:				
⁽¹⁾ List Equipment Type/Name	⁽²⁾ NO Leaks Detected: Add Date and Inspector Initials	 (3) YES Leak Detected: Add Date, then go to Leak Detection Repair Form(s) in back of calendar 			

Need Help?

Sample Monthly Leak Detection Monitoring Log, page 14 (1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc.

(2) If no leak is detected, enter "N", date inspected and inspector's initials.

Iowa Waste Reduction Center



2016/2017 Compliance Calendar for Large Bulk Gasoline Plants **December** 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
REMINDER: A sp and gasoline blend	•	ay of the monthly calendar for	recording daily gasoline	Gallons per day	2 Gallons per day	Gallons per day
Gallons per day	4 Gallons per day	5 Gallons per day	6 Gallons per day	Gallons per day	Gallons per day	Gallons per day
Gallons per day	1 Gallons per day	12 Gallons per day	3 Gallons per day	Gallons per day	Gallons per day	Gallons per day
Gallons per day	8 Gallons per day	19 Gallons per day	D Gallons per day	Gallons per day	23 Gallons per day	Callons per day
2 Gallons per day	5 Gallons per day	26 2 Gallons per day	7 Gallons per day	Callons per day	Gallons per day	31
					Monthly Inspection Conducted Record Results in Logs	



(leak inspection monitoring should be conducted when fluid is being circulated for all equipment in gasoline service at the facility, and inspection date recorded on the calendar each month)

Inspector Name:	Inspector Signature:				
⁽¹⁾ List Equipment Type/Name	⁽²⁾ NO Leaks Detected: Add Date and Inspector Initials	 (3) YES Leak Detected: Add Date, then go to Leak Detection Repair Form(s) in back of calendar 			

Need Help?

Sample Monthly Leak Detection Monitoring Log, page 14 (1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc.

(2) If no leak is detected, enter "N", date inspected and inspector's initials.



Iowa Air Emissions Assistance Program

2016/2017 Compliance Calendar for Large Bulk Gasoline Plants January 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Gallons per day	2 Gallons per day	Gallons per day	4 Gallons per day	5 Gallons per day	Gallons per day	7 Gallons per day
Gallons per day	Gallons per day	Gallons per day	11 Gallons per day	Gallons per day	Gallons per day	Gallons per day
Gallons per day	Gallons per day	17 Gallons per day	18 Gallons per day	19 Gallons per day	20 Gallons per day	21 Gallons per day
Gallons per day	23 Gallons per day	24 Gallons per day	25 Gallons per day	26 Gallons per day	27 Gallons per day	28 Gallons per day
29 Gallons per day	30 Gallons per day	Gallons per day Gallons per day Monthly Inspection Conducted Record Results in Logs	REMINDER: A space is and gasoline blend throu		ne monthly calendar for reco	ording daily gasoline



(leak inspection monitoring should be conducted when fluid is being circulated for all equipment in gasoline service at the facility, and inspection date recorded on the calendar each month)

Inspector Name:	Inspector Signature:	Inspector Signature:			
⁽¹⁾ List Equipment Type/Name	⁽²⁾ NO Leaks Detected: Add Date and Inspector Initials	 (3) YES Leak Detected: Add Date, then go to Leak Detection Repair Form(s) in back of calendar 			

Need Help?

Sample Monthly Leak Detection Monitoring Log, page 14 (1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc.

(2) If no leak is detected, enter "N", date inspected and inspector's initials.

Iowa Waste Reduction Center



2016/2017 Compliance Calendar for Large Bulk Gasoline Plants **February** 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			Gallons per day	2 Gallons per day	Gallons per day	4 Gallons per day
	C	7	0	0	10	11
Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day
Gallons per day	Gallons per day	14 Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day 18
Gallons per day	20 Gallons per day	21 Gallons per day	22 Gallons per day	23 Gallons per day	24 Gallons per day	25 Gallons per day
Gallons per day	Gallons per day 27	Gallons per day 28	REMINDER: A space and gasoline blend thro		the monthly calendar for rec	cording daily gasoline
		Conducted Record Results in Logs				



(leak inspection monitoring should be conducted when fluid is being circulated for all equipment in gasoline service at the facility, and inspection date recorded on the calendar each month)

Inspector Name:	Inspector Signature:				
⁽¹⁾ List Equipment Type/Name	⁽²⁾ NO Leaks Detected: Add Date and Inspector Initials	(3) YES Leak Detected: Add Date, then go to Leak Detection Repair Form(s) in back of calendar			

Need Help?

Sample Monthly Leak Detection Monitoring Log, page 14 (1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc.

(2) If no leak is detected, enter "N", date inspected and inspector's initials.



Iowa Air Emissions Assistance Program

2016/2017 Compliance Calendar for Large Bulk Gasoline Plants March 2017

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
· · ·	•	allons per day	2 Gallons per day	Gallons per day	4 Gallons per day
Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day
Gallons per day 13	14 Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day
20 Gallons per day	21 Gallons per day	22 Gallons per day	23 Gallons per day	24 Gallons per day	25 Gallons per day
Gallons per day	28 Gallons per day	29 Gallons per day	Gallons per day	Gallons per day Monthly Inspection Conducted	
	provided on each day of the and gasoline blend through Gallons per day Gallons per day 6 Gallons per day 13 Gallons per day 20 Gallons per day 21	provided on each day of the monthly calendar for and gasoline blend throughput. Gallons per day 6 Gallons per day 7 Gallons per day 13 Gallons per day 14 Gallons per day 20 Gallons per day 21 Gallons per day 27 28	provided on each day of the monthly calendar for md gasoline blend throughput. Gallons per day Gallons per day	provided on each day of the monthly calendar for Gallons per day Gallons Gallons Gallons	provided on each day of the monthly calendar for ind gasoline blend throughput. Gallons per day 1 Gallons per day 2 Gallons per day 3 Gallons per day 6 Gallons per day 7 Gallons per day 8 Gallons per day 9 Gallons per day 10 Gallons per day 6 Gallons per day 7 Gallons per day 8 Gallons per day 9 Gallons per day 10 Gallons per day 13 Gallons per day 14 Gallons per day 15 Gallons per day 16 Gallons per day 17 Gallons per day 20 Gallons per day 21 Gallons per day 22 Gallons per day 23 Gallons per day 24 Gallons per day 27 Gallons per day 28 Gallons per day 29 Gallons per day 30 Gallons per day Gallons per day Monthly Inspection



Inspector Name: Inspector Signature: ⁽²⁾ **NO** Leaks Detected: ⁽³⁾ YES Leak Detected: (I) List Equipment Type/Name Add Date, then go to *Leak Detection Repair Form(s)* in back of calendar Add Date and Inspector Initials

Need Help?

Sample Monthly Leak Detection Monitoring Log, page 14 (1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc.

(2) If no leak is detected, enter "N", date inspected and inspector's initials.

MONTHLY LEAK INSPECTION MONITORING LOG

(leak inspection monitoring should be conducted when fluid is being circulated for all equipment in gasoline service at the facility, and inspection date recorded on the calendar each month)

Iowa Waste Reduction Center

2016/2017 Compliance Calendar for Large Bulk Gasoline Plants **April** 2017

Sunday I	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
REMINDER: A space is	provided on each day of th	e monthly calendar for rec	cording daily gasoline and g	asoline blend throughput.		allons per day
2 Gallons per day	Gallons per day	4 Gallons per day	Gallons per day	Gallons per day	7 Gallons per day	Gallons per day
Gallons per day	Gallons per day	11 Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day
16 Gallons per day	17 Gallons per day	18 Gallons per day	19 Gallons per day	20 Gallons per day	21 Gallons per day	22 Gallons per day
Gallons per day 23	Gallons per day 24	25 Gallons per day	26 Gallons per day	Gallons per day 27	28 Gallons per day	Gallons per day
Gallons per day 30					Monthly Inspection Conducted Record Results in Logs	



(leak inspection monitoring should be conducted when fluid is being circulated for all equipment in gasoline service at the facility, and inspection date recorded on the calendar each month)

Inspector Name:	Inspector Signature:				
⁽¹⁾ List Equipment Type/Name	⁽²⁾ NO Leaks Detected: Add Date and Inspector Initials	(3) YES Leak Detected: Add Date, then go to Leak Detection Repair Form(s) in back of calendar			

Need Help?

Sample Monthly Leak Detection Monitoring Log, page 14 (1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc.

(2) If no leak is detected, enter "N", date inspected and inspector's initials.



INTRODUCED INTERVIEWS

2016/2017 Compliance Calendar for Large Bulk Gasoline Plants May 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	Gallons per day	2 Gallons per day	3 Gallons per day	4 Gallons per day	Gallons per day	Gallons per day
Gallons per day	Gallons per day	9 Gallons per day	10 Gallons per day	11 Gallons per day	12 Gallons per day	Gallons per day
Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day 20
Gallons per day	22 Gallons per day	23 Gallons per day	24 Gallons per day	25 Gallons per day	Gallons per day	Gallons per day
Callons per day	29 Gallons per day	30 Gallons per day	Gallons per day		provided on each day of th and gasoline blend through	-
			Conducted Record Results in Logs			put.



(leak inspection monitoring should be conducted when fluid is being circulated for all equipment in gasoline service at the facility, and inspection date recorded on the calendar each month)

Inspector Name:	Inspector Signature:				
⁽¹⁾ List Equipment Type/Name	⁽²⁾ NO Leaks Detected: Add Date and Inspector Initials	 (3) YES Leak Detected: Add Date, then go to Leak Detection Repair Form(s) in back of calendar 			

Need Help?

Sample Monthly Leak Detection Monitoring Log, page 14 (1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc.

(2) If no leak is detected, enter "N", date inspected and inspector's initials.



Iowa Air Emissions Assistance Program

2016/2017 Compliance Calendar for Large Bulk Gasoline Plants June 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
REMINDER: A sp and gasoline blenc		of the monthly calendar for re	ecording daily gasoline	allons per day	2 Gallons per day	Gallons per day
Gallons per day	4 Gallons per day	5 Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day
Gallons per day	Gallons per day	2 Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day
Gallons per day	18 Gallons per day	9 Gallons per day	Gallons per day	22 Gallons per day	23 Gallons per day	24 Gallons per day
Gallons per day	25 Gallons per day	6 Gallons per day 27	Gallons per day	Gallons per day	Gallons per day Monthly Inspection Conducted	



(leak inspection monitoring should be conducted when fluid is being circulated for all equipment in gasoline service at the facility, and inspection date recorded on the calendar each month)

Inspector Name:	Inspector Signature:				
⁽¹⁾ List Equipment Type/Name	⁽²⁾ NO Leaks Detected: Add Date and Inspector Initials	(3) YES Leak Detected: Add Date, then go to Leak Detection Repair Form(s) in back of calendar			

Need Help?

Sample Monthly Leak Detection Monitoring Log, page 14 (1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc.

(2) If no leak is detected, enter "N", date inspected and inspector's initials.

Iowa Waste Reduction Center



2016/2017 Compliance Calendar for Large Bulk Gasoline Plants July 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
REMINDER: A space	is provided on each day of th	ne monthly calendar for rec	ording daily gasoline and ga	asoline blend throughput.		Gallons per day
2 Gallons per day	Gallons per day	4 Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day
9 Gallons per day	Gallons per day 10	Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day
Gallons per day	Gallons per day	18 Gallons per day	19 Gallons per day	20 Gallons per day	21 Gallons per day	Gallons per day
Gallons per day 23 Gallons per day 30	Gallons per day 24 Gallons per day 31	25 Gallons per day	26 Gallons per day	27 Gallons per day	Gallons per day	29 Gallons per day
	Monthly Inspection Conducted Record Results in Logs					



(leak inspection monitoring should be conducted when fluid is being circulated for all equipment in gasoline service at the facility, and inspection date recorded on the calendar each month)

Inspector Name:	Inspector Signature:					
⁽¹⁾ List Equipment Type/Name	⁽²⁾ NO Leaks Detected: Add Date and Inspector Initials	 ⁽³⁾ YES Leak Detected: Add Date, then go to Leak Detection Repair Form(s) in back of calendar 				

Need Help?

Sample Monthly Leak Detection Monitoring Log, page 14 (1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc.

(2) If no leak is detected, enter "N", date inspected and inspector's initials.



Iowa Air Emissions Assistance Program

2016/2017 Compliance Calendar for Large Bulk Gasoline Plants **August** 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
REMINDER: A space is of the monthly calendar gasoline and gasoline bl	for recording daily	Gallons per day	2 Gallons per day	Gallons per day	Gallons per day	5 Gallons per day
Gallons per day	Gallons per day	Gallons per day	9 Gallons per day	Gallons per day	Gallons per day	Gallons per day
Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day
20 Gallons per day	21 Gallons per day	22 Gallons per day	23 Gallons per day	24 Gallons per day	25 Gallons per day	26 Gallons per day
Callons per day	28 Gallons per day	29 Gallons per day	30 Gallons per day	Gallons per day Monthly Inspection Conducted Record Results in Logs		



(leak inspection monitoring should be conducted when fluid is being circulated for all equipment in gasoline service at the facility, and inspection date recorded on the calendar each month)

Inspector Name:	Inspector Signature:					
⁽¹⁾ List Equipment Type/Name	⁽²⁾ NO Leaks Detected: Add Date and Inspector Initials	 (3) YES Leak Detected: Add Date, then go to <i>Leak Detection</i> <i>Repair Form(s)</i> in back of calendar 				

Need Help?

Sample Monthly Leak Detection Monitoring Log, page 14 (1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc.

(2) If no leak is detected, enter "N", date inspected and inspector's initials.

Iowa Waste Reduction Center



2016/2017 Compliance Calendar for Large Bulk Gasoline Plants **September** 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
REMINDER: A space blend throughput.	is provided on each day of	the monthly calendar for re	ecording daily gasoline and (gasoline	Gallons per day	Gallons per day
Gallons per day	Gallons per day	Gallons per day	Gallons per day	7 Gallons per day	Gallons per day	Gallons per day
Gallons per day	Gallons per day	Gallons per day	Gallons per day	14 Gallons per day	Gallons per day	Gallons per day
17 Gallons per day	18 Gallons per day	19 Gallons per day	20 Gallons per day	21 Gallons per day	22 Gallons per day	Gallons per day
24 Gallons per day	25 Gallons per day	26 Gallons per day	27 Gallons per day	28 Gallons per day	Gallons per day	Gallons per day
					Conducted Record Results in Logs	



(leak inspection monitoring should be conducted when fluid is being circulated for all equipment in gasoline service at the facility, and inspection date recorded on the calendar each month)

Inspector Name:	Inspector Signature:					
⁽¹⁾ List Equipment Type/Name	⁽²⁾ NO Leaks Detected: Add Date and Inspector Initials	 (3) YES Leak Detected: Add Date, then go to Leak Detection Repair Form(s) in back of calendar 				
		1				

Need Help?

Sample Monthly Leak Detection Monitoring Log, page 14 (1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc.

(2) If no leak is detected, enter "N", date inspected and inspector's initials.



Iowa Air Emissions Assistance Program

2016/2017 Compliance Calendar for Large Bulk Gasoline Plants **October** 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Gallons per day	2 Gallons per day	Gallons per day	4 Gallons per day	5 Gallons per day	Gallons per day	7 Gallons per day
Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day 14
Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day 20	Gallons per day 21
Gallons per day	23 Gallons per day	24 Gallons per day	25 Gallons per day	26 Gallons per day	27 Gallons per day	28 Gallons per day
29 Gallons per day	30 Gallons per day	Gallons per day Gallons per day Monthly Inspection Conducted Record Results in Logs	REMINDER: A space is gasoline blend throughp	s provided on each day of th out.	e monthly calendar for reco	ording daily gasoline and



(leak inspection monitoring should be conducted when fluid is being circulated for all equipment in gasoline service at the facility, and inspection date recorded on the calendar each month)

Inspector Name:	Inspector Signature:					
⁽¹⁾ List Equipment Type/Name	⁽²⁾ NO Leaks Detected: Add Date and Inspector Initials	(3) YES Leak Detected: Add Date, then go to Leak Detection Repair Form(s) in back of calendar				

Need Help?

Sample Monthly Leak Detection Monitoring Log, page 14 (1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc.

(2) If no leak is detected, enter "N", date inspected and inspector's initials.

Iowa Waste Reduction Center



2016/2017 Compliance Calendar for Large Bulk Gasoline Plants **November** 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	s provided on each day of the line and gasoline blend throu	-	1 Gallons per day	2 Gallons per day	Gallons per day	4 Gallons per day
Gallons per day	Gallons per day	7 Gallons per day	Gallons per day	Gallons per day	10 Gallons per day	Gallons per day
Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day	Gallons per day
19 Gallons per day	20 Gallons per day	21 Gallons per day	22 Gallons per day	23 Gallons per day	24 Gallons per day	25 Gallons per day
26 Gallons per day	Gallons per day	28 Gallons per day	29 Gallons per day	Gallons per day Monthly Inspection Conducted Record Results in Logs		



(leak inspection monitoring should be conducted when fluid is being circulated for all equipment in gasoline service at the facility, and inspection date recorded on the calendar each month)

Inspector Name:	Inspector Signature:						
⁽¹⁾ List Equipment Type/Name	⁽²⁾ NO Leaks Detected: Add Date and Inspector Initials	 (3) YES Leak Detected: Add Date, then go to Leak Detection Repair Form(s) in back of calendar 					

Need Help?

Sample Monthly Leak Detection Monitoring Log, page 14 (1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc.

(2) If no leak is detected, enter "N", date inspected and inspector's initials.

Iowa Waste Reduction Center



2016/2017 Compliance Calendar for Large Bulk Gasoline Plants **December** 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
REMINDER: A space is blend throughput.	provided on each day of th	e monthly calendar for reco	ording daily gasoline and ga	soline	Gallons per day	Gallons per day
Gallons per day	4 Gallons per day	Gallons per day	Gallons per day	7 Gallons per day	Gallons per day	Gallons per day
Gallons per day	11 Gallons per day	12 Gallons per day	Gallons per day	Gallons per day	15 Gallons per day	Gallons per day
Gallons per day	18 Gallons per day	19 Gallons per day	20 Gallons per day	21 Gallons per day	22 Gallons per day	23 Gallons per day
Gallons per day 24	25 Gallons per day	26 Gallons per day	27 Gallons per day	28 Gallons per day	29 Gallons per day	30 Gallons per day
Gallons per day 31					Monthly Inspection Conducted Record Results in Logs	

MONTHLY LEAK DETECTION REPAIR FORM – WORK ORDER

(copy as needed)

Inspector Name:				Inspector Signature:		
⁽¹⁾ List Equipment Type	Leak detected (y/n) & Date	⁽²⁾ Location & ID of Leak	⁽³⁾ Leak type (V/L)	(+) Method used & Inspector Initials	⁽⁵⁾ Work Order # and Issue Date	(6) Repair Complete Date*

(1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc

(2) If a leak is discovered, enter the Arm or Tank ID Number where the leak was discovered (use ID numbers required in the air permit).

(3) Enter "V" for a vapor leak or "L" for a liquid leak.

(4) Enter method used: "Sight" or "Smell" or "Sound" and the initials of the inspector. If leak detection instrument is used enter "Instrument".

(5) Enter Map or Photographs and issue date.

(6) Enter repair complete date.

MONTHLY LEAK DETECTION REPAIR FORM – TAG SYSTEM

(copy as needed)

Inspector Name: Inspector Signature:						
^(I) List Equipment Type	Leak detected (y/n) & Date	⁽²⁾ Location & ID of Leak	⁽³⁾ Leak type (V/L)	(+) Method used & Inspector Initials	⁽⁵⁾ Tag ID # and Issue Date	⁽⁶⁾ Repair Complete Date*

(1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc

(2) If a leak is discovered, enter the Arm or Tank ID Number where the leak was discovered (use ID numbers required in the air permit).

(3) Enter "V" for a vapor leak or "L" for a liquid leak.

(4) Enter method used: "Sight" or "Smell" or "Sound" and the initials of the inspector. If leak detection instrument is used enter "Instrument".

(5) Enter Map or Photographs and issue date.

(6) Enter repair complete date.

MONTHLY LEAK DETECTION REPAIR FORM – WRITTEN DESCRIPTION

(copy as needed)

Inspector Name: Inspector Signature:						
^(I) List Equipment Type	Leak detected (y/n) & Date	(2) Location & ID of Leak	⁽³⁾ Leak type (V/L)	(4) Method used & Inspector Initials	⁽⁵⁾ Written Description and Issue Date	⁽⁶⁾ Repair Complete Date*

(1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc

(2) If a leak is discovered, enter the Arm or Tank ID Number where the leak was discovered (use ID numbers required in the air permit).

(3) Enter "V" for a vapor leak or "L" for a liquid leak.

(4) Enter method used: "Sight" or "Smell" or "Sound" and the initials of the inspector. If leak detection instrument is used enter "Instrument".

(5) Enter Map or Photographs and issue date.

(6) Enter repair complete date.

MONTHLY LEAK DETECTION REPAIR FORM – MAP OR PHOTOGRAPHS

(copy as needed)

Inspector Name: Inspector Signature:						
^(I) List Equipment Type	Leak detected (y/n) & Date	⁽²⁾ Location & ID of Leak	⁽³⁾ Leak type (V/L)	(⁽⁺⁾ Method used & Inspector Initials	⁽⁵⁾ Map or Photographs and Issue Date	(6) Repair Complete Date*

(1) List the type of equipment in this column. All equipment in gasoline service must be monitored monthly including but not limited to all pumps, valves, open-ended lines, connectors, etc

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(5) Enter Map or Photographs and issue date.

(6) Enter repair complete date.

IOWA DEPARTMENT OF NATURAL RESOURCES

The lowa Department of Natural Resources (DNR) is the government agency that leads lowans in caring for their natural resources.

The DNR reviews design and performance objectives for all sources of air contaminants to determine their likely compliance with state and federal requirement. Businesses may receive air emissions related assistance from the DNR by calling 1-877-247-4692 or on the World Wide Web at <u>www.iowadnr.gov</u>.

IOWA WASTE REDUCTION CENTER

The lowa Waste Reduction Center (IWRC) at the University of Northern Iowa offers FREE and CONFIDENTIAL environmental assistance to Iowa small businesses. The IWRC was established under the Groundwater Protection Act of 1987. Since inception, the center has conducted over **3,200** multi-media on-site reviews in all 99 Iowa counties. As a result, the IWRC has become a national leader in small business environmental assistance. The IWRC provides businesses with environmental on-site assistance by offering recommendations for air, hazardous waste, wastewater, and solid waste issues.

For additional information, contact the IWRC at BCS Building, Suite 113, University of Northern Iowa, Cedar Falls, Iowa 50614-0185, by phone at (800) 422-3109 or on the World Wide Web at <u>www.IWRC.org</u>.



Iowa Waste Reduction Center INVESTIGATION CONTROL OF A C



The publication of this (document or tool) has been funded in part by the Iowa Department of Natural Resources. This (document or tool) is intended solely as guidance, cannot be used to bind the Iowa Department of Natural Resources and is not a substitute for reading applicable statutes and regulations.



