



United States
Environmental Protection Agency

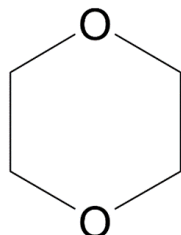
Office of Chemical Safety and
Pollution Prevention

Final Risk Evaluation for 1,4-Dioxane

Supplemental Information File on

**Ambient Water Exposure Modeling Outputs
from E-FAST**

CASRN: 123-91-1



December 2020

This supplemental file contains the model outputs for all runs conducted in E-FAST 2014 for the purposes of estimating surface water concentrations for the ambient water to general population pathway.

Contents

Occupational Exposure Scenario (OES): MANUFACTURING 3
Occupational Exposure Scenario (OES): INDUSTRIAL USES..... 7
Occupational Exposure Scenario (OES): OPEN SYSTEM FUNCTIONAL FLUIDS..... 53
Occupational Exposure Scenario (OES): SPRAY FOAM APPLICATION..... 66
Occupational Exposure Scenario (OES): DISPOSAL 70

OES: MANUFACTURING

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 MFG 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#: 1

Number of Release Sites: 1.

Release Activity: BASF 250 dy, NPDES LA0004057

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
----------------------	-------	-------------------------------	-------	----------

Total Releases:	620.00 (kg/yr)	N/A (kg/yr)	N/A (kg/yr)	N/A (kg/yr)
-----------------	-------------------	----------------	----------------	----------------

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	2.48 (kg/site/day)	N/A/0.00 (kg/site/day)	N/A (kg/site/day)	N/A (kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: 14 MFG 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:1 RELEASE ACTIVITY: BASF 250 dy, NPDES LA0004057
 FACILITY NAME: GRANT CHEMICAL-BATON ROUGE
 FACILITY LOCATION: ZACHARY LA 70791
 RECEIVING WATER NAME: BAYOU BATON ROUGE
 REACH NUMBER: 08070201015 FACILITY ON REACH: No DISCHARGE TYPE: Direct
 NPDES PERMIT #: LA0004057 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	2.48	2.48	0.00	3.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	51.59	25.65	15.32	12.75	NA
CONCENTRATION (µg/L)	48.07	96.69	161.88	194.51	NA

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES				
Exposure Units	Drinking Water Results	Drinking Water Units	Fish Ingestion Results	Fish Ingestion Units
Cancer				
LADD _{pot}	1.81E-04 mg/kg/day		3.92E-06 mg/kg/day	
LADC _{pot}	1.39E-02 mg/L		4.18E-02 mg/kg	
Acute				
ADR _{pot}	3.66E-03 mg/kg/day		5.03E-04	mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 MFG 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 1 RELEASE ACTIVITY: BASF 250 dy, NPDES LA0004057
 FACILITY NAME: GRANT CHEMICAL-BATON ROUGE
 FACILITY LOCATION: ZACHARY LA 70791
 RECEIVING STREAM NAME: BAYOU BATON ROUGE
 REACH NUMBER: 08070201015 FACILITY ON REACH: No DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: LA0004057 GAGING STATION ID: N/A
 GAGING STATION GAGING STATION NUMBER OF STATIONS ON REACH: N/A
 PERIOD OF RECORD: N/A NUMBER OF OBSERVATIONS: N/A
 MEAN FLOW (MLD): 124.49 7q10 FLOW (MLD): 15.32 EFFLUENT FLOW (MLD):0.60

RESULTS					
COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)
1.45E+04	0	0	250.00	2.48	0.00

OES INDUSTRIAL USES

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#: 1

Number of Release Sites: 1.

Release Activity: Ineos 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
----------------------	-------	-------------------------------	-------	----------

Total Releases:	722.50 (kg/yr)	N/A (kg/yr)	N/A (kg/yr)	N/A (kg/yr)
-----------------	-------------------	----------------	----------------	----------------

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	2.89 (kg/site/day)	N/A/0.00 (kg/site/day)	N/A (kg/site/day)	N/A (kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

SIC-CODE BASED HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 1 Number of Sites: 1 RELEASE ACTIVITY: Ineos 250 dy

SIC-CODE DESCRIPTION: POTW (Indust., includes POTWs which receive ind. disch.)

SIC-CODE (S): subset of 4952 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	250.	2.89	2.89	0.00	3.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER									
PLANT TYPE	% ILE FACILITY	STREAM FLOW (MLD)				STREAM CONC. (µg/l)			
		Harmonic Mean	30Q5	7Q10	1Q10	Harmonic Mean	30Q5	7Q10	1Q10
ALL	50	288.00	123.84	78.18	66.05	10.03	23.34	36.97	43.75
ALL	10	39.60	13.29	7.76	7.57	72.98	217.46	372.42	381.77

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
Exposure Units	Drinking Water Results		Drinking Water Units	Fish Ingestion Results		Fish Ingestion Units
	50%	10%		50%	10%	
Cancer						
LADD _{pot}	3.78E-05	2.75E-04	mg/kg/day	8.18E-07	5.95E-06	mg/kg/day
LADC _{pot}	2.91E-03	2.11E-02	mg/L	8.72E-03	6.34E-02	mg/kg
Acute						
ADR _{pot}	8.84E-04	8.24E-03	mg/kg/day	1.05E-04	7.64E-04	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 1 RELEASE ACTIVITY: Ineos 250 dy

SIC CODE DESCRIPTION: POTW (Indust., includes POTWs which receive ind. disch.)

ASSOCIATED SIC CODES: subset of 4952

SIC CODE RESULTS						
COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Loading (kg/site/day)	Waste Water Treatment (%)	High/Avg Analysis
1.45E+04	0	0	250.00	2.89	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:2

Number of Release Sites: 1.

Release Activity: Microdyn-Nadir 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
----------------------	-------	-------------------------------	-------	----------

Total Releases:	24.05 (kg/yr)	N/A (kg/yr)	N/A (kg/yr)	N/A (kg/yr)
-----------------	------------------	----------------	----------------	----------------

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	9.62E-02 (kg/site/day)	N/A/0.00 (kg/site/day)	N/A (kg/site/day)	N/A (kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

SIC-CODE BASED HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 2 Number of Sites: 1 RELEASE
ACTIVITY: Microdyn-Nadir 250
dy

SIC-CODE DESCRIPTION: POTW (Indust., includes POTWs which receive ind. disch.)

SIC-CODE (S): subset of 4952 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	250.	0.0962	9.62E-02	0.00	3.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER									
PLANT TYPE	% ILE FACILITY	STREAM FLOW (MLD)				STREAM CONC. (µg/l)			
		Harmonic Mean	30Q5	7Q10	1Q10	Harmonic Mean	30Q5	7Q10	1Q10
ALL	50	288.00	123.84	78.18	66.05	0.33	0.78	1.23	1.46
ALL	10	39.60	13.29	7.76	7.57	2.43	7.24	12.40	12.71

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
Exposure Units	Drinking Water Results		Drinking Water Units	Fish Ingestion Results		Fish Ingestion Units
	50%	10%		50%	10%	
Cancer						
LADD _{pot}	1.26E-06	9.15E-06	mg/kg/day	2.72E-08	1.98E-07	mg/kg/day
LADC _{pot}	9.68E-05	7.04E-04	mg/L	2.90E-04	2.11E-03	mg/kg
Acute						
ADR _{pot}	2.94E-05	2.74E-04	mg/kg/day	3.49E-06	2.54E-05	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 2 RELEASE ACTIVITY: Microdyn-Nadir 250 dy

SIC CODE DESCRIPTION: POTW (Indust., includes POTWs which receive ind. disch.)

ASSOCIATED SIC CODES: subset of 4952

SIC CODE RESULTS

COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Loading (kg/site/day)	Waste Water Treatment (%)	High/Avg Analysis
1.45E+04	0	0	250.00	9.62E-02	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:3

Number of Release Sites: 1.

Release Activity: St Charles/Union 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
----------------------	-------	-------------------------------	-------	----------

Total Releases:	827.50 (kg/yr)	N/A (kg/yr)	N/A (kg/yr)	N/A (kg/yr)
-----------------	-------------------	----------------	----------------	----------------

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	3.31 (kg/site/day)	N/A/0.00 (kg/site/day)	N/A (kg/site/day)	N/A (kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: 14 IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:3 RELEASE ACTIVITY: St Charles/Union 250 dy
 FACILITY NAME: UNION CARBIDE CORPORATION
 FACILITY LOCATION: HAHNVILLE LA 70057
 RECEIVING WATER NAME: MISSISSIPPI R
 REACH NUMBER: 08090100022 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT #: LA0000191 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	3.31	3.31	0.00	3.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	8.12E+05	2.98E+05	2.47E+05	1.92E+05	NA
CONCENTRATION (µg/L)	4.07E-03	1.11E-02	1.34E-02	1.72E-02	NA

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES				
Exposure Units	Drinking Water Results	Drinking Water Units	Fish Ingestion Results	Fish Ingestion Units
Cancer				
LADD _{pot}	1.53E-08 mg/kg/day		3.32E-10 mg/kg/day	
LADC _{pot}	1.18E-06 mg/L		3.54E-06 mg/kg	
Acute				
ADR _{pot}	4.21E-07 mg/kg/day		4.26E-08	mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 3 RELEASE ACTIVITY: St Charles/Union 250 dy
 FACILITY NAME: UNION CARBIDE CORPORATION
 FACILITY LOCATION: HAHNVILLE LA 70057
 RECEIVING STREAM NAME: MISSISSIPPI R
 REACH NUMBER: 08090100022 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: LA0000191 GAGING STATION ID: N/A
 GAGING STATION GAGING STATION NUMBER OF STATIONS ON REACH: N/A
 PERIOD OF RECORD: N/A NUMBER OF OBSERVATIONS: N/A
 MEAN FLOW (MLD): 1.14E+06 7q10 FLOW (MLD): 2.47E+05 EFFLUENT FLOW (MLD):1677.12

RESULTS

COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)
1.45E+04	0	0	250.00	3.31	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:4

Number of Release Sites: 1.

Release Activity: Suez 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
----------------------	-------	-------------------------------	-------	----------

Total Releases:	1.69E+04 (kg/yr)	N/A (kg/yr)	N/A (kg/yr)	N/A (kg/yr)
-----------------	---------------------	----------------	----------------	----------------

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	67.68 (kg/site/day)	N/A/0.00 (kg/site/day)	N/A (kg/site/day)	N/A (kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

SIC-CODE BASED HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 4 Number of Sites: 1 RELEASE ACTIVITY: Suez 250 dy

SIC-CODE DESCRIPTION: POTW (Indust., includes POTWs which receive ind. disch.)

SIC-CODE (S): subset of 4952 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	250.	67.68	67.68	0.00	3.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER									
PLANT TYPE	% ILE FACILITY	STREAM FLOW (MLD)				STREAM CONC. (µg/l)			
		Harmonic Mean	30Q5	7Q10	1Q10	Harmonic Mean	30Q5	7Q10	1Q10
ALL	50	288.00	123.84	78.18	66.05	235.00	546.51	865.69	1024.68
ALL	10	39.60	13.29	7.76	7.57	1709.09	5092.55	8721.65	8940.55

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
Exposure Units	Drinking Water Results		Drinking Water Units	Fish Ingestion Results		Fish Ingestion Units
	50%	10%		50%	10%	
Cancer						
LADD _{pot}	8.85E-04	6.44E-03	mg/kg/day	1.92E-05	1.39E-04	mg/kg/day
LADC _{pot}	6.81E-02	0.50	mg/L	0.20	1.49	mg/kg
Acute						
ADR _{pot}	2.07E-02	0.19	mg/kg/day	2.46E-03	1.79E-02	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES
--

SCENARIO #: 4 RELEASE ACTIVITY: Suez 250 dy

SIC CODE DESCRIPTION: POTW (Indust., includes POTWs which receive ind. disch.)

ASSOCIATED SIC CODES: subset of 4952

SIC CODE RESULTS

COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Loading (kg/site/day)	Waste Water Treatment (%)	High/Avg Analysis
1.45E+04	5	17	250.00	67.68	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:5

Number of Release Sites: 1.

Release Activity: Dow 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
----------------------	-------	-------------------------------	-------	----------

Total Releases:	647.50 (kg/yr)	N/A (kg/yr)	N/A (kg/yr)	N/A (kg/yr)
-----------------	-------------------	----------------	----------------	----------------

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	2.59 (kg/site/day)	N/A/0.00 (kg/site/day)	N/A (kg/site/day)	N/A (kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: 14 IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:5 RELEASE ACTIVITY: Dow 250 dy
 FACILITY NAME: DOW CHEMICAL CO-PLAQUEMINE
 FACILITY LOCATION: PLAQUEMINE LA 707650150
 RECEIVING WATER NAME: MISSISSIPPI R
 REACH NUMBER: 08070100007 FACILITY ON REACH: No DISCHARGE TYPE: Direct
 NPDES PERMIT #: LA0003301 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	2.59	2.59	0.00	3.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	8.12E+05	2.98E+05	2.47E+05	1.92E+05	NA
CONCENTRATION (µg/L)	3.19E-03	8.70E-03	1.05E-02	1.35E-02	NA

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES				
Exposure Units	Drinking Water Results	Drinking Water Units	Fish Ingestion Results	Fish Ingestion Units
Cancer				
LADD _{pot}	1.20E-08 mg/kg/day		2.60E-10 mg/kg/day	
LADC _{pot}	9.24E-07 mg/L		2.77E-06 mg/kg	
Acute				
ADR _{pot}	3.30E-07 mg/kg/day		3.34E-08	mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 5 RELEASE ACTIVITY: Dow 250 dy
 FACILITY NAME: DOW CHEMICAL CO-PLAQUEMINE
 FACILITY LOCATION: PLAQUEMINE LA 707650150
 RECEIVING STREAM NAME: MISSISSIPPI R
 REACH NUMBER: 08070100007 FACILITY ON REACH: No DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: LA0003301 GAGING STATION ID: N/A
 GAGING STATION GAGING STATION NUMBER OF STATIONS ON REACH: N/A
 PERIOD OF RECORD: N/A NUMBER OF OBSERVATIONS: N/A
 MEAN FLOW (MLD): 1.14E+06 7q10 FLOW (MLD): 2.47E+05 EFFLUENT FLOW (MLD):4079.80

RESULTS					
COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)
1.45E+04	0	0	250.00	2.59	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:6

Number of Release Sites: 1.

Release Activity: Union Institute 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
----------------------	-------	-------------------------------	-------	----------

Total Releases:	3820.00 (kg/yr)	N/A (kg/yr)	N/A (kg/yr)	N/A (kg/yr)
-----------------	--------------------	----------------	----------------	----------------

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	15.28 (kg/site/day)	N/A/0.00 (kg/site/day)	N/A (kg/site/day)	N/A (kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: 14 IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:6 RELEASE ACTIVITY: Union Institute 250 dy
 FACILITY NAME: UNION CARBIDE CORP
 FACILITY LOCATION: SOUTH CHARLESTON WV 25303
 RECEIVING WATER NAME: KANAWHA R
 REACH NUMBER: 05050008010 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT #: WV0000078 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	15.28	15.28	0.00	3.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	1.41E+04	4586.17	3287.88	2635.38	NA
CONCENTRATION (µg/L)	1.09	3.33	4.65	5.80	NA

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES				
Exposure Units	Drinking Water Results	Drinking Water Units	Fish Ingestion Results	Fish Ingestion Units
Cancer				
LADD _{pot}	4.09E-06 mg/kg/day		8.84E-08 mg/kg/day	
LADC _{pot}	3.14E-04 mg/L		9.43E-04 mg/kg	
Acute				
ADR _{pot}	1.26E-04 mg/kg/day		1.14E-05	mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 6 RELEASE ACTIVITY: Union Institute 250 dy
 FACILITY NAME: UNION CARBIDE CORP
 FACILITY LOCATION: SOUTH CHARLESTON WV 25303
 RECEIVING STREAM NAME: KANAWHA R
 REACH NUMBER: 05050008010 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: WV0000078 GAGING STATION ID: N/A
 GAGING STATION GAGING STATION NUMBER OF STATIONS ON REACH: N/A
 PERIOD OF RECORD: N/A NUMBER OF OBSERVATIONS: N/A
 MEAN FLOW (MLD): 3.34E+04 7q10 FLOW (MLD): 3287.88 EFFLUENT FLOW (MLD):415.99

RESULTS					
COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)
1.45E+04	0	0	250.00	15.28	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#: 7

Number of Release Sites: 1.

Release Activity: Union Seadrift

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
----------------------	-------	-------------------------------	-------	----------

Total Releases:	502.50 (kg/yr)	N/A (kg/yr)	N/A (kg/yr)	N/A (kg/yr)
-----------------	-------------------	----------------	----------------	----------------

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	2.01 (kg/site/day)	N/A/0.00 (kg/site/day)	N/A (kg/site/day)	N/A (kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

CHEMICAL ID: 14 IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS		
SCENARIO #: 7	RELEASE ACTIVITY: Union Seadrift	
FACILITY NAME: UNION CARBIDE CORP-PORT LAVACA		
FACILITY LOCATION: SEADRIFT TX 77983		
RECEIVING WATER NAME: MATAGORDA BAY		
REACH NUMBER: 12100402011	FACILITY ON REACH: No	DISCHARGE TYPE: Direct
NPDES PERMIT #: TX0002844	EXPOSED POPULATION: Adult	

WWT REMOVAL (%)	RELEASE DAYS	PLANT FLOW (MLD)	PRETREAT RELEASE (kg/site/day)	POST-TREAT RELEASE (kg/site/day)	BCF (L/kg)
0.	250.	33.31	2.01	2.01	3.00

AQUATIC EXPOSURE ESTIMATES		
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)
ACUTE SCENARIO	2.50	24.14
CHRONIC SCENARIO	10.00	6.03

FISH INGESTION EXPOSURE ESTIMATES					
Exposure Units	Results	ASSUMPTIONS			
		ED (years)	AT (years)	BW (kg)	IR (g/day)
Cancer					
LADD _{pot} (mg/kg/day)	4.92E-07	33.00	78.00	80.00	7.50
LADC _{pot} (mg/kg)	5.25E-03	33.00	78.00	NA	NA
Acute					

ADR _{pot} (mg/kg/day)	2.53E-04	NA	1 day	80.00	279.00
--------------------------------	----------	----	-------	-------	--------

Lakes Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#: 1

Number of Release Sites: 1.

Release Activity: BASF 250

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
----------------------	-------	-------------------------------	-------	----------

Total Releases:	2.98 (kg/yr)	N/A (kg/yr)	N/A (kg/yr)	N/A (kg/yr)
-----------------	-----------------	----------------	----------------	----------------

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	1.19E-02 (kg/site/day)	N/A/0.00 (kg/site/day)	N/A (kg/site/day)	N/A (kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: 14 IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:1 RELEASE ACTIVITY: BASF 250
 FACILITY NAME: BASF CORPORATION
 FACILITY LOCATION: MONACA PA 15061
 RECEIVING WATER NAME: RACCOON CR
 REACH NUMBER: 05030101004 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT #: PA0092223 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	0.0119	1.19E-02	0.00	3.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	120.17	34.59	20.88	17.34	NA
CONCENTRATION (µg/L)	9.90E-02	0.34	0.57	0.69	NA

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES				
Exposure Units	Drinking Water Results	Drinking Water Units	Fish Ingestion Results	Fish Ingestion Units
Cancer				
LADD _{pot}	3.73E-07 mg/kg/day		8.07E-09 mg/kg/day	
LADC _{pot}	2.87E-05 mg/L		8.61E-05 mg/kg	
Acute				
ADR _{pot}	1.30E-05 mg/kg/day		1.04E-06	mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 1 RELEASE ACTIVITY: BASF 250

FACILITY NAME: BASF CORPORATION

FACILITY LOCATION: MONACA PA 15061

RECEIVING STREAM NAME: RACCOON CR

REACH NUMBER: 05030101004 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: PA0092223 GAGING STATION ID: N/A

GAGING STATION GAGING STATION NUMBER OF STATIONS ON REACH: N/A

PERIOD OF RECORD: N/A NUMBER OF OBSERVATIONS: N/A

MEAN FLOW (MLD): 518.32 7q10 FLOW (MLD): 20.88 EFFLUENT FLOW (MLD):7.05

RESULTS

COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)
1.45E+04	0	0	250.00	1.19E-02	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#: 1

Number of Release Sites: 1.

Release Activity: Cherokee 250

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
----------------------	-------	-------------------------------	-------	----------

Total Releases:	1.66 (kg/yr)	N/A (kg/yr)	N/A (kg/yr)	N/A (kg/yr)
-----------------	-----------------	----------------	----------------	----------------

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	6.62E-03 (kg/site/day)	N/A/0.00 (kg/site/day)	N/A (kg/site/day)	N/A (kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: 14 IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:1 RELEASE ACTIVITY: Cherokee 250
 FACILITY NAME: MERCK & COMPANY INC - CHEROKEE
 FACILITY LOCATION: DANVILLE PA 178210600
 RECEIVING WATER NAME: SUSQUEHANNA R
 REACH NUMBER: 02050107001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT #: PA0008419 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	0.00662	6.62E-03	0.00	3.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	1.06E+04	2519.35	1768.47	1423.67	NA
CONCENTRATION (µg/L)	6.25E-04	2.63E-03	3.74E-03	4.65E-03	NA

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES				
Exposure Units	Drinking Water Results	Drinking Water Units	Fish Ingestion Results	Fish Ingestion Units
Cancer				
LADD _{pot}	2.36E-09 mg/kg/day		5.10E-11 mg/kg/day	
LADC _{pot}	1.81E-07 mg/L		5.44E-07 mg/kg	
Acute				
ADR _{pot}	9.95E-08 mg/kg/day		6.54E-09	mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 1 RELEASE ACTIVITY: Cherokee 250
 FACILITY NAME: MERCK & COMPANY INC - CHEROKEE
 FACILITY LOCATION: DANVILLE PA 178210600
 RECEIVING STREAM NAME: SUSQUEHANNA R
 REACH NUMBER: 02050107001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: PA0008419 GAGING STATION ID: N/A
 GAGING STATION GAGING STATION NUMBER OF STATIONS ON REACH: N/A
 PERIOD OF RECORD: N/A NUMBER OF OBSERVATIONS: N/A
 MEAN FLOW (MLD): 3.77E+04 7q10 FLOW (MLD): 1768.47 EFFLUENT FLOW (MLD):41.69

RESULTS					
COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)
1.45E+04	0	0	250.00	6.62E-03	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#: 1

Number of Release Sites: 1.

Release Activity: Dak Americas 250

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
----------------------	-------	-------------------------------	-------	----------

Total Releases:	7965.00 (kg/yr)	N/A (kg/yr)	N/A (kg/yr)	N/A (kg/yr)
-----------------	--------------------	----------------	----------------	----------------

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	31.86 (kg/site/day)	N/A/0.00 (kg/site/day)	N/A (kg/site/day)	N/A (kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: 14 IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:1 RELEASE ACTIVITY: Dak Americas 250
 FACILITY NAME: MONSANTO COMPANY
 FACILITY LOCATION: FAYETTEVILLE NC 28302
 RECEIVING WATER NAME: CAPE FEAR R
 REACH NUMBER: 03030004001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT #: NC0003719 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	31.86	31.86	0.00	3.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	3927.32	1144.42	781.33	632.60	NA
CONCENTRATION (µg/L)	8.11	27.84	40.78	50.36	NA

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES				
Exposure Units	Drinking Water Results	Drinking Water Units	Fish Ingestion Results	Fish Ingestion Units
Cancer				
LADD _{pot}	3.06E-05 mg/kg/day		6.61E-07 mg/kg/day	
LADC _{pot}	2.35E-03 mg/L		7.05E-03 mg/kg	
Acute				
ADR _{pot}	1.05E-03 mg/kg/day		8.49E-05	mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 1 RELEASE ACTIVITY: Dak Americas 250

FACILITY NAME: MONSANTO COMPANY

FACILITY LOCATION: FAYETTEVILLE NC 28302

RECEIVING STREAM NAME: CAPE FEAR R

REACH NUMBER: 03030004001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NC0003719 GAGING STATION ID: N/A

GAGING STATION GAGING STATION NUMBER OF STATIONS ON REACH: N/A

PERIOD OF RECORD: N/A NUMBER OF OBSERVATIONS: N/A

MEAN FLOW (MLD): 1.20E+04 7q10 FLOW (MLD): 781.33 EFFLUENT FLOW (MLD):3.08

RESULTS					
COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)
1.45E+04	0	0	250.00	31.86	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#: 1

Number of Release Sites: 1.

Release Activity: Institute Plant 250

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
----------------------	-------	-------------------------------	-------	----------

Total Releases:	6132.50 (kg/yr)	N/A (kg/yr)	N/A (kg/yr)	N/A (kg/yr)
-----------------	--------------------	----------------	----------------	----------------

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	24.53 (kg/site/day)	N/A/0.00 (kg/site/day)	N/A (kg/site/day)	N/A (kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: 14 IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:1 RELEASE ACTIVITY: Institute Plant 250
 FACILITY NAME: AVENTIS CROPS SCIENCE USA L.P.
 FACILITY LOCATION: INSTITUTE WV 25112
 RECEIVING WATER NAME: KANAWHA R
 REACH NUMBER: 05050008008 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT #: WV0000086 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	24.53	24.53	0.00	3.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	1.42E+04	4656.81	3340.32	2677.12	NA
CONCENTRATION (µg/L)	1.73	5.27	7.34	9.16	NA

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES				
Exposure Units	Drinking Water Results	Drinking Water Units	Fish Ingestion Results	Fish Ingestion Units
Cancer				
LADD _{pot}	6.50E-06 mg/kg/day		1.41E-07 mg/kg/day	
LADC _{pot}	5.00E-04 mg/L		1.50E-03 mg/kg	
Acute				
ADR _{pot}	2.00E-04 mg/kg/day		1.81E-05	mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 1 RELEASE ACTIVITY: Institute Plant 250

FACILITY NAME: AVENTIS CROPSCIENCE USA L.P.

FACILITY LOCATION: INSTITUTE WV 25112

RECEIVING STREAM NAME: KANAWHA R

REACH NUMBER: 05050008008 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: WV0000086 GAGING STATION ID: N/A

GAGING STATION GAGING STATION NUMBER OF STATIONS ON REACH: N/A

PERIOD OF RECORD: N/A NUMBER OF OBSERVATIONS: N/A

MEAN FLOW (MLD): 3.35E+04 7q10 FLOW (MLD): 3340.32 EFFLUENT FLOW (MLD):1137.85

RESULTS					
COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)
1.45E+04	0	0	250.00	24.53	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#: 1

Number of Release Sites: 1.

Release Activity: Kodak Park 250

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
----------------------	-------	-------------------------------	-------	----------

Total Releases:	64.00 (kg/yr)	N/A (kg/yr)	N/A (kg/yr)	N/A (kg/yr)
-----------------	------------------	----------------	----------------	----------------

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	0.26 (kg/site/day)	N/A/0.00 (kg/site/day)	N/A (kg/site/day)	N/A (kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: 14 IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:1 RELEASE ACTIVITY: Kodak Park 250
 FACILITY NAME: EASTMAN KODAK CO
 FACILITY LOCATION: ROCHESTER NY 14652
 RECEIVING WATER NAME: GENESEE R
 REACH NUMBER: 04130003001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT #: NY0001643 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	0.256	0.26	0.00	3.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	3565.85	1528.47	1054.21	851.75	NA
CONCENTRATION (µg/L)	7.18E-02	0.17	0.24	0.30	NA

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES				
Exposure Units	Drinking Water Results	Drinking Water Units	Fish Ingestion Results	Fish Ingestion Units
Cancer				
LADD _{pot}	2.70E-07 mg/kg/day		5.85E-09 mg/kg/day	
LADC _{pot}	2.08E-05 mg/L		6.24E-05 mg/kg	
Acute				
ADR _{pot}	6.34E-06 mg/kg/day		7.51E-07	mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 1 RELEASE ACTIVITY: Kodak Park 250

FACILITY NAME: EASTMAN KODAK CO

FACILITY LOCATION: ROCHESTER NY 14652

RECEIVING STREAM NAME: GENESEE R

REACH NUMBER: 04130003001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NY0001643 GAGING STATION ID: N/A

GAGING STATION GAGING STATION NUMBER OF STATIONS ON REACH: N/A

PERIOD OF RECORD: N/A NUMBER OF OBSERVATIONS: N/A

MEAN FLOW (MLD): 6914.59 7q10 FLOW (MLD): 1054.21 EFFLUENT FLOW (MLD):126.89

RESULTS

COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)
1.45E+04	0	0	250.00	0.26	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#: 1

Number of Release Sites: 1.

Release Activity: Pharmacia 250

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
----------------------	-------	-------------------------------	-------	----------

Total Releases:	1.05 (kg/yr)	N/A (kg/yr)	N/A (kg/yr)	N/A (kg/yr)
-----------------	-----------------	----------------	----------------	----------------

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	4.19E-03 (kg/site/day)	N/A/0.00 (kg/site/day)	N/A (kg/site/day)	N/A (kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: 14 IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:1 RELEASE ACTIVITY: Pharmacia 250
 FACILITY NAME: PHARMACIA & UPJOHN CO
 FACILITY LOCATION: NORTH HAVEN CT 06473
 RECEIVING WATER NAME: QUINNIPIAC R
 REACH NUMBER: 01100004024 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT #: CT0001341 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	0.00419	4.19E-03	0.00	3.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	329.07	153.17	97.43	80.04	NA
CONCENTRATION (µg/L)	1.27E-02	2.74E-02	4.30E-02	5.23E-02	NA

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES				
Exposure Units	Drinking Water Results	Drinking Water Units	Fish Ingestion Results	Fish Ingestion Units
Cancer				
LADD _{pot}	4.80E-08 mg/kg/day		1.04E-09 mg/kg/day	
LADC _{pot}	3.69E-06 mg/L		1.11E-05 mg/kg	
Acute				
ADR _{pot}	1.04E-06 mg/kg/day		1.33E-07	mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 1 RELEASE ACTIVITY: Pharmacia 250

FACILITY NAME: PHARMACIA & UPJOHN CO

FACILITY LOCATION: NORTH HAVEN CT 06473

RECEIVING STREAM NAME: QUINNIPIAC R

REACH NUMBER: 01100004024 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: CT0001341 GAGING STATION ID: N/A

GAGING STATION GAGING STATION NUMBER OF STATIONS ON REACH: N/A

PERIOD OF RECORD: N/A NUMBER OF OBSERVATIONS: N/A

MEAN FLOW (MLD): 722.51 7q10 FLOW (MLD): 97.43 EFFLUENT FLOW (MLD):2.29

RESULTS					
COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)
1.45E+04	0	0	250.00	4.19E-03	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#: 1

Number of Release Sites: 1.

Release Activity: Philips 250

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
----------------------	-------	-------------------------------	-------	----------

Total Releases:	6.45E-02 (kg/yr)	N/A (kg/yr)	N/A (kg/yr)	N/A (kg/yr)
-----------------	---------------------	----------------	----------------	----------------

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	2.58E-04 (kg/site/day)	N/A/0.00 (kg/site/day)	N/A (kg/site/day)	N/A (kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: 14 IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:1 RELEASE ACTIVITY: Philips 250
 FACILITY NAME: MINERAL WELLS CITY OF (FT WAL)
 FACILITY LOCATION: MINERAL WELLS TX 76067
 RECEIVING WATER NAME: TURKEY CR
 REACH NUMBER: 12060201022 FACILITY ON REACH: No DISCHARGE TYPE: Direct
 NPDES PERMIT #: TX0023779 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	0.00026	2.58E-04	0.00	3.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	5.38	2.47	1.36	1.36	NA
CONCENTRATION (µg/L)	4.79E-02	0.10	0.19	0.19	NA

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES				
Exposure Units	Drinking Water Results	Drinking Water Units	Fish Ingestion Results	Fish Ingestion Units
Cancer				
LADD _{pot}	1.81E-07 mg/kg/day		3.91E-09 mg/kg/day	
LADC _{pot}	1.39E-05 mg/L		4.17E-05 mg/kg	
Acute				
ADR _{pot}	3.95E-06 mg/kg/day		5.02E-07	mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 1 RELEASE ACTIVITY: Philips 250
 FACILITY NAME: MINERAL WELLS CITY OF (FT WAL
 FACILITY LOCATION: MINERAL WELLS TX 76067
 RECEIVING STREAM NAME: TURKEY CR
 REACH NUMBER: 12060201022 FACILITY ON REACH: No DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: TX0023779 GAGING STATION ID: N/A
 GAGING STATION GAGING STATION NUMBER OF STATIONS ON REACH: N/A
 PERIOD OF RECORD: N/A NUMBER OF OBSERVATIONS: N/A
 MEAN FLOW (MLD): 17.66 7q10 FLOW (MLD): 1.36 EFFLUENT FLOW (MLD):1.36

RESULTS					
COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)
1.45E+04	0	0	250.00	2.58E-04	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#: 1

Number of Release Sites: 1.

Release Activity: Sanderson 250

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
----------------------	-------	-------------------------------	-------	----------

Total Releases:	3.33E-02 (kg/yr)	N/A (kg/yr)	N/A (kg/yr)	N/A (kg/yr)
-----------------	---------------------	----------------	----------------	----------------

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	1.33E-04 (kg/site/day)	N/A/0.00 (kg/site/day)	N/A (kg/site/day)	N/A (kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

SIC-CODE BASED HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 1 Number of Sites: 1 RELEASE ACTIVITY: Sanderson
250

SIC-CODE DESCRIPTION: POTW (Indust., includes POTWs which receive ind. disch.)

SIC-CODE (S): subset of 4952 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	250.	0.00013	1.33E-04	0.00	3.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER									
PLANT TYPE	% ILE FACILITY	STREAM FLOW (MLD)				STREAM CONC. (µg/l)			
		Harmonic Mean	30Q5	7Q10	1Q10	Harmonic Mean	30Q5	7Q10	1Q10
ALL	50	288.00	123.84	78.18	66.05	4.62E-04	1.07E-03	1.70E-03	2.01E-03
ALL	10	39.60	13.29	7.76	7.57	3.36E-03	1.00E-02	1.71E-02	1.76E-02

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
Exposure Units	Drinking Water Results		Drinking Water Units	Fish Ingestion Results		Fish Ingestion Units
	50%	10%		50%	10%	
Cancer						
LADD _{pot}	1.74E-09	1.27E-08	mg/kg/day	3.76E-11	2.74E-10	mg/kg/day
LADC _{pot}	1.34E-07	9.73E-07	mg/L	4.01E-07	2.92E-06	mg/kg
Acute						
ADR _{pot}	4.07E-08	3.79E-07	mg/kg/day	4.83E-09	3.51E-08	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 IND 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 1 RELEASE ACTIVITY: Sanderson 250

SIC CODE DESCRIPTION: POTW (Indust., includes POTWs which receive ind. disch.)

ASSOCIATED SIC CODES: subset of 4952

SIC CODE RESULTS

COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Loading (kg/site/day)	Waste Water Treatment (%)	High/Avg Analysis
1.45E+04	0	0	250.00	1.33E-04	0.00	High

OES: OPEN SYSTEM FUNCTIONAL FLUIDS

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 OSFF 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#: 1

Number of Release Sites: 1.

Release Activity: Ametek 247

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
----------------------	-------	-------------------------------	-------	----------

Total Releases:	2.64 (kg/yr)	N/A (kg/yr)	N/A (kg/yr)	N/A (kg/yr)
-----------------	-----------------	----------------	----------------	----------------

Non-sludge/Sludge

Release Days/yr:	247.00	0.00/0.00	N/A	N/A
Per Site Release:	1.07E-02 (kg/site/day)	N/A/0.00 (kg/site/day)	N/A (kg/site/day)	N/A (kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: 14 OSFF 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:1 RELEASE ACTIVITY: Ametek 247
 FACILITY NAME: PENNRIDGE WWT AUTH
 FACILITY LOCATION: SELLERSVILLE PA 189600031
 RECEIVING WATER NAME: PERKIOMEN CR E BR
 REACH NUMBER: 02040203005 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT #: PA0020460 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	247.	0.0107	1.07E-02	0.00	3.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	88.62	27.01	16.16	13.44	NA
CONCENTRATION (µg/L)	0.12	0.40	0.66	0.80	NA

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES				
Exposure Units	Drinking Water Results	Drinking Water Units	Fish Ingestion Results	Fish Ingestion Units
Cancer				
LADD _{pot}	4.49E-07 mg/kg/day		9.72E-09 mg/kg/day	
LADC _{pot}	3.46E-05 mg/L		1.04E-04 mg/kg	
Acute				
ADR _{pot}	1.50E-05 mg/kg/day		1.26E-06	mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 OSFF 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 1 RELEASE ACTIVITY: Ametek 247

FACILITY NAME: PENNRIDGE WWT AUTH

FACILITY LOCATION: SELLERSVILLE PA 189600031

RECEIVING STREAM NAME: PERKIOMEN CR E BR

REACH NUMBER: 02040203005 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: PA0020460 GAGING STATION ID: N/A

GAGING STATION GAGING STATION NUMBER OF STATIONS ON REACH: N/A

PERIOD OF RECORD: N/A NUMBER OF OBSERVATIONS: N/A

MEAN FLOW (MLD): 367.12 7q10 FLOW (MLD): 16.16 EFFLUENT FLOW (MLD):10.29

RESULTS

COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)
1.45E+04	0	0	247.00	1.07E-02	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 OSFF 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#: 1

Number of Release Sites: 1.

Release Activity: Lake Reg Med 247

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
----------------------	-------	-------------------------------	-------	----------

Total Releases:	0.25 (kg/yr)	N/A (kg/yr)	N/A (kg/yr)	N/A (kg/yr)
-----------------	-----------------	----------------	----------------	----------------

Non-sludge/Sludge

Release Days/yr:	247.00	0.00/0.00	N/A	N/A
Per Site Release:	9.92E-04 (kg/site/day)	N/A/0.00 (kg/site/day)	N/A (kg/site/day)	N/A (kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: 14 OSFF 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:1 RELEASE ACTIVITY: Lake Reg Med 247
 FACILITY NAME: UNIFORM TUBE INC
 FACILITY LOCATION: COLLEGEVILLE PA 19426
 RECEIVING WATER NAME: PERKIOMEN CR
 REACH NUMBER: 02040203004 FACILITY ON REACH: No DISCHARGE TYPE: Direct
 NPDES PERMIT #: PA0042617 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	247.	0.00099	9.92E-04	0.00	3.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	281.27	75.79	47.03	38.83	NA
CONCENTRATION (µg/L)	3.53E-03	1.31E-02	2.11E-02	2.55E-02	NA

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES				
Exposure Units	Drinking Water Results	Drinking Water Units	Fish Ingestion Results	Fish Ingestion Units
Cancer				
LADD _{pot}	1.31E-08 mg/kg/day		2.84E-10 mg/kg/day	
LADC _{pot}	1.01E-06 mg/L		3.03E-06 mg/kg	
Acute				
ADR _{pot}	4.96E-07 mg/kg/day		3.69E-08	mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 OSFF 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 1 RELEASE ACTIVITY: Lake Reg Med 247

FACILITY NAME: UNIFORM TUBE INC

FACILITY LOCATION: COLLEGEVILLE PA 19426

RECEIVING STREAM NAME: PERKIOMEN CR

REACH NUMBER: 02040203004 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: PA0042617 GAGING STATION ID: N/A

GAGING STATION GAGING STATION NUMBER OF STATIONS ON REACH: N/A

PERIOD OF RECORD: N/A NUMBER OF OBSERVATIONS: N/A

50 %ile FLOW (MLD): 1213.02 10 %ile FLOW (MLD): 47.03 EFFLUENT FLOW (MLD):6.00E-02

RESULTS

COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)
1.45E+04	0	0	247.00	9.92E-04	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 OSFF 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#: 1

Number of Release Sites: 1.

Release Activity: Pall Life Sciences 247

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
----------------------	-------	-------------------------------	-------	----------

Total Releases:	5.41 (kg/yr)	N/A (kg/yr)	N/A (kg/yr)	N/A (kg/yr)
-----------------	-----------------	----------------	----------------	----------------

Non-sludge/Sludge

Release Days/yr:	247.00	0.00/0.00	N/A	N/A
Per Site Release:	2.19E-02 (kg/site/day)	N/A/0.00 (kg/site/day)	N/A (kg/site/day)	N/A (kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: 14 OSFF 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:1 RELEASE ACTIVITY: Pall Life Sciences 247
 FACILITY NAME: LOCH ALPINE SA-SCIO-WEB WWTP
 FACILITY LOCATION: ANN ARBOR MI 48103
 RECEIVING WATER NAME: HURON R
 REACH NUMBER: 04090005009 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT #: MI0024066 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	247.	0.0219	2.19E-02	0.00	3.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	897.26	509.44	338.04	275.30	NA
CONCENTRATION (µg/L)	2.44E-02	4.30E-02	6.48E-02	7.95E-02	NA

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES				
Exposure Units	Drinking Water Results	Drinking Water Units	Fish Ingestion Results	Fish Ingestion Units
Cancer				
LADD _{pot}	9.08E-08 mg/kg/day		1.97E-09 mg/kg/day	
LADC _{pot}	6.99E-06 mg/L		2.10E-05 mg/kg	
Acute				
ADR _{pot}	1.63E-06 mg/kg/day		2.55E-07	mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 OSFF 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 1 RELEASE ACTIVITY: Pall Life Sciences 247
 FACILITY NAME: LOCH ALPINE SA-SCIO-WEB WWTP
 FACILITY LOCATION: ANN ARBOR MI 48103
 RECEIVING STREAM NAME: HURON R
 REACH NUMBER: 04090005009 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: MI0024066 GAGING STATION ID: 04174800
 GAGING STATION GAGING STATION NUMBER OF STATIONS ON REACH: 2
 PERIOD OF RECORD: 06/01/74 - NUMBER OF OBSERVATIONS: 3841.00
 12/04/84
 50 %ile FLOW (MLD): 1071.34 10 %ile FLOW (MLD): 447.62 EFFLUENT FLOW (MLD):0.43

RESULTS					
COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)
1.45E+04	0	0	247.00	2.19E-02	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 OSFF 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#: 1

Number of Release Sites: 1.

Release Activity: Modeled 247

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
----------------------	-------	-------------------------------	-------	----------

Total Releases:	9.36 (kg/yr)	N/A (kg/yr)	N/A (kg/yr)	N/A (kg/yr)
-----------------	-----------------	----------------	----------------	----------------

Non-sludge/Sludge

Release Days/yr:	247.00	0.00/0.00	N/A	N/A
Per Site Release:	3.79E-02 (kg/site/day)	N/A/0.00 (kg/site/day)	N/A (kg/site/day)	N/A (kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 OSFF 00

SIC-CODE BASED HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 1 Number of Sites: 1 RELEASE ACTIVITY: Modeled
247

SIC-CODE DESCRIPTION: POTW (Indust., includes POTWs which receive ind. disch.)

SIC-CODE (S): subset of 4952 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	247.	0.0379	3.79E-02	0.00	3.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER									
PLANT TYPE	% ILE FACILITY	STREAM FLOW (MLD)				STREAM CONC. (µg/l)			
		Harmonic Mean	30Q5	7Q10	1Q10	Harmonic Mean	30Q5	7Q10	1Q10
ALL	50	288.00	123.84	78.18	66.05	0.13	0.31	0.48	0.57
ALL	10	39.60	13.29	7.76	7.57	0.96	2.85	4.88	5.01

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
Exposure Units	Drinking Water Results		Drinking Water Units	Fish Ingestion Results		Fish Ingestion Units
	50%	10%		50%	10%	
Cancer						
LADD _{pot}	4.90E-07	3.56E-06	mg/kg/day	1.06E-08	7.71E-08	mg/kg/day
LADC _{pot}	3.77E-05	2.74E-04	mg/L	1.13E-04	8.22E-04	mg/kg
Acute						
ADR _{pot}	1.16E-05	1.08E-04	mg/kg/day	1.38E-06	1.00E-05	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 OSFF 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 1 RELEASE ACTIVITY: Modeled 247

SIC CODE DESCRIPTION: POTW (Indust., includes POTWs which receive ind. disch.)

ASSOCIATED SIC CODES: subset of 4952

SIC CODE RESULTS						
COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Loading (kg/site/day)	Waste Water Treatment (%)	High/Avg Analysis
1.45E+04	0	0	247.00	3.79E-02	0.00	High

OES: SPRAY FOAM APPLICATION

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 SFA 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#: 1

Number of Release Sites: 1.

Release Activity: Model 260

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
----------------------	-------	-------------------------------	-------	----------

Total Releases:	0.93 (kg/yr)	N/A (kg/yr)	N/A (kg/yr)	N/A (kg/yr)
-----------------	-----------------	----------------	----------------	----------------

Non-sludge/Sludge

Release Days/yr:	260.00	0.00/0.00	N/A	N/A
Per Site Release:	3.59E-03 (kg/site/day)	N/A/0.00 (kg/site/day)	N/A (kg/site/day)	N/A (kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 SFA 00

SIC-CODE BASED HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 1 Number of Sites: 1 RELEASE ACTIVITY: Model 260

SIC-CODE DESCRIPTION: POTW (Indust., includes POTWs which receive ind. disch.)

SIC-CODE (S): subset of 4952 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	260.	0.00359	3.59E-03	0.00	3.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER									
PLANT TYPE	% ILE FACILITY	STREAM FLOW (MLD)				STREAM CONC. (µg/l)			
		Harmonic Mean	30Q5	7Q10	1Q10	Harmonic Mean	30Q5	7Q10	1Q10
ALL	50	288.00	123.84	78.18	66.05	1.25E-02	2.90E-02	4.59E-02	5.44E-02
ALL	10	39.60	13.29	7.76	7.57	9.07E-02	0.27	0.46	0.47

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
Exposure Units	Drinking Water Results		Drinking Water Units	Fish Ingestion Results		Fish Ingestion Units
	50%	10%		50%	10%	
Cancer						
LADD _{pot}	4.88E-08	3.55E-07	mg/kg/day	1.06E-09	7.68E-09	mg/kg/day
LADC _{pot}	3.76E-06	2.73E-05	mg/L	1.13E-05	8.20E-05	mg/kg
Acute						
ADR _{pot}	1.10E-06	1.02E-05	mg/kg/day	1.30E-07	9.48E-07	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 SFA 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 1

RELEASE ACTIVITY: Model 260

SIC CODE DESCRIPTION: POTW (Indust., includes POTWs which receive ind. disch.)

ASSOCIATED SIC CODES: subset of 4952

SIC CODE RESULTS

COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Loading (kg/site/day)	Waste Water Treatment (%)	High/Avg Analysis
1.45E+04	0	0	260.00	3.59E-03	0.00	High

OES: DISPOSAL

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 DIS 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#: 1

Number of Release Sites: 1.

Release Activity: Beacon 250

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
----------------------	-------	-------------------------------	-------	----------

Total Releases:	30.00 (kg/yr)	N/A (kg/yr)	N/A (kg/yr)	N/A (kg/yr)
-----------------	------------------	----------------	----------------	----------------

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	0.12 (kg/site/day)	N/A/0.00 (kg/site/day)	N/A (kg/site/day)	N/A (kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: 14 DIS 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:1 RELEASE ACTIVITY: Beacon 250
 FACILITY NAME: BEACON FALLS WPCF
 FACILITY LOCATION: BEACON FALLS CT 06403
 RECEIVING WATER NAME: NAUGATUCK R
 REACH NUMBER: 01100005002 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT #: CT0101061 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	0.12	0.12	0.00	3.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	550.85	225.04	145.09	118.86	NA
CONCENTRATION (µg/L)	0.22	0.53	0.83	1.01	NA

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES				
Exposure Units	Drinking Water Results	Drinking Water Units	Fish Ingestion Results	Fish Ingestion Units
Cancer				
LADD _{pot}	8.21E-07 mg/kg/day		1.78E-08 mg/kg/day	
LADC _{pot}	6.31E-05 mg/L		1.89E-04 mg/kg	
Acute				
ADR _{pot}	2.02E-05 mg/kg/day		2.28E-06	mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 DIS 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 1 RELEASE ACTIVITY: Beacon 250

FACILITY NAME: BEACON FALLS WPCF

FACILITY LOCATION: BEACON FALLS CT 06403

RECEIVING STREAM NAME: NAUGATUCK R

REACH NUMBER: 01100005002 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: CT0101061 GAGING STATION ID: 01208500

GAGING STATION GAGING STATION NUMBER OF STATIONS ON REACH: 1

PERIOD OF RECORD: 01/01/66 - 11/06/90 NUMBER OF OBSERVATIONS: 9041.00

50 %ile FLOW (MLD): 914.80 10 %ile FLOW (MLD): 298.41 EFFLUENT FLOW (MLD):0.76

RESULTS

COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)
1.45E+04	0	0	250.00	0.12	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 DIS 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#: 1

Number of Release Sites: 1.

Release Activity: Ingersoll 250

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
----------------------	-------	-------------------------------	-------	----------

Total Releases:	11.50 (kg/yr)	N/A (kg/yr)	N/A (kg/yr)	N/A (kg/yr)
-----------------	------------------	----------------	----------------	----------------

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	4.60E-02 (kg/site/day)	N/A/0.00 (kg/site/day)	N/A (kg/site/day)	N/A (kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 DIS 00

SIC-CODE BASED HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 1 Number of Sites: 1 RELEASE ACTIVITY: Ingersoll
250

SIC-CODE DESCRIPTION: POTW (Indust., includes POTWs which receive ind. disch.)

SIC-CODE (S): subset of 4952 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	250.	0.046	4.60E-02	0.00	3.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER									
PLANT TYPE	% ILE FACILITY	STREAM FLOW (MLD)				STREAM CONC. (µg/l)			
		Harmonic Mean	30Q5	7Q10	1Q10	Harmonic Mean	30Q5	7Q10	1Q10
ALL	50	288.00	123.84	78.18	66.05	0.16	0.37	0.59	0.70
ALL	10	39.60	13.29	7.76	7.57	1.16	3.46	5.93	6.08

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
Exposure Units	Drinking Water Results		Drinking Water Units	Fish Ingestion Results		Fish Ingestion Units
	50%	10%		50%	10%	
Cancer						
LADD _{pot}	6.02E-07	4.38E-06	mg/kg/day	1.30E-08	9.47E-08	mg/kg/day
LADC _{pot}	4.63E-05	3.37E-04	mg/L	1.39E-04	1.01E-03	mg/kg
Acute						
ADR _{pot}	1.41E-05	1.31E-04	mg/kg/day	1.67E-06	1.22E-05	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: 14 DIS 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 1

RELEASE ACTIVITY: Ingersoll 250

SIC CODE DESCRIPTION: POTW (Indust., includes POTWs which receive ind. disch.)

ASSOCIATED SIC CODES: subset of 4952

SIC CODE RESULTS

COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Loading (kg/site/day)	Waste Water Treatment (%)	High/Avg Analysis
1.45E+04	0	0	250.00	4.60E-02	0.00	High