Freshwater Biological Association The Ferry House Ambleside Cumbria LA22 OLP England

Contract No. 3519-88-11 ED ISP GB Between the Joint Research Centre, Ispra and the Freshwater Biological Association, Ambleside.

Project Leader : I. Pettman

Report Date : July 1989
Report To : Joint Research Centre, Ispra

FBA Report Ref. No. : WI/T1105211/2

TFS Project No. : T1105211

> ECDIN Contract No. 3519-88-11 ED ISP GB Final Report on the updating service on environmental chemicals in fresh water for the period 9.1.89 to 9.7.89

> > by I. Pettman & A. Benning

The Freshwater Biological Association is grant-aided by the Natural Environment Research Council.

### Freshwater Biological Association

Contract No: 3519-88-11 ED ISP GB

ECDIN: Updating service on environmental chemicals in the freshwater environment.

FINAL REPORT for the period 9.1.89 - 9.7.89

#### 1. LINES OF DATA

During this six month period five batches of data have been despatched to the Joint Research Centre, Ispra.

Batch	Lines of Data	Nos. of Papers
lst 2nd	271 278	36 (7339 - 7374) 30 (7375 - 7404)
3rd	306	23 (7405 - 7427)
4th	275	33 (7428 - 7460)
<u>5th</u>	<u> 168</u>	<u>17</u> (7461 - 7477)
Totals	1298	<u>139</u>

The allocation of these data to the various ECDIN Database Files is tabulated below:

	***************************************	I	BATCH I	, Ov		
FILE	1	2	3	4	5	TOTAL
Aquatic Toxicity	263	266	194	256	140	1119
Bioaccumulation	3	10	112	18	28	171
Metabolism and Elimination	5	2	_		-	7
Biodegradation	•	-	<b>-</b>	1	•	1
						1298

### 2. FORMATS

Further adjustments have been made to two of the formats during the period of this contract. These adjustments have been made in liaison with Dr. W. Penning, Ispra and L. Noble, Plymouth Marine Laboratory.

i) Small alterations have been made to the <u>Metabolism and Elimination</u> format:
Sheet 1, line 3 "ROUTE" = 11 boxes

"NO OF DOSES" - starts at No. 18 not 19

"DOSING FREQUENCY" = 10 boxes

See Annex 1 for a sample of this format.

ii) The name of the <u>Biodegradation</u> format has been changed to <u>Biodegradiation/Biotransformation</u>.

Section BIDA09 has been changed:

From

	OP	VAL 1	VAL 2	METABOLITIES
BIDA09				

### METABOLITIES

### METABOLITIES

### METABOLITIES

### METABOLITIES

### METABOLITIES

All data for this format extracted <u>during the period of this contract</u> have been reformatted to this new version.

See Annex 2 for samples of these formats.

# 3. MEETINGS

In addition to the liaison and training meetings with Plymouth Marine
Laboratory detailed in the Interim Report\*, Dr. W. Penning, Ispra visited the
Freshwater Biological Association for a one day Contract Meeting on the 12th

June 1989. Dr. Penning discussed the changes in organization, the progress and the future of the ECDIN database with I. Pettman and A. Benning.

The techniques of data extraction and input were consolidated and a system was set up to allow access to the Ispra computer by both the FBA and PML contract staff.

## 4. DATA QUALITY AND STANDARDISATION OF TERMINOLOGY

The direct access to the Ispra computer, mentioned above, will in future allow rapid access to existing data. This will enable new data to be quickly compared with any existing data. Data can then be added selectively thus enabling the quality of the data in the database to be maintained as well as coverage and standardisation to be extended.

### 5. INTERROGATION OF DATABASE ON DATACENTRALEN FROM USERS VIEWPOINT

During the period of this contract, the ECDIN database was accessed several times via the host DataCentralen in order to evaluate the retrieval of data from the users viewpoint.

The support staff of DataCentralen were very helpful and their telephone support service was very good.

The ability to search by broad taxanomic category has been helpful to users. Further detailed suggestions are being discussed with Dr. Penning.

Mr. I. PETTMAN

Miss A. BENNING

28.7.89

\* I. PETTMAN & A. BENNING. (1989) ECDIN Contract
No. 3519-88-11 ED ISP GB.

Interim Report on the updating service on environmental chemicals in freshwater for the period 9.1.89 to 8.4.89.

ANNEX 1 : REVISED FORMAT FOR

METABOLISM AND ELIMINATION

Freshwater Biological Association,
Windermere 11K

ECDIN	ADD METABOLISM AND ELIMINATION	Thildermere, C.K.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60	61 65 65 66 65 66 67 70 70 70 70 70 70 70 70 70 70 70 70 70
TRANS ECDIN	TRUNC. REG NAME SPECIES CODE SUPPLIER REF.	PAGE
MELAO1 NO	LIFESTAGE ORGANISM  DURATION DOSE	0200
ROUTE POST		UNIT 0300
MELAO3 VAL 1	VAL 2 UNIT	0400
MELA04 VAL 1	VAL 2 UNIT APPL. APPL. FREQUENCY OF VAL 1 VAL 2 t	O S O O
MELAOS VAL CONCENTRAT	TION VAL 2 UNIT OP VAL 1 VAL 2 UNIT F P	0600
MELAO6 MEDIUM OI	SALINITY HARDNESS PH TEMPERATURE P VAL 1 VAL 2 OP VAL 1 VAL 2 OP VAL 1 VAL 2	OP DISSOVED OXYGEN VAL 1 VAL 2
SOLVENT WELAO7		0800
COMMENTS WELAO8		0900
TRANS COUNT SHEET:	\$/07	1000
WELA99 SHEET	ay OE ,	1100

ANNEX 2 : REVISED FORMATS FOR

BIODEGRADATION / BIOTRANSFORMATION

Freshwater Biological Association,
Windermere, U.K.

ECDIN

ADD BIODEGRADATION/BIOTRANSFORMATION

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 35 35 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 57 58 59 60 61 62 63 64 65 66 67 68 69 70 77 72 73 74 75 76 77 78 79 80 DATA BIBLIOG. TRUNC. REG NAME SUPPLIER REF. . 0100 BIDAOO ORIGIN TYPE OF SEED/SPECIES NAME BIDAOI 0200 ACCESSORY NUTRIENTS ACC AER B I D A 0 2 0300 0400 B 1 D A 0 3 DISSOLVED OXYGEN % ORGANIC MATTER HARDNESS
VAL 2 OP VAL 1 VAL 2 OP VAL 1 VAL 2 OP VAL 1 VAL 2 TEMPERATURE VAL 1 VAL 2 SALINITY OP VAL 1 VAL 2 OP VAL 1 0500 BIDA05 0600 VAL | CONCENTRATION VAL 2 BIDAO6 0700 COMMENTS B 1 D A 0 7 0800 BIDA07 TRANS COUNT SHEETS/OF BIDA99 1000

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ECDIN .			ADD BIODEGRADA	TION/BIOTRANSFORMATION		Freshwater Biologica Win ১০০১ এ গুলুকা জ্বান্ত স্থান	i Association, indermere, U.K.
1 2 3 4 3 0 7 8 9 10 11	TIME	2 23 24 25 26 27 28 29 30 % CONVERTED	31 32 33 34 35 36 37 38 3 BOD	39 40 41 42 43 44 45 46 47 48 49 50 9	51 52 53 54 55 56 57 58 59 60 61	02 03 64 65 66 07 68 69 70 71 72 73	2 75 76 77 78 78 80
	VAL 2 UNIT OP	VAL 1 VAL 2	SPECIFICATION V.	ALUE .	•	· <u>P</u>	AGE
B 1 D A 0 8							1100
7	METABOLITES	<del></del>	<del></del>	·			<u></u>
B I D A O 9			<del>                                     </del>				1200
B   DA 0 9							1300
B I D A 0 9			<del>                                     </del>				1400
B 1 D A O 9							1500
B 1 D A 0 9							1600
B I D A 0 9							1700
			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
B 1 D A 0 9	TIME	Z CONVERTED	BOD				1800
OP VAL 1	TIME VAL 2 UNIT OP	Z CONVERTED VAL 1 VAL 2	BOD SPECIFICATION V	ALUE	· .		
OP VAL 1	VAL 2 UNIT OP	VAL 1 VAL 2	BOD SPECIFICATION V	ALUE			1900
OP VAL 1	VAL 2 UNIT OP	VAL 1 VAL 2	SPECIFICATION V	ALUE			1900
OP VAL 1 B   D A O 8	VAL 2 UNIT OP	VAL 1 VAL 2	SPECIFICATION V.	ALUE			1900
OP VAL 1  8   D A O 8	VAL 2 UNIT OP	VAL 1 VAL 2	SPECIFICATION V.	ALUE			1 9 0 0 2 0 0 0 2 1 0 0
0P VAL 1  8   D A O 8	VAL 2 UNIT OP	VAL 1 VAL 2	SPECIFICATION V.	ALUE			1 9 0 0 2 0 0 0 2 1 0 0 2 2 0 0
OP VAL 1  B I D A O 9  B I D A O 9  B I D A O 9	VAL 2 UNIT OP	VAL 1 VAL 2	BOD SPECIFICATION V.	ALUE			1 9 0 0 2 0 0 0 2 1 0 0 2 2 0 0 2 3 0 0
0P VAL 1  B I D A 0 8  Z  B I D A 0 9  B I D A 0 9  B I D A 0 9  B I D A 0 9	VAL 2 UNIT OP	VAL 1 VAL 2	BOD SPECIFICATION V.	ALUE			1 9 0 0 2 0 0 0 2 1 0 0 2 2 0 0
OP VAL 1  B   D A O 8  T D A O 9  B   D A O 9  B   D A O 9  B   D A O 9  B   D A O 9  B   D A O 9  B   D A O 9	VAL 2 UNIT OP	VAL 1 VAL 2	BOD SPECIFICATION V.	ALUE			1 9 0 0 2 0 0 0 2 1 0 0 2 2 0 0 2 3 0 0
OP VAL 1  B I D A O 8  B I D A O 9  B I D A O 9  B I D A O 9  B I D A O 9  B I D A O 9  B I D A O 9  B I D A O 9  B I D A O 9  B I D A O 9  B I D A O 9	VAL 2 UNIT OP	VAL 1 VAL 2	BOD SPECIFICATION VA	ALUE			1 9 0 0 2 0 0 0 2 1 0 0 2 2 0 0 2 3 0 0