



United States
Environmental Protection Agency

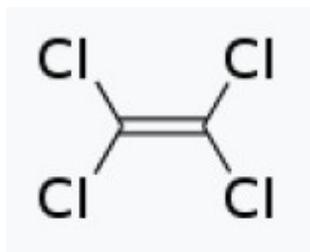
Office of Chemical Safety and
Pollution Prevention

Draft Risk Evaluation for Perchloroethylene (Ethene, 1,1,2,2-Tetrachloro)

Supplemental File:

E-FAST Surface Water Modeling Outputs

CASRN: 127-18-4



April 2020, DRAFT

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1. OES: MANUFACTURING

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:1

Number of Release Sites: 1.

Release Activity: Axiall 350 dy max

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	35.00 (kg/yr)	N/A (kg/yr)	N/A (kg/yr)	N/A (kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	0.10 (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: PERC OES MFG 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:1 RELEASE ACTIVITY: Axiall 350 dy max
 FACILITY NAME: PPG IND-LAKE CHARLES
 FACILITY LOCATION: LAKE CHARLES LA 70601
 RECEIVING WATER NAME: CALCASIEU R
 REACH NUMBER: 08080206033 FACILITY ON REACH: DISCHARGE TYPE: Direct
 No
 NPDES PERMIT #: LA0000761 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	350.	0.1	0.10	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	3997.81	1290.68	884.92	884.92	NA
CONCENTRATION (µg/L)	2.50E-02	7.75E-02	0.11	0.11	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}	1.32E-07 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	1.01E-05 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	2.93E-06 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 1 RELEASE ACTIVITY: Axiall 350 dy max
FACILITY NAME: PPG IND-LAKE CHARLES
FACILITY LOCATION: LAKE CHARLES LA 70601
RECEIVING STREAM NAME: CALCASIEU R
REACH NUMBER: 08080206033 FACILITY ON REACH: No DISCHARGE TYPE: Direct
NPDES PERMIT NUMBER: LA0000761 GAGING STATION ID: N/A
GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF STATIONS ON REACH: N/A
NUMBER OF OBSERVATIONS: N/A
MEAN FLOW (MLD): 1.08E+04 7q10 FLOW (MLD): 884.92 EFFLUENT FLOW (MLD):884.92

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 (%)
1.40	0	0	350.00	0.10	0.00
50.00	0	0	350.00	0.10	0.00
1342.00	0	0	350.00	0.10	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:2

Number of Release Sites: 1.

Release Activity: Axiall 350 dy avg

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	10.50	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	3.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES MFG 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:2 RELEASE ACTIVITY: Axiall 350 dy avg
FACILITY NAME: PPG IND-LAKE CHARLES
FACILITY LOCATION: LAKE CHARLES LA 70601
RECEIVING WATER NAME: CALCASIEU R
REACH NUMBER: 08080206033 FACILITY ON REACH: DISCHARGE TYPE: Direct No
NPDES PERMIT #: LA0000761 EXPOSED POPULATION: Adult

Table with 6 columns: WWT REMOVAL (%), RELEASE DAYS, PRETREATMENT RELEASE (kg/site/day), POSTTREATMENT RELEASE (kg/site/day), DWT (%), BCF (L/kg). Values: 0, 350, 0.03, 3.00E-02, 0.00, 0.00.

Table with 6 columns: FLOW DESCRIPTOR, Harmonic Mean, 3Q5, 7Q10, 1Q10, PLANT. Rows include FLOW (MLD) and CONCENTRATION (µg/L).

Table with 5 columns: Exposure Units, Drinking Water Results, Drinking Water Units, Fish Ingestion Results, Fish Ingestion Units. Includes sections for Cancer and Acute exposure estimates.

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	8.80E-07 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 2 RELEASE ACTIVITY: Axiall 350 dy avg
 FACILITY NAME: PPG IND-LAKE CHARLES
 FACILITY LOCATION: LAKE CHARLES LA 70601
 RECEIVING STREAM NAME: CALCASIEU R
 REACH NUMBER: 08080206033 FACILITY ON REACH: No DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER:
 LA0000761 GAGING STATION ID: N/A
 GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS
 RECORD: N/A NUMBER OF ON REACH: N/A
 OBSERVATIONS: N/A
 MEAN FLOW (MLD): 1.08E+04 7q10 FLOW (MLD): 884.92 EFFLUENT FLOW
 (MLD):884.92

RESULTS

COC ($\mu\text{g/L}$)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)
1.40	0	0	350.00	3.00E-02	0.00
50.00	0	0	350.00	3.00E-02	0.00
1342.00	0	0	350.00	3.00E-02	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:3

Number of Release Sites: 1.

Release Activity: Axiall 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	10.80	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	0.54	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES MFG 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 3 RELEASE ACTIVITY: Axiall 20 dy

FACILITY NAME: PPG IND-LAKE CHARLES

FACILITY LOCATION: LAKE CHARLES LA 70601

RECEIVING WATER NAME: CALCASIEU R

REACH NUMBER: 08080206033 FACILITY ON REACH: DISCHARGE TYPE: Direct
No

NPDES PERMIT #: LA0000761 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.54	0.54	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	3997.81	1290.68	884.92	884.92	NA
CONCENTRATION (µg/L)	0.14	0.42	0.61	0.61	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}	4.07E-08 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	3.13E-06 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.58E-05 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:4

Number of Release Sites: 1.

Release Activity: Greenchem 350 dy max

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	35.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	0.10	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

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

SCENARIO #: 4 Number of Sites: 1 RELEASE
ACTIVITY: Greenchem 350 dy
max

SIC-CODE DESCRIPTION: Organic Chemicals Manufacture

SIC-CODE (S): 2865,2869 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	350.	0.1	0.10	0.00	0.00

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	2825.61	935.49	634.16	514.20	3.54E-02	0.11	0.16	0.19
ALL	10	50.57	9.38	5.41	4.53	1.98	10.66	18.48	22.08

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	1.87E-07	1.04E-05	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	1.44E-05	8.02E-04	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	4.05E-06	4.04E-04	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 4

RELEASE ACTIVITY: Greenchem 350 dy max

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

ASSOCIATED SIC CODES: 2865,2869

SIC CODE RESULTS

COC ($\mu\text{g/L}$)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Loading (kg/site/day)	Waste Water Treatment (%)	High/Avg Analysis
1.40	52	189	350.00	0.10	0.00	High
50.00	7	25	350.00	0.10	0.00	High
1342.00	0	0	350.00	0.10	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:5

Number of Release Sites: 1.

Release Activity: Greenchem 350 dy avg

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	10.50	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	3.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

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

SCENARIO #: 5 Number of Sites: 1 RELEASE
ACTIVITY: Greenchem 350 dy
avg

SIC-CODE DESCRIPTION: Organic Chemicals Manufacture

SIC-CODE (S): 2865,2869 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	350.	0.03	3.00E-02	0.00	0.00

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	2825.61	935.49	634.16	514.20	1.06E-02	3.21E-02	4.73E-02	5.83E-02
ALL	10	50.57	9.38	5.41	4.53	0.59	3.20	5.55	6.62

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	5.60E-08	3.13E-06	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	4.31E-06	2.41E-04	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.21E-06	1.21E-04	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 5 RELEASE ACTIVITY: Greenchem 350 dy avg

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

ASSOCIATED SIC CODES: 2865,2869

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
1.40	27	100	350.00	3.00E-02	0.00	High
50.00	3	11	350.00	3.00E-02	0.00	High
1342.00	0	0	350.00	3.00E-02	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:6

Number of Release Sites: 1.

Release Activity: Greenchem 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	10.80	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	0.54	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

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

SCENARIO #: 6 Number of Sites: 1 RELEASE
ACTIVITY: Greenchem 20 dy

SIC-CODE DESCRIPTION: Organic Chemicals Manufacture

SIC-CODE (S): 2865,2869 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	20.	0.54	0.54	0.00	0.00

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	2825.61	935.49	634.16	514.20	0.19	0.58	0.85	1.05
ALL	10	50.57	9.38	5.41	4.53	10.68	57.57	99.82	119.21

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	5.76E-08	3.22E-06	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	4.43E-06	2.48E-04	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	2.19E-05	2.18E-03	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 6

RELEASE ACTIVITY: Greenchem 20 dy

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

ASSOCIATED SIC CODES: 2865,2869

SIC CODE RESULTS

COC ($\mu\text{g/L}$)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Loading (kg/site/day)	Waste Water Treatment (%)	High/Avg Analysis
1.40	5	17	20.00	0.54	0.00	High
50.00	1	4	20.00	0.54	0.00	High
1342.00	0	0	20.00	0.54	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:7

Number of Release Sites: 1.

Release Activity: Occidental 350 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.70	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	2.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	2.55E-10 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 7 RELEASE ACTIVITY: Occidental 350 dy
 FACILITY NAME: VULCAN CHEMICAL
 FACILITY LOCATION: GEISMAR LA 70734
 RECEIVING STREAM NAME: MISSISSIPPI R
 REACH NUMBER: 08070100001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: GAGING STATION ID: N/A
 LA0002933
 GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS
 RECORD: N/A NUMBER OF ON REACH: N/A
 OBSERVATIONS: N/A
 MEAN FLOW (MLD): 1.14E+06 7q10 FLOW (MLD): EFFLUENT FLOW
 2.47E+05 (MLD):4.14

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 (%)
1.40	0	0	350.00	2.00E-03	0.00
50.00	0	0	350.00	2.00E-03	0.00
1342.00	0	0	350.00	2.00E-03	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:8

Number of Release Sites: 1.

Release Activity: Occidental 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.60	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	3.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES MFG 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 8 RELEASE ACTIVITY: Occidental 20 dy

FACILITY NAME: VULCAN CHEMICAL

FACILITY LOCATION: GEISMAR LA 70734

RECEIVING WATER NAME: MISSISSIPPI R

REACH NUMBER: 08070100001 FACILITY ON REACH: DISCHARGE TYPE: Direct
 Yes

NPDES PERMIT #: LA0002933 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.03	3.00E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	8.12E+05	2.98E+05	2.47E+05	1.92E+05	NA
CONCENTRATION ($\mu\text{g/L}$)	3.69E-05	1.01E-04	1.21E-04	1.56E-04	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}	1.11E-11 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	8.56E-10 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	3.82E-09 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 8 RELEASE ACTIVITY: Occidental 20 dy
 FACILITY NAME: VULCAN CHEMICAL
 FACILITY LOCATION: GEISMAR LA 70734
 RECEIVING STREAM NAME: MISSISSIPPI R
 REACH NUMBER: 08070100001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: GAGING STATION ID: N/A
 LA0002933
 GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS
 RECORD: N/A NUMBER OF ON REACH: N/A
 OBSERVATIONS: N/A
 MEAN FLOW (MLD): 1.14E+06 7q10 FLOW (MLD): EFFLUENT FLOW
 2.47E+05 (MLD):4.14

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 (%)
1.40	0	0	20.00	3.00E-02	0.00
50.00	0	0	20.00	3.00E-02	0.00
1342.00	0	0	20.00	3.00E-02	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:9

Number of Release Sites: 1.

Release Activity: Solvents 350 dy max

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.10	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	3.00E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

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

SCENARIO #: 9 Number of Sites: 1 RELEASE
ACTIVITY: Solvents 350 dy
max

SIC-CODE DESCRIPTION: Organic Chemicals Manufacture

SIC-CODE (S): 2865,2869 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	350.	0.0003	3.00E-04	0.00	0.00

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	2825.61	935.49	634.16	514.20	1.06E-04	3.21E-04	4.73E-04	5.83E-04
ALL	10	50.57	9.38	5.41	4.53	5.93E-03	3.20E-02	5.55E-02	6.62E-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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	5.60E-10	3.13E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	4.31E-08	2.41E-06	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.21E-08	1.21E-06	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 9

RELEASE ACTIVITY: Solvents 350 dy max

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

ASSOCIATED SIC CODES: 2865,2869

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
1.40	1	2	350.00	3.00E-04	0.00	High
50.00	0	0	350.00	3.00E-04	0.00	High
1342.00	0	0	350.00	3.00E-04	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:10

Number of Release Sites: 1.

Release Activity: Solvents 350 dy avg

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	3.50E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

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

SCENARIO #: 10 Number of Sites: 1 RELEASE
ACTIVITY: Solvents 350 dy
avg

SIC-CODE DESCRIPTION: Organic Chemicals Manufacture

SIC-CODE (S): 2865,2869 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	350.	0.0001	1.00E-04	0.00	0.00

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	2825.61	935.49	634.16	514.20	3.54E-05	1.07E-04	1.58E-04	1.94E-04
ALL	10	50.57	9.38	5.41	4.53	1.98E-03	1.07E-02	1.85E-02	2.21E-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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	1.87E-10	1.04E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	1.44E-08	8.02E-07	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	4.05E-09	4.04E-07	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 10 RELEASE ACTIVITY: Solvents 350 dy avg

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

ASSOCIATED SIC CODES: 2865,2869

SIC CODE RESULTS

COC ($\mu\text{g/L}$)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Loading (kg/site/day)	Waste Water Treatment (%)	High/Avg Analysis
1.40	0	0	350.00	1.00E-04	0.00	High
50.00	0	0	350.00	1.00E-04	0.00	High
1342.00	0	0	350.00	1.00E-04	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:11

Number of Release Sites: 1.

Release Activity: Univar 350 dy max

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	35.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	0.10	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

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

SCENARIO #: 11 Number of Sites: 1 RELEASE ACTIVITY:Univar
350 dy max

SIC-CODE DESCRIPTION: Organic Chemicals Manufacture

SIC-CODE (S): 2865,2869 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	350.	0.1	0.10	0.00	0.00

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	2825.61	935.49	634.16	514.20	3.54E-02	0.11	0.16	0.19
ALL	10	50.57	9.38	5.41	4.53	1.98	10.66	18.48	22.08

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	1.87E-07	1.04E-05	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	1.44E-05	8.02E-04	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	4.05E-06	4.04E-04	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 11

RELEASE ACTIVITY: Univar 350 dy max

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

ASSOCIATED SIC CODES: 2865,2869

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
1.40	52	189	350.00	0.10	0.00	High
50.00	7	25	350.00	0.10	0.00	High
1342.00	0	0	350.00	0.10	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:12

Number of Release Sites: 1.

Release Activity: Univar 350 dy avg

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	10.50	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	3.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

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

SCENARIO #: 12 Number of Sites: 1 RELEASE ACTIVITY:Univar
350 dy avg

SIC-CODE DESCRIPTION: Organic Chemicals Manufacture

SIC-CODE (S): 2865,2869 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	350.	0.03	3.00E-02	0.00	0.00

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	2825.61	935.49	634.16	514.20	1.06E-02	3.21E-02	4.73E-02	5.83E-02
ALL	10	50.57	9.38	5.41	4.53	0.59	3.20	5.55	6.62

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	5.60E-08	3.13E-06	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	4.31E-06	2.41E-04	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.21E-06	1.21E-04	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 12

RELEASE ACTIVITY: Univar 350 dy avg

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

ASSOCIATED SIC CODES: 2865,2869

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
1.40	27	100	350.00	3.00E-02	0.00	High
50.00	3	11	350.00	3.00E-02	0.00	High
1342.00	0	0	350.00	3.00E-02	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:13

Number of Release Sites: 1.

Release Activity: Univar 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	10.80	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	0.54	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

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

SCENARIO #: 13 Number of Sites: 1 RELEASE ACTIVITY:Univar
20 dy

SIC-CODE DESCRIPTION: Organic Chemicals Manufacture

SIC-CODE (S): 2865,2869 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	20.	0.54	0.54	0.00	0.00

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	2825.61	935.49	634.16	514.20	0.19	0.58	0.85	1.05
ALL	10	50.57	9.38	5.41	4.53	10.68	57.57	99.82	119.21

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	5.76E-08	3.22E-06	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	4.43E-06	2.48E-04	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	2.19E-05	2.18E-03	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 13 RELEASE ACTIVITY: Univar 20 dy

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

ASSOCIATED SIC CODES: 2865,2869

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
1.40	5	17	20.00	0.54	0.00	High
50.00	1	4	20.00	0.54	0.00	High
1342.00	0	0	20.00	0.54	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:14

Number of Release Sites: 1.

Release Activity: Solvents 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	4.00E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	2.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

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

SCENARIO #: 14 Number of Sites: 1 RELEASE
ACTIVITY: Solvents 20 dy

SIC-CODE DESCRIPTION: Organic Chemicals Manufacture

SIC-CODE (S): 2865,2869 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	20.	0.002	2.00E-03	0.00	0.00

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	2825.61	935.49	634.16	514.20	7.08E-04	2.14E-03	3.15E-03	3.89E-03
ALL	10	50.57	9.38	5.41	4.53	3.95E-02	0.21	0.37	0.44

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	2.13E-10	1.19E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	1.64E-08	9.17E-07	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	8.10E-08	8.08E-06	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 14 RELEASE ACTIVITY: Solvents 20 dy

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

ASSOCIATED SIC CODES: 2865,2869

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
1.40	0	1	20.00	2.00E-03	0.00	High
50.00	0	0	20.00	2.00E-03	0.00	High
1342.00	0	0	20.00	2.00E-03	0.00	High

2. OES: IMPORT AND REPACKAGING

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:1

Number of Release Sites: 1.

Release Activity: Axiall 350 dy max

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	35.00 (kg/yr)	N/A (kg/yr)	N/A (kg/yr)	N/A (kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	0.10 (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: PERC OES MFG 80

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 1 RELEASE ACTIVITY: Axiall 350 dy max

FACILITY NAME: PPG IND-LAKE CHARLES

FACILITY LOCATION: LAKE CHARLES LA 70601

RECEIVING WATER NAME: CALCASIEU R

REACH NUMBER: 08080206033 FACILITY ON REACH: DISCHARGE TYPE: Direct
No

NPDES PERMIT #: LA0000761 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
80.	350.	0.1	2.00E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	3997.81	1290.68	884.92	884.92	NA
CONCENTRATION ($\mu\text{g/L}$)	5.00E-03	1.55E-02	2.26E-02	2.26E-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}	2.64E-08 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	2.03E-06 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	5.87E-07 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 80

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 1 RELEASE ACTIVITY: Axiall 350 dy max
FACILITY NAME: PPG IND-LAKE CHARLES
FACILITY LOCATION: LAKE CHARLES LA 70601
RECEIVING STREAM NAME: CALCASIEU R
REACH NUMBER: 08080206033 FACILITY ON REACH: No DISCHARGE TYPE: Direct
NPDES PERMIT NUMBER: GAGING STATION ID: N/A
LA0000761
GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS
RECORD: N/A NUMBER OF ON REACH: N/A
OBSERVATIONS: N/A
MEAN FLOW (MLD): 1.08E+04 7q10 FLOW (MLD): 884.92 EFFLUENT FLOW
(MLD):884.92

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 (%)
1.40	0	0	350.00	0.10	80.00
50.00	0	0	350.00	0.10	80.00
1342.00	0	0	350.00	0.10	80.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:2

Number of Release Sites: 1.

Release Activity: Axiall 350 dy avg

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	10.50	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	3.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES MFG 80

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:2 RELEASE ACTIVITY: Axiall 350 dy avg

FACILITY NAME: PPG IND-LAKE CHARLES

FACILITY LOCATION: LAKE CHARLES LA 70601

RECEIVING WATER NAME: CALCASIEU R

REACH NUMBER: 08080206033 FACILITY ON REACH: DISCHARGE TYPE: Direct
No

NPDES PERMIT #: LA0000761 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
80.	350.	0.03	6.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	3997.81	1290.68	884.92	884.92	NA
CONCENTRATION ($\mu\text{g/L}$)	1.50E-03	4.65E-03	6.78E-03	6.78E-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}	7.92E-09	mg/kg/day	0.00	mg/kg/day
LADC _{pot}	6.09E-07	mg/L	0.00	mg/kg
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.76E-07 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 80

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 2 RELEASE ACTIVITY: Axiall 350 dy avg
 FACILITY NAME: PPG IND-LAKE CHARLES
 FACILITY LOCATION: LAKE CHARLES LA 70601
 RECEIVING STREAM NAME: CALCASIEU R
 REACH NUMBER: 08080206033 FACILITY ON REACH: No DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: LA0000761 GAGING STATION ID: N/A
 GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF STATIONS ON REACH: N/A
 NUMBER OF OBSERVATIONS: N/A
 MEAN FLOW (MLD): 1.08E+04 7q10 FLOW (MLD): 884.92 EFFLUENT FLOW (MLD):884.92

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 (%)
1.40	0	0	350.00	3.00E-02	80.00
50.00	0	0	350.00	3.00E-02	80.00
1342.00	0	0	350.00	3.00E-02	80.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:3

Number of Release Sites: 1.

Release Activity: Greenchem 350 dy max

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	35.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	0.10	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 80

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

SCENARIO #: 3 Number of Sites: 1 RELEASE
ACTIVITY: Greenchem 350 dy
max

SIC-CODE DESCRIPTION: Organic Chemicals Manufacture

SIC-CODE (S): 2865,2869 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
80.00	350.	0.1	2.00E-02	0.00	0.00

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	2825.61	935.49	634.16	514.20	7.08E-03	2.14E-02	3.15E-02	3.89E-02
ALL	10	50.57	9.38	5.41	4.53	0.40	2.13	3.70	4.42

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	3.73E-08	2.09E-06	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	2.87E-06	1.60E-04	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	8.10E-07	8.08E-05	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 80

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 3

RELEASE ACTIVITY: Greenchem 350 dy max

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

ASSOCIATED SIC CODES: 2865,2869

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
1.40	21	77	350.00	0.10	80.00	High
50.00	2	7	350.00	0.10	80.00	High
1342.00	0	0	350.00	0.10	80.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:4

Number of Release Sites: 1.

Release Activity: Greenchem 350 dy avg

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	10.50	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	3.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 80

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

SCENARIO #: 4 Number of Sites: 1 RELEASE
ACTIVITY: Greenchem 350 dy
avg

SIC-CODE DESCRIPTION: Organic Chemicals Manufacture

SIC-CODE (S): 2865,2869 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
80.00	350.	0.03	6.00E-03	0.00	0.00

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	2825.61	935.49	634.16	514.20	2.12E-03	6.41E-03	9.46E-03	1.17E-02
ALL	10	50.57	9.38	5.41	4.53	0.12	0.64	1.11	1.32

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	1.12E-08	6.26E-07	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	8.61E-07	4.81E-05	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	2.43E-07	2.42E-05	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 80

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 4

RELEASE ACTIVITY: Greenchem 350 dy avg

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

ASSOCIATED SIC CODES: 2865,2869

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
1.40	10	37	350.00	3.00E-02	80.00	High
50.00	0	1	350.00	3.00E-02	80.00	High
1342.00	0	0	350.00	3.00E-02	80.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:5

Number of Release Sites: 1.

Release Activity: Olin 350 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	14.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	4.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES MFG 80

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:5 RELEASE ACTIVITY: Olin 350 dy
 FACILITY NAME: DOW CHEMICAL CO-FREEPORT
 FACILITY LOCATION: FREEPORT TX 775413257
 RECEIVING WATER NAME: BRAZOS R
 REACH NUMBER: 12070104002 FACILITY ON REACH: DISCHARGE TYPE: Direct
 Yes
 NPDES PERMIT #: TX0006483 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
80.	350.	0.04	8.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	9652.16	3667.69	2608.81	2608.81	NA
CONCENTRATION ($\mu\text{g/L}$)	8.29E-04	2.18E-03	3.07E-03	3.07E-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}	4.37E-09 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	3.36E-07 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	8.26E-08 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 80

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 5 RELEASE ACTIVITY: Olin 350 dy
 FACILITY NAME: DOW CHEMICAL CO-FREEPORT
 FACILITY LOCATION: FREEPORT TX 775413257
 RECEIVING STREAM NAME: BRAZOS R
 REACH NUMBER: 12070104002 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: TX0006483 GAGING STATION ID: N/A
 GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A
 MEAN FLOW (MLD): 1.97E+04 7q10 FLOW (MLD): 2608.81 EFFLUENT FLOW (MLD):2608.81

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 (%)
1.40	0	0	350.00	4.00E-02	80.00
50.00	0	0	350.00	4.00E-02	80.00
1342.00	0	0	350.00	4.00E-02	80.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:6

Number of Release Sites: 1.

Release Activity: Olin 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	14.60	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	0.73	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES MFG 80

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:6 RELEASE ACTIVITY: Olin 20 dy

FACILITY NAME: DOW CHEMICAL CO-FREEPORT

FACILITY LOCATION: FREEPORT TX 775413257

RECEIVING WATER NAME: BRAZOS R

REACH NUMBER: 12070104002 FACILITY ON REACH: DISCHARGE TYPE: Direct
Yes

NPDES PERMIT #: TX0006483 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
80.	20.	0.73	0.15	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	9652.16	3667.69	2608.81	2608.81	NA
CONCENTRATION ($\mu\text{g}/\text{L}$)	1.51E-02	3.98E-02	5.60E-02	5.60E-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}	4.56E-09 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	3.51E-07 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.51E-06 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 80

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 6 RELEASE ACTIVITY: Olin 20 dy
 FACILITY NAME: DOW CHEMICAL CO-FREEPORT
 FACILITY LOCATION: FREEPORT TX 775413257
 RECEIVING STREAM NAME: BRAZOS R
 REACH NUMBER: 12070104002 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: TX0006483 GAGING STATION ID: N/A
 GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A
 MEAN FLOW (MLD): 1.97E+04 7q10 FLOW (MLD): 2608.81 EFFLUENT FLOW (MLD):2608.81

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 (%)
1.40	0	0	20.00	0.73	80.00
50.00	0	0	20.00	0.73	80.00
1342.00	0	0	20.00	0.73	80.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:7

Number of Release Sites: 1.

Release Activity: Solvents 350 dy max

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.10	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	3.00E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 80

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

SCENARIO #: 7 Number of Sites: 1 RELEASE
ACTIVITY: Solvents 350 dy
max

SIC-CODE DESCRIPTION: Organic Chemicals Manufacture

SIC-CODE (S): 2865,2869 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
80.00	350.	0.0003	6.00E-05	0.00	0.00

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	2825.61	935.49	634.16	514.20	2.12E-05	6.41E-05	9.46E-05	1.17E-04
ALL	10	50.57	9.38	5.41	4.53	1.19E-03	6.40E-03	1.11E-02	1.32E-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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	1.12E-10	6.26E-09	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	8.61E-09	4.81E-07	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	2.43E-09	2.42E-07	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 80

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 7

RELEASE ACTIVITY: Solvents 350 dy max

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

ASSOCIATED SIC CODES: 2865,2869

SIC CODE RESULTS

COC ($\mu\text{g/L}$)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Loading (kg/site/day)	Waste Water Treatment (%)	High/Avg Analysis
1.40	0	0	350.00	3.00E-04	80.00	High
50.00	0	0	350.00	3.00E-04	80.00	High
1342.00	0	0	350.00	3.00E-04	80.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:8

Number of Release Sites: 1.

Release Activity: Solvents 350 dy avg

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	3.50E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 80

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

SCENARIO #: 8 Number of Sites: 1 RELEASE
ACTIVITY: Solvents 350 dy
avg

SIC-CODE DESCRIPTION: Organic Chemicals Manufacture

SIC-CODE (S): 2865,2869 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
80.00	350.	0.0001	2.00E-05	0.00	0.00

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	2825.61	935.49	634.16	514.20	7.08E-06	2.14E-05	3.15E-05	3.89E-05
ALL	10	50.57	9.38	5.41	4.53	3.95E-04	2.13E-03	3.70E-03	4.42E-03

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	3.73E-11	2.09E-09	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	2.87E-09	1.60E-07	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	8.10E-10	8.08E-08	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 80

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 8 RELEASE ACTIVITY: Solvents 350 dy avg

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

ASSOCIATED SIC CODES: 2865,2869

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
1.40	0	0	350.00	1.00E-04	80.00	High
50.00	0	0	350.00	1.00E-04	80.00	High
1342.00	0	0	350.00	1.00E-04	80.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:9

Number of Release Sites: 1.

Release Activity: Univar 350 dy max

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	35.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	0.10	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 80

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

SCENARIO #: 9 Number of Sites: 1 RELEASE ACTIVITY:Univar
350 dy max

SIC-CODE DESCRIPTION: Organic Chemicals Manufacture

SIC-CODE (S): 2865,2869 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
80.00	350.	0.1	2.00E-02	0.00	0.00

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	2825.61	935.49	634.16	514.20	7.08E-03	2.14E-02	3.15E-02	3.89E-02
ALL	10	50.57	9.38	5.41	4.53	0.40	2.13	3.70	4.42

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	3.73E-08	2.09E-06	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	2.87E-06	1.60E-04	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	8.10E-07	8.08E-05	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 80

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 9

RELEASE ACTIVITY: Univar 350 dy max

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

ASSOCIATED SIC CODES: 2865,2869

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
1.40	21	77	350.00	0.10	80.00	High
50.00	2	7	350.00	0.10	80.00	High
1342.00	0	0	350.00	0.10	80.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:10

Number of Release Sites: 1.

Release Activity: Univar 350 dy avg

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	10.50	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	3.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 80

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

SCENARIO #: 10 Number of Sites: 1 RELEASE ACTIVITY:Univar
350 dy avg

SIC-CODE DESCRIPTION: Organic Chemicals Manufacture

SIC-CODE (S): 2865,2869 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
80.00	350.	0.03	6.00E-03	0.00	0.00

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	2825.61	935.49	634.16	514.20	2.12E-03	6.41E-03	9.46E-03	1.17E-02
ALL	10	50.57	9.38	5.41	4.53	0.12	0.64	1.11	1.32

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	1.12E-08	6.26E-07	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	8.61E-07	4.81E-05	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	2.43E-07	2.42E-05	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES MFG 80

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 10 RELEASE ACTIVITY: Univar 350 dy avg

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

ASSOCIATED SIC CODES: 2865,2869

SIC CODE RESULTS

COC ($\mu\text{g/L}$)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Loading (kg/site/day)	Waste Water Treatment (%)	High/Avg Analysis
1.40	10	37	350.00	3.00E-02	80.00	High
50.00	0	1	350.00	3.00E-02	80.00	High
1342.00	0	0	350.00	3.00E-02	80.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IMP 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:1

Number of Release Sites: 1.

Release Activity: Chemtool 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.25	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES IMP 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 1 RELEASE ACTIVITY: Chemtool 250 dy

FACILITY NAME: BELOIT CORPORATION BLACKHAWK

FACILITY LOCATION: ROCKTON IL 61072

RECEIVING WATER NAME: ROCK R

REACH NUMBER: 07090001001 FACILITY ON REACH: DISCHARGE TYPE: Direct
Yes

NPDES PERMIT #: IL0064564 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	0.001	1.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	2440.83	1010.44	686.84	556.60	NA
CONCENTRATION (μ g/L)	4.10E-04	9.90E-04	1.46E-03	1.80E-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}	1.54E-09 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	1.19E-07 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	3.75E-08 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IMP 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 1 RELEASE ACTIVITY: Chemtool 250 dy
 FACILITY NAME: BELOIT CORPORATION BLACKHAWK
 FACILITY LOCATION: ROCKTON IL 61072
 RECEIVING STREAM NAME: ROCK R
 REACH NUMBER: 07090001001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: IL0064564 GAGING STATION ID: N/A
 GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A
 MEAN FLOW (MLD): 5115.29 7q10 FLOW (MLD): 686.84 EFFLUENT FLOW (MLD): 0.46

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 (%)
1.40	0	0	250.00	1.00E-03	0.00
50.00	0	0	250.00	1.00E-03	0.00
1342.00	0	0	250.00	1.00E-03	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IMP 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:2

Number of Release Sites: 1.

Release Activity: Chemtool 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.30	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	1.50E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	5.62E-07 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IMP 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:3

Number of Release Sites: 1.

Release Activity: Harvey 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	2.50E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES IMP 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:3 RELEASE ACTIVITY: Harvey 250 dy

FACILITY NAME: COMPTON CORPORATION

FACILITY LOCATION: GRETNA LA 70054

RECEIVING WATER NAME: MISSISSIPPI R

REACH NUMBER: 08090100004 FACILITY ON REACH: DISCHARGE TYPE: Direct
Yes

NPDES PERMIT #: LA0005291 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	0.0001	1.00E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	8.13E+05	2.98E+05	2.47E+05	1.92E+05	NA
CONCENTRATION (µg/L)	1.23E-07	3.36E-07	4.05E-07	5.20E-07	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}	4.64E-13 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	3.57E-11 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.27E-11 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IMP 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 3 RELEASE ACTIVITY: Harvey 250 dy
 FACILITY NAME: COMPTON CORPORATION
 FACILITY LOCATION: GRETNA LA 70054
 RECEIVING STREAM NAME: MISSISSIPPI R
 REACH NUMBER: 08090100004 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: GAGING STATION ID: N/A
 LA0005291
 GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS
 RECORD: N/A NUMBER OF ON REACH: N/A
 OBSERVATIONS: N/A
 MEAN FLOW (MLD): 1.14E+06 7q10 FLOW (MLD): EFFLUENT FLOW
 2.47E+05 (MLD):20.25

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 (%)
1.40	0	0	250.00	1.00E-04	0.00
50.00	0	0	250.00	1.00E-04	0.00
1342.00	0	0	250.00	1.00E-04	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IMP 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:4

Number of Release Sites: 1.

Release Activity: Harvey 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	2.00E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.27E-10 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IMP 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 4 RELEASE ACTIVITY: Harvey 20 dy
 FACILITY NAME: COMPTON CORPORATION
 FACILITY LOCATION: GRETNA LA 70054
 RECEIVING STREAM NAME: MISSISSIPPI R
 REACH NUMBER: 08090100004 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: GAGING STATION ID: N/A
 LA0005291
 GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS
 RECORD: N/A NUMBER OF ON REACH: N/A
 OBSERVATIONS: N/A
 MEAN FLOW (MLD): 1.14E+06 7q10 FLOW (MLD): EFFLUENT FLOW
 2.47E+05 (MLD):20.25

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 (%)
1.40	0	0	20.00	1.00E-03	0.00
50.00	0	0	20.00	1.00E-03	0.00
1342.00	0	0	20.00	1.00E-03	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IMP 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:5

Number of Release Sites: 1.

Release Activity: Vopak 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	1.25	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	5.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES IMP 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:5 RELEASE ACTIVITY: Vopak 250 dy
 FACILITY NAME: ENTERGY LOUISIANA INC-NINEMIL
 FACILITY LOCATION: WESTWEGO LA 70094
 RECEIVING WATER NAME: MISSISSIPPI R
 REACH NUMBER: 08090100004 FACILITY ON REACH: DISCHARGE TYPE: Direct
 No
 NPDES PERMIT #: LA0003093 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	0.005	5.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	8.13E+05	2.98E+05	2.47E+05	1.92E+05	NA
CONCENTRATION ($\mu\text{g/L}$)	6.15E-06	1.68E-05	2.02E-05	2.60E-05	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}	2.32E-11 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	1.78E-09 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	6.36E-10 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IMP 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 5 RELEASE ACTIVITY: Vopak 250 dy
 FACILITY NAME: ENTERGY LOUISIANA INC-NINEMIL
 FACILITY LOCATION: WESTWEGO LA 70094
 RECEIVING STREAM NAME: MISSISSIPPI R
 REACH NUMBER: 08090100004 FACILITY ON REACH: No DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: GAGING STATION ID: N/A
 LA0003093
 GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS
 RECORD: N/A NUMBER OF ON REACH: N/A
 OBSERVATIONS: N/A
 MEAN FLOW (MLD): 1.14E+06 7q10 FLOW (MLD): EFFLUENT FLOW
 2.47E+05 (MLD):3549.49

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 (%)
1.40	0	0	250.00	5.00E-03	0.00
50.00	0	0	250.00	5.00E-03	0.00
1342.00	0	0	250.00	5.00E-03	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IMP 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:6

Number of Release Sites: 1.

Release Activity: Vopak 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	1.20	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	6.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	7.64E-09 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IMP 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 6 RELEASE ACTIVITY: Vopak 20 dy
 FACILITY NAME: ENTERGY LOUISIANA INC-NINEMIL
 FACILITY LOCATION: WESTWEGO LA 70094
 RECEIVING STREAM NAME: MISSISSIPPI R
 REACH NUMBER: 08090100004 FACILITY ON REACH: No DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: GAGING STATION ID: N/A
 LA0003093
 GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS
 RECORD: N/A NUMBER OF ON REACH: N/A
 OBSERVATIONS: N/A
 MEAN FLOW (MLD): 1.14E+06 7q10 FLOW (MLD): EFFLUENT FLOW
 2.47E+05 (MLD):3549.49

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 (%)
1.40	0	0	20.00	6.00E-02	0.00
50.00	0	0	20.00	6.00E-02	0.00
1342.00	0	0	20.00	6.00E-02	0.00

IMPORT/REPACKAGING (80% WWT)

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IMP 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:1

Number of Release Sites: 1.

Release Activity: Hubbard 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	280.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	1.12	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IMP 80

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

SCENARIO #: 1 Number of Sites: 1 RELEASE
ACTIVITY: Hubbard 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)
80.00	250.	1.12	0.22	0.00	0.00

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	0.78	1.81	2.87	3.39
ALL	10	39.60	13.29	7.76	7.57	5.66	16.85	28.87	29.59

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	2.93E-06	2.13E-05	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	2.25E-04	1.64E-03	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	6.85E-05	6.38E-04	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IMP 80

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 1

RELEASE ACTIVITY: Hubbard 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
1.40	63	230	250.00	1.12	80.00	High
50.00	4	16	250.00	1.12	80.00	High
1342.00	0	0	250.00	1.12	80.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IMP 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:2

Number of Release Sites: 1.

Release Activity: Hubbard 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	279.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	13.95	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IMP 80

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

SCENARIO #: 2 Number of Sites: 1 RELEASE
ACTIVITY:Hubbard 20 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)
80.00	20.	13.95	2.79	0.00	0.00

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	9.69	22.53	35.69	42.24
ALL	10	39.60	13.29	7.76	7.57	70.45	209.93	359.54	368.56

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	2.92E-06	2.12E-05	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	2.25E-04	1.63E-03	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	8.53E-04	7.95E-03	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IMP 80

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 2

RELEASE ACTIVITY: Hubbard 20 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
1.40	5	20	20.00	13.95	80.00	High
50.00	4	14	20.00	13.95	80.00	High
1342.00	0	0	20.00	13.95	80.00	High

3. OES: PROCESSING AS A REACTANT

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:1

Number of Release Sites: 1.

Release Activity: Akzo 350 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	3.50E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:1 RELEASE ACTIVITY: Akzo 350 dy
 FACILITY NAME: AKZO NOBEL SURFACE CHEMISTRY
 FACILITY LOCATION: MORRIS IL 60450
 RECEIVING WATER NAME: AUX SABLE CR
 REACH NUMBER: 07120005014 FACILITY ON REACH: DISCHARGE TYPE: Direct Yes
 NPDES PERMIT #: IL0026069 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	350.	0.0001	1.00E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	1098.93	713.96	479.41	389.48	NA
CONCENTRATION ($\mu\text{g/L}$)	9.10E-05	1.40E-04	2.09E-04	2.57E-04	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-10 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	3.69E-08 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	5.30E-09 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 1 RELEASE ACTIVITY: Akzo 350 dy
 FACILITY NAME: AKZO NOBEL SURFACE CHEMISTRY
 FACILITY LOCATION: MORRIS IL 60450
 RECEIVING STREAM NAME: AUX SABLE CR
 REACH NUMBER: 07120005014 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: GAGING STATION ID: N/A
 IL0026069
 GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS
 RECORD: N/A NUMBER OF ON REACH: N/A
 OBSERVATIONS: N/A
 MEAN FLOW (MLD): 1440.13 7q10 FLOW (MLD): 479.41 EFFLUENT FLOW
 (MLD):1.29

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 (%)
1.40	0	0	350.00	1.00E-04	0.00
50.00	0	0	350.00	1.00E-04	0.00
1342.00	0	0	350.00	1.00E-04	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:2

Number of Release Sites: 1.

Release Activity: Akzo 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	5.00E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	2.50E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.33E-07 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 2 RELEASE ACTIVITY: Akzo 20 dy
 FACILITY NAME: AKZO NOBEL SURFACE CHEMISTRY
 FACILITY LOCATION: MORRIS IL 60450
 RECEIVING STREAM NAME: AUX SABLE CR
 REACH NUMBER: 07120005014 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: IL0026069 GAGING STATION ID: N/A
 GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A
 MEAN FLOW (MLD): 1440.13 7q10 FLOW (MLD): 479.41 EFFLUENT FLOW (MLD): 1.29

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 (%)
1.40	0	0	20.00	2.50E-03	0.00
50.00	0	0	20.00	2.50E-03	0.00
1342.00	0	0	20.00	2.50E-03	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:3

Number of Release Sites: 1.

Release Activity: Atkemix 350 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	24.50	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	7.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:3 RELEASE ACTIVITY: Atkemix 350 dy
FACILITY NAME: ATKEMIX TEN INC
FACILITY LOCATION: LOUISVILLE KY 40216
RECEIVING WATER NAME: OHIO R
REACH NUMBER: 05140101001 FACILITY ON REACH: DISCHARGE TYPE: Direct
Yes
NPDES PERMIT #: KY0002780 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	350.	0.07	7.00E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	1.02E+05	2.46E+04	1.87E+04	1.48E+04	NA
CONCENTRATION ($\mu\text{g/L}$)	6.84E-04	2.85E-03	3.75E-03	4.73E-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}	3.61E-09 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	2.78E-07 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.08E-07 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 3 RELEASE ACTIVITY: Atkemix 350 dy
 FACILITY NAME: ATKEMIX TEN INC
 FACILITY LOCATION: LOUISVILLE KY 40216
 RECEIVING STREAM NAME: OHIO R
 REACH NUMBER: 05140101001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: GAGING STATION ID: 03294500
 KY0002780
 GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS
 RECORD: 01/01/66 - 09/29/89 NUMBER OF ON REACH: 1
 OBSERVATIONS: 8674.00
 50 %ile FLOW (MLD): 1.99E+05 10 %ile FLOW (MLD): EFFLUENT FLOW
 5.65E+04 (MLD):1.71

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 (%)
1.40	0	0	350.00	7.00E-02	0.00
50.00	0	0	350.00	7.00E-02	0.00
1342.00	0	0	350.00	7.00E-02	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:4

Number of Release Sites: 1.

Release Activity: Atkemix 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	25.80	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	1.29	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES					
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SCENARIO NUMBER: 4 RELEASE ACTIVITY: Atkemix 20 dy
 FACILITY NAME: ATKEMIX TEN INC
 FACILITY LOCATION: LOUISVILLE KY 40216
 RECEIVING WATER NAME: OHIO R
 REACH NUMBER: 05140101001 FACILITY ON REACH: DISCHARGE TYPE: Direct
 Yes
 NPDES PERMIT #: KY0002780 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	1.29	1.29	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	1.02E+05	2.46E+04	1.87E+04	1.48E+04	NA
CONCENTRATION (µg/L)	1.26E-02	5.25E-02	6.91E-02	8.72E-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}	3.80E-09 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	2.92E-07 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.99E-06 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 4 RELEASE ACTIVITY: Atkemix 20 dy

FACILITY NAME: ATKEMIX TEN INC

FACILITY LOCATION: LOUISVILLE KY 40216

RECEIVING STREAM NAME: OHIO R

REACH NUMBER: 05140101001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: KY0002780 GAGING STATION ID: 03294500

GAGING STATION PERIOD OF RECORD: 01/01/66 - 09/29/89	GAGING STATION NUMBER OF OBSERVATIONS: 8674.00	NUMBER OF STATIONS ON REACH: 1
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50 %ile FLOW (MLD): 1.99E+05	10 %ile FLOW (MLD): 5.65E+04	EFFLUENT FLOW (MLD):1.71
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RESULTS					
COC (μ g/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)
1.40	0	0	20.00	1.29	0.00
50.00	0	0	20.00	1.29	0.00
1342.00	0	0	20.00	1.29	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:5

Number of Release Sites: 1.

Release Activity: BayerNJ 350 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	1.40E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	4.00E-05	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

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

SCENARIO #: 5 Number of Sites: 1 RELEASE
ACTIVITY: BayerNJ 350 dy

SIC-CODE DESCRIPTION: Organic Chemicals Manufacture

SIC-CODE (S): 2865,2869 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	350.	0.00004	4.00E-05	0.00	0.00

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	2825.61	935.49	634.16	514.20	1.42E-05	4.28E-05	6.31E-05	7.78E-05
ALL	10	50.57	9.38	5.41	4.53	7.91E-04	4.26E-03	7.39E-03	8.83E-03

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	7.47E-11	4.17E-09	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	5.74E-09	3.21E-07	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.62E-09	1.62E-07	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 5 RELEASE ACTIVITY: BayerNJ 350 dy

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

ASSOCIATED SIC CODES: 2865,2869

SIC CODE RESULTS

COC ($\mu\text{g/L}$)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Loading (kg/site/day)	Waste Water Treatment (%)	High/Avg Analysis
1.40	0	0	350.00	4.00E-05	0.00	High
50.00	0	0	350.00	4.00E-05	0.00	High
1342.00	0	0	350.00	4.00E-05	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:6

Number of Release Sites: 1.

Release Activity: BayerNJ 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	1.00E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	5.00E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

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

SCENARIO #: 6 Number of Sites: 1 RELEASE
ACTIVITY: BayerNJ 20 dy

SIC-CODE DESCRIPTION: Organic Chemicals Manufacture

SIC-CODE (S): 2865,2869 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	20.	0.0005	5.00E-04	0.00	0.00

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	2825.61	935.49	634.16	514.20	1.77E-04	5.34E-04	7.88E-04	9.72E-04
ALL	10	50.57	9.38	5.41	4.53	9.89E-03	5.33E-02	9.24E-02	0.11

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	5.33E-11	2.98E-09	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	4.10E-09	2.29E-07	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	2.02E-08	2.02E-06	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 6 RELEASE ACTIVITY: BayerNJ 20 dy

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

ASSOCIATED SIC CODES: 2865,2869

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
1.40	0	0	20.00	5.00E-04	0.00	High
50.00	0	0	20.00	5.00E-04	0.00	High
1342.00	0	0	20.00	5.00E-04	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:7

Number of Release Sites: 1.

Release Activity: BayerWV 350 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.35	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES
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SCENARIO NUMBER: 7 RELEASE ACTIVITY: BayerWV 350 dy

FACILITY NAME: BAYER CORP

FACILITY LOCATION: NEW MARTINSVILLE WV 26155

RECEIVING WATER NAME: OHIO R

REACH NUMBER: 05030201051 FACILITY ON REACH: DISCHARGE TYPE: Direct
Yes

NPDES PERMIT #: WV0005169 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	350.	0.001	1.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
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FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	3.88E+04	1.13E+04	8396.41	6686.06	NA
CONCENTRATION ($\mu\text{g/L}$)	2.57E-05	8.81E-05	1.19E-04	1.50E-04	NA

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES				
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Exposure Units	Drinking Water Results	Drinking Water Units	Fish Ingestion Results	Fish Ingestion Units
Cancer				
LADD _{pot}	1.36E-10 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	1.04E-08 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	3.34E-09 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES
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SCENARIO NUMBER: 7 RELEASE ACTIVITY: BayerWV 350 dy

FACILITY NAME: BAYER CORP

FACILITY LOCATION: NEW MARTINSVILLE WV 26155

RECEIVING STREAM NAME: OHIO R

REACH NUMBER: 05030201051 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: WV0005169 GAGING STATION ID: N/A

GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A

MEAN FLOW (MLD): 9.57E+04 7q10 FLOW (MLD): 8396.41 EFFLUENT FLOW (MLD):14.41

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 (%)
1.40	0	0	350.00	1.00E-03	0.00
50.00	0	0	350.00	1.00E-03	0.00
1342.00	0	0	350.00	1.00E-03	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:8

Number of Release Sites: 1.

Release Activity: BayerWV 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.26	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	1.30E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:8 RELEASE ACTIVITY: BayerWV 20 dy
 FACILITY NAME: BAYER CORP
 FACILITY LOCATION: NEW MARTINSVILLE WV 26155
 RECEIVING WATER NAME: OHIO R
 REACH NUMBER: 05030201051 FACILITY ON REACH: DISCHARGE TYPE: Direct
 Yes
 NPDES PERMIT #: WV0005169 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.013	1.30E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	3.88E+04	1.13E+04	8396.41	6686.06	NA
CONCENTRATION ($\mu\text{g/L}$)	3.35E-04	1.15E-03	1.55E-03	1.94E-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}	1.01E-10 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	7.76E-09 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	4.34E-08 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 8 RELEASE ACTIVITY: BayerWV 20 dy
 FACILITY NAME: BAYER CORP
 FACILITY LOCATION: NEW MARTINSVILLE WV 26155
 RECEIVING STREAM NAME: OHIO R
 REACH NUMBER: 05030201051 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: WV0005169 GAGING STATION ID: N/A
 GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A
 MEAN FLOW (MLD): 9.57E+04 7q10 FLOW (MLD): 8396.41 EFFLUENT FLOW (MLD):14.41

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 (%)
1.40	0	0	20.00	1.30E-02	0.00
50.00	0	0	20.00	1.30E-02	0.00
1342.00	0	0	20.00	1.30E-02	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:9

Number of Release Sites: 1.

Release Activity: Chemtura 350 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	7.00E-03	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	2.00E-05	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	7.47E-10 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 9 RELEASE ACTIVITY: Chemtura 350 dy
 FACILITY NAME: GE SPECIALTY CHEMICALS INC
 FACILITY LOCATION: MORGANTOWN WV 26501
 RECEIVING STREAM NAME: MONONGAHELA R
 REACH NUMBER: 05020003007 FACILITY ON REACH: No DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER:
 WV0004740 GAGING STATION ID: N/A
 GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS
 RECORD: N/A NUMBER OF ON REACH: N/A
 OBSERVATIONS: N/A
 MEAN FLOW (MLD): 1.05E+04 7q10 FLOW (MLD): 689.50 EFFLUENT FLOW
 (MLD):5.21

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 (%)
1.40	0	0	350.00	2.00E-05	0.00
50.00	0	0	350.00	2.00E-05	0.00
1342.00	0	0	350.00	2.00E-05	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:10

Number of Release Sites: 1.

Release Activity: Chemtura 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	1.00E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	5.00E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.87E-08 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:11

Number of Release Sites: 1.

Release Activity: Dupont 350 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	7.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	2.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

CHEMICAL ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS		
SCENARIO #: 11	RELEASE ACTIVITY: Dupont 350 dy	
FACILITY NAME: DUPONT-MONTAGUE		
FACILITY LOCATION: MONTAGUE MI 49437		
RECEIVING WATER NAME: L MICHIGAN		
REACH NUMBER: 04060101006	FACILITY ON REACH: Yes	DISCHARGE TYPE: Direct
NPDES PERMIT #: MI0000884	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.	350.	8.27	0.02	2.00E-02	0.00

AQUATIC EXPOSURE ESTIMATES		
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)
ACUTE SCENARIO	1.00	2.42
CHRONIC SCENARIO	1.00	2.42

FISH INGESTION EXPOSURE ESTIMATES					
Exposure Units	Results	ASSUMPTIONS			
		ED (years)	AT (years)	BW (kg)	IR (g/day)

Cancer					
LADD _{pot} (mg/kg/day)	0.00	33.00	78.00	80.00	7.50
LADC _{pot} (mg/kg)	0.00	33.00	78.00	NA	NA
Acute					
ADR _{pot} (mg/kg/day)	0.00	NA	1 day	80.00	279.00

Lakes Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:12

Number of Release Sites: 1.

Release Activity: Dupont 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	5.80	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	0.29	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

CHEMICAL ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS		
SCENARIO #: 12	RELEASE ACTIVITY: Dupont 20 dy	
FACILITY NAME: DUPONT-MONTAGUE		
FACILITY LOCATION: MONTAGUE MI 49437		
RECEIVING WATER NAME: L MICHIGAN		
REACH NUMBER: 04060101006	FACILITY ON REACH: Yes	DISCHARGE TYPE: Direct
NPDES PERMIT #: MI0000884	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.	20.	8.27	0.29	0.29	0.00

AQUATIC EXPOSURE ESTIMATES		
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)
ACUTE SCENARIO	1.00	35.07
CHRONIC SCENARIO	1.00	35.07

FISH INGESTION EXPOSURE ESTIMATES					
Exposure Units	Results	ASSUMPTIONS			
		ED (years)	AT (years)	BW (kg)	IR (g/day)

Cancer					
LADD _{pot} (mg/kg/day)	0.00	33.00	78.00	80.00	7.50
LADC _{pot} (mg/kg)	0.00	33.00	78.00	NA	NA
Acute					
ADR _{pot} (mg/kg/day)	0.00	NA	1 day	80.00	279.00

Lakes Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:13

Number of Release Sites: 1.

Release Activity: Eagle 350 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	465.50	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	1.33	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	3.90E-05 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:14

Number of Release Sites: 1.

Release Activity: Eagle 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	465.40	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	23.27	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:14 RELEASE ACTIVITY: Eagle 20 dy

FACILITY NAME: PPG IND-LAKE CHARLES

FACILITY LOCATION: LAKE CHARLES LA 70601

RECEIVING WATER NAME: CALCASIEU R

REACH NUMBER: 08080206033 FACILITY ON REACH: DISCHARGE TYPE: Direct
No

NPDES PERMIT #: LA0000761 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	23.27	23.27	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	3997.81	1290.68	884.92	884.92	NA
CONCENTRATION (μ g/L)	5.82	18.03	26.30	26.30	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}	1.75E-06 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	1.35E-04 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	6.83E-04 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 14 RELEASE ACTIVITY: Eagle 20 dy
FACILITY NAME: PPG IND-LAKE CHARLES
FACILITY LOCATION: LAKE CHARLES LA 70601
RECEIVING STREAM NAME: CALCASIEU R
REACH NUMBER: 08080206033 FACILITY ON REACH: No DISCHARGE TYPE: Direct
NPDES PERMIT NUMBER: GAGING STATION ID: N/A
LA0000761
GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS
RECORD: N/A NUMBER OF ON REACH: N/A
OBSERVATIONS: N/A
MEAN FLOW (MLD): 1.08E+04 7q10 FLOW (MLD): 884.92 EFFLUENT FLOW
(MLD):884.92

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 (%)
1.40	5	17	20.00	23.27	0.00
50.00	0	0	20.00	23.27	0.00
1342.00	0	0	20.00	23.27	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:15

Number of Release Sites: 1.

Release Activity: FlintHillsTX 350 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	24.50	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	7.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

CHEMICAL ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS		
SCENARIO #: 15	RELEASE ACTIVITY: FlintHillsTX 350 dy	
FACILITY NAME: FLINT HILLS RESOURCES LP		
FACILITY LOCATION: CORPUS CHRISTI TX 78410		
RECEIVING WATER NAME: CORPUS CHRISTI BAY		
REACH NUMBER: 12110202001	FACILITY ON REACH: No	DISCHARGE TYPE: Direct
NPDES PERMIT #: TX0006289	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.	350.	7.04	0.07	7.00E-02	0.00

AQUATIC EXPOSURE ESTIMATES		
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)
ACUTE SCENARIO	3.30	3.01
CHRONIC SCENARIO	12.50	0.80

FISH INGESTION EXPOSURE ESTIMATES				
Exposure Units	Results	ASSUMPTIONS		
		ED	AT	BW

		(years)	(years)	(kg)	(g/day)
Cancer					
LADD _{pot} (mg/kg/day)	0.00	33.00	78.00	80.00	7.50
LADC _{pot} (mg/kg)	0.00	33.00	78.00	NA	NA
Acute					
ADR _{pot} (mg/kg/day)	0.00	NA	1 day	80.00	279.00

Lakes Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:16

Number of Release Sites: 1.

Release Activity: FlintHillsTX 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	24.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	1.20	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

CHEMICAL ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS		
SCENARIO #: 16	RELEASE ACTIVITY: FlintHillsTX 20 dy	
FACILITY NAME: FLINT HILLS RESOURCES LP		
FACILITY LOCATION: CORPUS CHRISTI TX 78410		
RECEIVING WATER NAME: CORPUS CHRISTI BAY		
REACH NUMBER: 12110202001	FACILITY ON REACH: No	DISCHARGE TYPE: Direct
NPDES PERMIT #: TX0006289	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.	20.	7.04	1.2	1.20	0.00

AQUATIC EXPOSURE ESTIMATES		
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)
ACUTE SCENARIO	3.30	51.65
CHRONIC SCENARIO	12.50	13.64

FISH INGESTION EXPOSURE ESTIMATES					
Exposure Units	Results	ASSUMPTIONS			
		ED	AT	BW	IR

		(years)	(years)	(kg)	(g/day)
Cancer					
LADD _{pot} (mg/kg/day)	0.00	33.00	78.00	80.00	7.50
LADC _{pot} (mg/kg)	0.00	33.00	78.00	NA	NA
Acute					
ADR _{pot} (mg/kg/day)	0.00	NA	1 day	80.00	279.00

Lakes Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:17

Number of Release Sites: 1.

Release Activity: FlintHillsMN 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	3.50	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	7.71E-08 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 17 RELEASE ACTIVITY: FlintHillsMN 20 dy
 FACILITY NAME: KOCH REFINING CO-ROSEMOUNT
 FACILITY LOCATION: ROSEMOUNT MN 55068
 RECEIVING STREAM NAME: MISSISSIPPI R
 REACH NUMBER: 07010206001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: MN0000418 GAGING STATION ID: 05331000
 GAGING STATION PERIOD OF RECORD: 01/01/66 - 09/29/88 GAGING STATION NUMBER OF OBSERVATIONS: 8309.00 NUMBER OF STATIONS ON REACH: 1
 50 %ile FLOW (MLD): 2.23E+04 10 %ile FLOW (MLD): 8658.78 EFFLUENT FLOW (MLD):14.81

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 (%)
1.40	0	0	350.00	1.00E-02	0.00
50.00	0	0	350.00	1.00E-02	0.00
1342.00	0	0	350.00	1.00E-02	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:18

Number of Release Sites: 1.

Release Activity: FlintHillsMN 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	4.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	0.20	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.54E-06 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 18 RELEASE ACTIVITY: FlintHillsMN 20 dy
 FACILITY NAME: KOCH REFINING CO-ROSEMOUNT
 FACILITY LOCATION: ROSEMOUNT MN 55068
 RECEIVING STREAM NAME: MISSISSIPPI R
 REACH NUMBER: 07010206001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: GAGING STATION ID: 05331000
 MN0000418
 GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS
 RECORD: 01/01/66 - 09/29/88 NUMBER OF ON REACH: 1
 OBSERVATIONS: 8309.00
 50 %ile FLOW (MLD): 2.23E+04 10 %ile FLOW (MLD): EFFLUENT FLOW
 8658.78 (MLD):14.81

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 (%)
1.40	0	0	20.00	0.20	0.00
50.00	0	0	20.00	0.20	0.00
1342.00	0	0	20.00	0.20	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:19

Number of Release Sites: 1.

Release Activity: Geismar 350 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	7.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	2.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 19 RELEASE ACTIVITY: Geismar 350 dy
 FACILITY NAME: ALLIED-SIGNAL INC-GEISMAR
 FACILITY LOCATION: GEISMAR LA 70734
 RECEIVING WATER NAME: MISSISSIPPI R
 REACH NUMBER: 08070100001 FACILITY ON REACH: DISCHARGE TYPE: Direct
 Yes
 NPDES PERMIT #: LA0006181 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	350.	0.02	2.00E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	8.12E+05	2.98E+05	2.47E+05	1.92E+05	NA
CONCENTRATION (μ g/L)	2.46E-05	6.72E-05	8.09E-05	1.04E-04	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}	1.30E-10 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	9.99E-09 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	2.55E-09 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 19 RELEASE ACTIVITY: Geismar 350 dy
 FACILITY NAME: ALLIED-SIGNAL INC-GEISMAR
 FACILITY LOCATION: GEISMAR LA 70734
 RECEIVING STREAM NAME: MISSISSIPPI R
 REACH NUMBER: 08070100001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: GAGING STATION ID: N/A
 LA0006181
 GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS
 RECORD: N/A NUMBER OF ON REACH: N/A
 OBSERVATIONS: N/A
 MEAN FLOW (MLD): 1.14E+06 7q10 FLOW (MLD): EFFLUENT FLOW
 2.47E+05 (MLD):1.40

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 (%)
1.40	0	0	350.00	2.00E-02	0.00
50.00	0	0	350.00	2.00E-02	0.00
1342.00	0	0	350.00	2.00E-02	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:20

Number of Release Sites: 1.

Release Activity: Geismar 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	7.20	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	0.36	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	4.58E-08 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 20 RELEASE ACTIVITY: Geismar 20 dy
 FACILITY NAME: ALLIED-SIGNAL INC-GEISMAR
 FACILITY LOCATION: GEISMAR LA 70734
 RECEIVING STREAM NAME: MISSISSIPPI R
 REACH NUMBER: 08070100001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: GAGING STATION ID: N/A
 LA0006181
 GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS
 RECORD: N/A NUMBER OF ON REACH: N/A
 OBSERVATIONS: N/A
 MEAN FLOW (MLD): 1.14E+06 7q10 FLOW (MLD): EFFLUENT FLOW
 2.47E+05 (MLD):1.40

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 (%)
1.40	0	0	20.00	0.36	0.00
50.00	0	0	20.00	0.36	0.00
1342.00	0	0	20.00	0.36	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:21

Number of Release Sites: 1.

Release Activity: BatonRouge 350 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	17.50	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	5.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.10E-04 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:22

Number of Release Sites: 1.

Release Activity: BatonRouge 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	17.20	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	0.86	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:22 RELEASE ACTIVITY: BatonRouge 20 dy

FACILITY NAME: HONEYWELL

FACILITY LOCATION: BATON ROUGE LA 70805

RECEIVING WATER NAME: MONTE SAND BAYOU

REACH NUMBER: 08070201013 FACILITY ON REACH: DISCHARGE TYPE: Direct
Yes

NPDES PERMIT #: LA0000329 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.86	0.86	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	33.73	17.18	10.12	8.45	NA
CONCENTRATION (µg/L)	25.49	50.05	84.98	101.81	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}	7.68E-06 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	5.91E-04 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.90E-03 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 22	RELEASE ACTIVITY: BatonRouge 20 dy	
FACILITY NAME: HONEYWELL		
FACILITY LOCATION: BATON ROUGE LA 70805		
RECEIVING STREAM NAME: MONTE SAND BAYOU		
REACH NUMBER: 08070201013	FACILITY ON REACH: Yes	DISCHARGE TYPE: Direct
NPDES PERMIT NUMBER: LA0000329	GAGING STATION ID: N/A	
GAGING STATION PERIOD OF RECORD: N/A	GAGING STATION NUMBER OF OBSERVATIONS: N/A	NUMBER OF STATIONS ON REACH: N/A
MEAN FLOW (MLD): 82.27	7q10 FLOW (MLD): 10.12	EFFLUENT FLOW (MLD):5.59

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 (%)
1.40	5	20	20.00	0.86	0.00
50.00	2	7	20.00	0.86	0.00
1342.00	0	0	20.00	0.86	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:23

Number of Release Sites: 1.

Release Activity: Indorama 350 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	3.50E-03	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-05	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

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

SCENARIO #: 23 Number of Sites: 1 RELEASE
ACTIVITY: Indorama 350 dy

SIC-CODE DESCRIPTION: Organic Chemicals Manufacture

SIC-CODE (S): 2865,2869 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	350.	0.00001	1.00E-05	0.00	0.00

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	2825.61	935.49	634.16	514.20	3.54E-06	1.07E-05	1.58E-05	1.94E-05
ALL	10	50.57	9.38	5.41	4.53	1.98E-04	1.07E-03	1.85E-03	2.21E-03

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	1.87E-11	1.04E-09	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	1.44E-09	8.02E-08	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	4.05E-10	4.04E-08	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 23

RELEASE ACTIVITY: Indorama 350 dy

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

ASSOCIATED SIC CODES: 2865,2869

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
1.40	0	0	350.00	1.00E-05	0.00	High
50.00	0	0	350.00	1.00E-05	0.00	High
1342.00	0	0	350.00	1.00E-05	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:24

Number of Release Sites: 1.

Release Activity: Indorama 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	4.00E-03	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	2.00E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

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

SCENARIO #: 24 Number of Sites: 1 RELEASE
ACTIVITY: Indorama 20 dy

SIC-CODE DESCRIPTION: Organic Chemicals Manufacture

SIC-CODE (S): 2865,2869 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	20.	0.0002	2.00E-04	0.00	0.00

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	2825.61	935.49	634.16	514.20	7.08E-05	2.14E-04	3.15E-04	3.89E-04
ALL	10	50.57	9.38	5.41	4.53	3.95E-03	2.13E-02	3.70E-02	4.42E-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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	2.13E-11	1.19E-09	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	1.64E-09	9.17E-08	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	8.10E-09	8.08E-07	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 24 RELEASE ACTIVITY: Indorama 20 dy

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

ASSOCIATED SIC CODES: 2865,2869

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
1.40	0	0	20.00	2.00E-04	0.00	High
50.00	0	0	20.00	2.00E-04	0.00	High
1342.00	0	0	20.00	2.00E-04	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:25

Number of Release Sites: 1.

Release Activity: Keeshan 350 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	1.75E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	5.00E-05	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

CHEMICAL ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS		
SCENARIO #: 25	RELEASE ACTIVITY: Keeshan 350 dy	
FACILITY NAME: KEESHAN AND CO-MANVEL		
FACILITY LOCATION: MANVEL TX 77578		
RECEIVING WATER NAME: WEST BAY		
REACH NUMBER: 12040204020	FACILITY ON REACH: No	DISCHARGE TYPE: Direct
NPDES PERMIT #: TX0072168	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.	350.	1.00E-02	0.00005	5.00E-05	0.00

AQUATIC EXPOSURE ESTIMATES		
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)
ACUTE SCENARIO	1.00	5.00
CHRONIC SCENARIO	1.00	5.00

FISH INGESTION EXPOSURE ESTIMATES					
Exposure Units	Results	ASSUMPTIONS			
		ED	AT	BW	IR

		(years)	(years)	(kg)	(g/day)
Cancer					
LADD _{pot} (mg/kg/day)	0.00	33.00	78.00	80.00	7.50
LADC _{pot} (mg/kg)	0.00	33.00	78.00	NA	NA
Acute					
ADR _{pot} (mg/kg/day)	0.00	NA	1 day	80.00	279.00

Lakes Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:26

Number of Release Sites: 1.

Release Activity: Keeshan 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	2.00E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

CHEMICAL ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS		
SCENARIO #: 26	RELEASE ACTIVITY: Keeshan 20 dy	
FACILITY NAME: KEESHAN AND CO-MANVEL		
FACILITY LOCATION: MANVEL TX 77578		
RECEIVING WATER NAME: WEST BAY		
REACH NUMBER: 12040204020	FACILITY ON REACH: No	DISCHARGE TYPE: Direct
NPDES PERMIT #: TX0072168	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.	20.	1.00E-02	0.001	1.00E-03	0.00

AQUATIC EXPOSURE ESTIMATES		
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)
ACUTE SCENARIO	1.00	100.00
CHRONIC SCENARIO	1.00	100.00

FISH INGESTION EXPOSURE ESTIMATES					
Exposure Units	Results	ASSUMPTIONS			
		ED	AT	BW	IR

		(years)	(years)	(kg)	(g/day)
Cancer					
LADD _{pot} (mg/kg/day)	0.00	33.00	78.00	80.00	7.50
LADC _{pot} (mg/kg)	0.00	33.00	78.00	NA	NA
Acute					
ADR _{pot} (mg/kg/day)	0.00	NA	1 day	80.00	279.00

Lakes Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:27

Number of Release Sites: 1.

Release Activity: PhillipsLA 350 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	21.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	6.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	2.43E-06 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 27 RELEASE ACTIVITY: PhillipsLA 350 dy

FACILITY NAME: CONOCO INC-LAKE CHARLES REFINE

FACILITY LOCATION: WESTLAKE LA 70669

RECEIVING STREAM NAME: CALCASIEU R

REACH NUMBER: 08080206033 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: LA0003026 GAGING STATION ID: N/A

GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A

MEAN FLOW (MLD): 1.08E+04 7q10 FLOW (MLD): 634.15 EFFLUENT FLOW (MLD):16.28

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 (%)
1.40	0	0	350.00	6.00E-02	0.00
50.00	0	0	350.00	6.00E-02	0.00
1342.00	0	0	350.00	6.00E-02	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:28

Number of Release Sites: 1.

Release Activity: PhillipsLA 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	20.60	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	1.03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 28 RELEASE ACTIVITY: PhillipsLA 20 dy
 FACILITY NAME: CONOCO INC-LAKE CHARLES REFINE
 FACILITY LOCATION: WESTLAKE LA 70669
 RECEIVING WATER NAME: CALCASIEU R
 REACH NUMBER: 08080206033 FACILITY ON REACH: DISCHARGE TYPE: Direct No
 NPDES PERMIT #: LA0003026 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	1.03	1.03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	3326.14	935.46	634.15	514.19	NA
CONCENTRATION (µg/L)	0.31	1.10	1.62	2.00	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}	9.33E-08 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	7.18E-06 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	4.17E-05 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:29

Number of Release Sites: 1.

Release Activity: Premcor 350 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	45.50	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	0.13	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:29 RELEASE ACTIVITY: Premcor 350 dy

FACILITY NAME: PREMCOR REFINING GROUP INC.

FACILITY LOCATION: PORT ARTHUR TX 77641

RECEIVING WATER NAME: TAYLOR BAYOU

REACH NUMBER: 12040201009 FACILITY ON REACH: DISCHARGE TYPE: Direct No

NPDES PERMIT #: TX0005991 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	350.	0.13	0.13	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	376.67	104.19	65.38	65.38	NA
CONCENTRATION (µg/L)	0.35	1.25	1.99	1.99	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}	1.82E-06 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	1.40E-04 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	4.73E-05 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 29 RELEASE ACTIVITY: Premcor 350 dy
 FACILITY NAME: PREMCOR REFINING GROUP INC.
 FACILITY LOCATION: PORT ARTHUR TX 77641
 RECEIVING STREAM NAME: TAYLOR BAYOU
 REACH NUMBER: 12040201009 FACILITY ON REACH: No DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: TX0005991 GAGING STATION ID: N/A
 GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A
 MEAN FLOW (MLD): 1531.34 7q10 FLOW (MLD): 65.38 EFFLUENT FLOW (MLD):65.38

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 (%)
1.40	18	67	350.00	0.13	0.00
50.00	0	0	350.00	0.13	0.00
1342.00	0	0	350.00	0.13	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:30

Number of Release Sites: 1.

Release Activity: Premcor 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	45.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	2.25	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:30 RELEASE ACTIVITY: Premcor 20 dy
FACILITY NAME: PREMCOR REFINING GROUP INC.
FACILITY LOCATION: PORT ARTHUR TX 77641
RECEIVING WATER NAME: TAYLOR BAYOU
REACH NUMBER: 12040201009 FACILITY ON REACH: DISCHARGE TYPE: Direct No
NPDES PERMIT #: TX0005991 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	2.25	2.25	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	376.67	104.19	65.38	65.38	NA
CONCENTRATION (µg/L)	5.97	21.60	34.41	34.41	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}	1.80E-06 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	1.38E-04 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	8.18E-04 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 30 RELEASE ACTIVITY: Premcor 20 dy
 FACILITY NAME: PREMCOR REFINING GROUP INC.
 FACILITY LOCATION: PORT ARTHUR TX 77641
 RECEIVING STREAM NAME: TAYLOR BAYOU
 REACH NUMBER: 12040201009 FACILITY ON REACH: No DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: TX0005991 GAGING STATION ID: N/A
 GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A
 MEAN FLOW (MLD): 1531.34 7q10 FLOW (MLD): 65.38 EFFLUENT FLOW (MLD):65.38

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 (%)
1.40	5	17	20.00	2.25	0.00
50.00	0	1	20.00	2.25	0.00
1342.00	0	0	20.00	2.25	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:31

Number of Release Sites: 1.

Release Activity: Solutia 350 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	7.00E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	2.00E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:31 RELEASE ACTIVITY: Solutia 350 dy

FACILITY NAME: FLEXSYS AMERICA LP

FACILITY LOCATION: NITRO WV 25143

RECEIVING WATER NAME: KANAWHA R

REACH NUMBER: 05050008007 FACILITY ON REACH: DISCHARGE TYPE: Direct
Yes

NPDES PERMIT #: WV0000868 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	350.	0.0002	2.00E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	1.50E+04	4737.79	3400.47	2724.98	NA
CONCENTRATION ($\mu\text{g/L}$)	1.34E-05	4.22E-05	5.88E-05	7.34E-05	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}	7.05E-11 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	5.43E-09 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.60E-09 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 31 RELEASE ACTIVITY: Solutia 350 dy

FACILITY NAME: FLEXSYS AMERICA LP

FACILITY LOCATION: NITRO WV 25143

RECEIVING STREAM NAME: KANAWHA R

REACH NUMBER: 05050008007 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: WV0000868 GAGING STATION ID: N/A

GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A

MEAN FLOW (MLD): 3.65E+04 7q10 FLOW (MLD): 3400.47 EFFLUENT FLOW (MLD):5.50

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 (%)
1.40	0	0	350.00	2.00E-04	0.00
50.00	0	0	350.00	2.00E-04	0.00
1342.00	0	0	350.00	2.00E-04	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:32

Number of Release Sites: 1.

Release Activity: Solutia 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	6.00E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	3.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	2.40E-08 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 32 RELEASE ACTIVITY: Solutia 20 dy
 FACILITY NAME: FLEXSYS AMERICA LP
 FACILITY LOCATION: NITRO WV 25143
 RECEIVING STREAM NAME: KANAWHA R
 REACH NUMBER: 05050008007 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: WV0000868 GAGING STATION ID: N/A
 GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A
 MEAN FLOW (MLD): 3.65E+04 7q10 FLOW (MLD): 3400.47 EFFLUENT FLOW (MLD):5.50

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 (%)
1.40	0	0	20.00	3.00E-03	0.00
50.00	0	0	20.00	3.00E-03	0.00
1342.00	0	0	20.00	3.00E-03	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:33

Number of Release Sites: 1.

Release Activity: Solvay 350 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	7.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	2.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:33 RELEASE ACTIVITY: Solvay 350 dy
FACILITY NAME: RHODIA INC.
FACILITY LOCATION: HOUSTON TX 77262
RECEIVING WATER NAME: BUFFALO BAYOU
REACH NUMBER: 12040104017 FACILITY ON REACH: DISCHARGE TYPE: Direct
Yes
NPDES PERMIT #: TX0007072 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	350.	0.02	2.00E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	110.16	9.37	5.40	4.53	NA
CONCENTRATION ($\mu\text{g/L}$)	0.18	2.14	3.70	4.42	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}	9.57E-07 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	7.37E-05 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	8.09E-05 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 33 RELEASE ACTIVITY: Solvay 350 dy
 FACILITY NAME: RHODIA INC.
 FACILITY LOCATION: HOUSTON TX 77262
 RECEIVING STREAM NAME: BUFFALO BAYOU
 REACH NUMBER: 12040104017 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: TX0007072 GAGING STATION ID: N/A
 GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A
 MEAN FLOW (MLD): 2090.31 7q10 FLOW (MLD): 5.40 EFFLUENT FLOW (MLD):2.76

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 (%)
1.40	2	8	350.00	2.00E-02	0.00
50.00	0	0	350.00	2.00E-02	0.00
1342.00	0	0	350.00	2.00E-02	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:34

Number of Release Sites: 1.

Release Activity: Solvay 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	8.20	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	0.41	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:34 RELEASE ACTIVITY: Solvay 20 dy
FACILITY NAME: RHODIA INC.
FACILITY LOCATION: HOUSTON TX 77262
RECEIVING WATER NAME: BUFFALO BAYOU
REACH NUMBER: 12040104017 FACILITY ON REACH: DISCHARGE TYPE: Direct
Yes
NPDES PERMIT #: TX0007072 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.41	0.41	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	110.16	9.37	5.40	4.53	NA
CONCENTRATION (µg/L)	3.72	43.77	75.93	90.57	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}	1.12E-06 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	8.63E-05 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.66E-03 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 34 RELEASE ACTIVITY: Solvay 20 dy
 FACILITY NAME: RHODIA INC.
 FACILITY LOCATION: HOUSTON TX 77262
 RECEIVING STREAM NAME: BUFFALO BAYOU
 REACH NUMBER: 12040104017 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: TX0007072 GAGING STATION ID: N/A
 GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A
 MEAN FLOW (MLD): 2090.31 7q10 FLOW (MLD): 5.40 EFFLUENT FLOW (MLD):2.76

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 (%)
1.40	2	8	20.00	0.41	0.00
50.00	0	0	20.00	0.41	0.00
1342.00	0	0	20.00	0.41	0.00

PROCESSING AS A REACTANT (80% WWT)

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES PROC 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:1

Number of Release Sites: 1.

Release Activity: PhillipsCA 350 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	38.50	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	350.00	0.00/0.00	N/A	N/A
Per Site Release:	0.11	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

CHEMICAL ID: PERC OES PROC 80

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS		
SCENARIO #: 1	RELEASE ACTIVITY: PhillipsCA 350 dy	
FACILITY NAME: LOS ANGELES CITY OF		
FACILITY LOCATION: SAN PEDRO CA 907317493		
RECEIVING WATER NAME: PACIFIC OCEAN		
REACH NUMBER: 18070104003	FACILITY ON REACH: Yes	DISCHARGE TYPE: Direct
NPDES PERMIT #: CA0053856	EXPOSED POPULATION: Adult	

WWT REMOVAL (%)	RELEASE DAYS	PLANT FLOW (MLD)	PRETREAT RELEASE (kg/site/day)	POST-TREAT RELEASE (kg/site/day)	BCF (L/kg)
80.	350.	69.55	0.11	2.20E-02	0.00

AQUATIC EXPOSURE ESTIMATES		
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)
ACUTE SCENARIO	1.00	0.32
CHRONIC SCENARIO	1.00	0.32

FISH INGESTION EXPOSURE ESTIMATES				
Exposure Units	Results	ASSUMPTIONS		
		ED	AT	BW

		(years)	(years)	(kg)	(g/day)
Cancer					
LADD _{pot} (mg/kg/day)	0.00	33.00	78.00	80.00	7.50
LADC _{pot} (mg/kg)	0.00	33.00	78.00	NA	NA
Acute					
ADR _{pot} (mg/kg/day)	0.00	NA	1 day	80.00	279.00

Lakes Comments:

4. OES: INCORPORATION INTO FORMULATION

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES INC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:1

Number of Release Sites: 1.

Release Activity: Stepan 300 dy

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

Total Releases:	0.60	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	300.00	0.00/0.00	N/A	N/A
Per Site Release:	2.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES INC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:1 RELEASE ACTIVITY: Stepan 300 dy
 FACILITY NAME: STEPAN COMPANY-ELWOOD
 FACILITY LOCATION: ELWOOD IL 60421
 RECEIVING WATER NAME: DES PLAINS R
 REACH NUMBER: 07120004006 FACILITY ON REACH: DISCHARGE TYPE: Direct
 No
 NPDES PERMIT #: IL0002453 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	300.	0.002	2.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	6250.28	3366.14	2387.10	1917.66	NA
CONCENTRATION (µg/L)	3.20E-04	5.94E-04	8.38E-04	1.04E-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}	1.45E-09 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	1.11E-07 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	2.25E-08 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES INC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 1 RELEASE ACTIVITY: Stepan 300 dy
 FACILITY NAME: STEPAN COMPANY-ELWOOD
 FACILITY LOCATION: ELWOOD IL 60421
 RECEIVING STREAM NAME: DES PLAINS R
 REACH NUMBER: 07120004006 FACILITY ON REACH: No DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: GAGING STATION ID: N/A
 IL0002453
 GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS
 RECORD: N/A NUMBER OF ON REACH: N/A
 OBSERVATIONS: N/A
 MEAN FLOW (MLD): 8726.51 7q10 FLOW (MLD): 2387.10 EFFLUENT FLOW
 (MLD):2.77

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 (%)
1.40	0	0	300.00	2.00E-03	0.00
50.00	0	0	300.00	2.00E-03	0.00
1342.00	0	0	300.00	2.00E-03	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES INC 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:2

Number of Release Sites: 1.

Release Activity: Stepan 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.50	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	2.50E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES INC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:2

RELEASE ACTIVITY: Stepan 20 dy

FACILITY NAME: STEPAN COMPANY-ELWOOD

FACILITY LOCATION: ELWOOD IL 60421

RECEIVING WATER NAME: DES PLAINS R

REACH NUMBER: 07120004006

FACILITY ON REACH:

DISCHARGE TYPE: Direct

No

NPDES PERMIT #: IL0002453

EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.025	2.50E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	6250.28	3366.14	2387.10	1917.66	NA
CONCENTRATION ($\mu\text{g/L}$)	4.00E-03	7.43E-03	1.05E-02	1.30E-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}	1.21E-09 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	9.27E-08 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	2.81E-07 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES INC 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 2 RELEASE ACTIVITY: Stepan 20 dy
 FACILITY NAME: STEPAN COMPANY-ELWOOD
 FACILITY LOCATION: ELWOOD IL 60421
 RECEIVING STREAM NAME: DES PLAINS R
 REACH NUMBER: 07120004006 FACILITY ON REACH: No DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: GAGING STATION ID: N/A
 IL0002453
 GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS
 RECORD: N/A NUMBER OF ON REACH: N/A
 OBSERVATIONS: N/A
 MEAN FLOW (MLD): 8726.51 7q10 FLOW (MLD): 2387.10 EFFLUENT FLOW
 (MLD):2.77

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 (%)
1.40	0	0	20.00	2.50E-02	0.00
50.00	0	0	20.00	2.50E-02	0.00
1342.00	0	0	20.00	2.50E-02	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES INC 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:1

Number of Release Sites: 1.

Release Activity: Lord 300 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	1578.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	300.00	0.00/0.00	N/A	N/A
Per Site Release:	5.26	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES INC 80

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

SCENARIO #: 1 Number of Sites: 1 RELEASE ACTIVITY: Lord
300 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)
80.00	300.	5.26	1.05	0.00	0.00

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	3.65	8.49	13.46	15.93
ALL	10	39.60	13.29	7.76	7.57	26.57	79.16	135.57	138.97

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	1.65E-05	1.20E-04	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	1.27E-03	9.24E-03	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	3.22E-04	3.00E-03	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES INC 80

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 1 RELEASE ACTIVITY: Lord 300 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
1.40	82	299	300.00	5.26	80.00	High
50.00	35	127	300.00	5.26	80.00	High
1342.00	0	1	300.00	5.26	80.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES INC 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:2

Number of Release Sites: 1.

Release Activity: Lord 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	1578.60	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	78.93	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES INC 80

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

SCENARIO #: 2 Number of Sites: 1 RELEASE ACTIVITY: Lord
20 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)
80.00	20.	78.93	15.79	0.00	0.00

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	54.81	127.47	201.92	239.00
ALL	10	39.60	13.29	7.76	7.57	398.64	1187.81	2034.28	2085.34

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	1.65E-05	1.20E-04	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	1.27E-03	9.24E-03	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	4.83E-03	4.50E-02	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES INC 80

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 2

RELEASE ACTIVITY: Lord 20 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
1.40	5	20	20.00	78.93	80.00	High
50.00	5	20	20.00	78.93	80.00	High
1342.00	1	5	20.00	78.93	80.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES INC 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:3

Number of Release Sites: 1.

Release Activity: Tesoro 300 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	99.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	300.00	0.00/0.00	N/A	N/A
Per Site Release:	0.33	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

CHEMICAL ID: PERC OES INC 80

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS		
SCENARIO #: 3	RELEASE ACTIVITY: Tesoro 300 dy	
FACILITY NAME: LOS ANGELES COUNTY SAN DIST		
FACILITY LOCATION: CARSON CA 90745		
RECEIVING WATER NAME: PACIFIC OCEAN		
REACH NUMBER: 18070104003	FACILITY ON REACH: Yes	DISCHARGE TYPE: Direct
NPDES PERMIT #: CA0053813	EXPOSED POPULATION: Adult	

WWT REMOVAL (%)	RELEASE DAYS	PLANT FLOW (MLD)	PRETREAT RELEASE (kg/site/day)	POST-TREAT RELEASE (kg/site/day)	BCF (L/kg)
80.	300.	1494.88	0.33	6.60E-02	0.00

AQUATIC EXPOSURE ESTIMATES		
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)
ACUTE SCENARIO	166.00	2.66E-04
CHRONIC SCENARIO	166.00	2.66E-04

FISH INGESTION EXPOSURE ESTIMATES					
Exposure Units	Results	ASSUMPTIONS			
		ED	AT	BW	IR

		(years)	(years)	(kg)	(g/day)
Cancer					
LADD _{pot} (mg/kg/day)	0.00	33.00	78.00	80.00	7.50
LADC _{pot} (mg/kg)	0.00	33.00	78.00	NA	NA
Acute					
ADR _{pot} (mg/kg/day)	0.00	NA	1 day	80.00	279.00

Lakes Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES INC 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:4

Number of Release Sites: 1.

Release Activity: Weatherford 300 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.60	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	300.00	0.00/0.00	N/A	N/A
Per Site Release:	2.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES INC 80

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 4 RELEASE ACTIVITY: Weatherford 300 dy

FACILITY NAME: WEATHERFORD CITY OF

FACILITY LOCATION: WEATHERFORD TX 76086

RECEIVING WATER NAME: WILLOW CR

REACH NUMBER: 12030102032 FACILITY ON REACH: DISCHARGE TYPE: Direct
No

NPDES PERMIT #: TX0047724 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
80.	300.	0.002	4.00E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	18.09	10.59	6.13	6.13	NA
CONCENTRATION (µg/L)	2.21E-02	3.78E-02	6.53E-02	6.53E-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}	1.00E-07 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	7.69E-06 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.43E-06 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES INC 80

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 4 RELEASE ACTIVITY: Weatherford 300 dy

FACILITY NAME: WEATHERFORD CITY OF

FACILITY LOCATION: WEATHERFORD TX 76086

RECEIVING STREAM NAME: WILLOW CR

REACH NUMBER: 12030102032 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: TX0047724 GAGING STATION ID: N/A

GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A

MEAN FLOW (MLD): 39.54 7q10 FLOW (MLD): 6.13 EFFLUENT FLOW (MLD):6.13

RESULTS

COC ($\mu\text{g/L}$)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)
1.40	0	0	300.00	2.00E-03	80.00
50.00	0	0	300.00	2.00E-03	80.00
1342.00	0	0	300.00	2.00E-03	80.00

5. OES: OTVD

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:1

Number of Release Sites: 1.

Release Activity: 601Nassau 260 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	2.60E-03 (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:	1.00E-05 (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: PERC OES OTVD 00

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

SCENARIO #: 1 Number of Sites: 1 RELEASE
ACTIVITY:601Nassau 260 dy

SIC-CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

SIC-CODE (S): 3315-3317,3351-3357,3463,3497 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	260.	0.00001	1.00E-05	0.00	0.00

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	485.40	206.33	132.62	108.72	2.06E-05	4.85E-05	7.54E-05	9.20E-05
ALL	10	43.45	15.35	9.00	7.91	2.30E-04	6.51E-04	1.11E-03	1.26E-03

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	8.07E-11	9.02E-10	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	6.21E-09	6.94E-08	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.84E-09	2.47E-08	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 1

RELEASE ACTIVITY: 601Nassau 260 dy

SIC CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

ASSOCIATED SIC CODES: 3315-3317,3351-3357,3463,3497

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
1.40	0	0	260.00	1.00E-05	0.00	High
50.00	0	0	260.00	1.00E-05	0.00	High
1342.00	0	0	260.00	1.00E-05	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:2

Number of Release Sites: 1.

Release Activity: 601Nassau 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	2.00E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

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

SCENARIO #: 2 Number of Sites: 1 RELEASE
ACTIVITY:601Nassau 20 dy

SIC-CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

SIC-CODE (S): 3315-3317,3351-3357,3463,3497 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	20.	0.001	1.00E-03	0.00	0.00

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	485.40	206.33	132.62	108.72	2.06E-03	4.85E-03	7.54E-03	9.20E-03
ALL	10	43.45	15.35	9.00	7.91	2.30E-02	6.51E-02	0.11	0.13

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	6.21E-10	6.94E-09	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	4.78E-08	5.34E-07	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.84E-07	2.47E-06	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 2

RELEASE ACTIVITY: 601Nassau 20 dy

SIC CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

ASSOCIATED SIC CODES: 3315-3317,3351-3357,3463,3497

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
1.40	0	2	20.00	1.00E-03	0.00	High
50.00	0	0	20.00	1.00E-03	0.00	High
1342.00	0	0	20.00	1.00E-03	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:3

Number of Release Sites: 1.

Release Activity: ASCO 260 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	2.60E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	260.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

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

SCENARIO #: 3 Number of Sites: 1 RELEASE ACTIVITY: ASCO
260 dy

SIC-CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

SIC-CODE (S): 3315-3317,3351-3357,3463,3497 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	260.	0.0001	1.00E-04	0.00	0.00

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	485.40	206.33	132.62	108.72	2.06E-04	4.85E-04	7.54E-04	9.20E-04
ALL	10	43.45	15.35	9.00	7.91	2.30E-03	6.51E-03	1.11E-02	1.26E-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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	8.07E-10	9.02E-09	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	6.21E-08	6.94E-07	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.84E-08	2.47E-07	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 3

RELEASE ACTIVITY: ASCO 260 dy

SIC CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

ASSOCIATED SIC CODES: 3315-3317,3351-3357,3463,3497

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
1.40	2	7	260.00	1.00E-04	0.00	High
50.00	0	0	260.00	1.00E-04	0.00	High
1342.00	0	0	260.00	1.00E-04	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:4

Number of Release Sites: 1.

Release Activity: ASCO 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	3.80E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	1.90E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

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

SCENARIO #: 4 Number of Sites: 1 RELEASE ACTIVITY: ASCO
20 dy

SIC-CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

SIC-CODE (S): 3315-3317,3351-3357,3463,3497 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	20.	0.0019	1.90E-03	0.00	0.00

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	485.40	206.33	132.62	108.72	3.91E-03	9.21E-03	1.43E-02	1.75E-02
ALL	10	43.45	15.35	9.00	7.91	4.37E-02	0.12	0.21	0.24

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	1.18E-09	1.32E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	9.07E-08	1.01E-06	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	3.49E-07	4.69E-06	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 4

RELEASE ACTIVITY: ASCO 20 dy

SIC CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

ASSOCIATED SIC CODES: 3315-3317,3351-3357,3463,3497

SIC CODE RESULTS

COC ($\mu\text{g/L}$)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Loading (kg/site/day)	Waste Water Treatment (%)	High/Avg Analysis
1.40	0	2	20.00	1.90E-03	0.00	High
50.00	0	0	20.00	1.90E-03	0.00	High
1342.00	0	0	20.00	1.90E-03	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:5

Number of Release Sites: 1.

Release Activity: Chemours 260 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	2.60	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	260.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 5 RELEASE ACTIVITY: Chemours 260 dy
 FACILITY NAME: E.I. DUPONT DE NEMOURS AND COM
 FACILITY LOCATION: JEFFERSON COUNTY TX
 RECEIVING WATER NAME: NECHES R
 REACH NUMBER: 12020003001 FACILITY ON REACH: DISCHARGE TYPE: Direct
 Yes
 NPDES PERMIT #: TX0004669 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.01	1.00E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	4712.12	1034.72	703.93	570.35	NA
CONCENTRATION ($\mu\text{g/L}$)	2.12E-03	9.66E-03	1.42E-02	1.75E-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}	8.31E-09 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	6.40E-07 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	3.66E-07 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 5 RELEASE ACTIVITY: Chemours 260 dy
 FACILITY NAME: E.I. DUPONT DE NEMOURS AND COM
 FACILITY LOCATION: JEFFERSON COUNTY TX
 RECEIVING STREAM NAME: NECHES R
 REACH NUMBER: 12020003001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: TX0004669 GAGING STATION ID: N/A
 GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A
 MEAN FLOW (MLD): 2.00E+04 7q10 FLOW (MLD): 703.93 EFFLUENT FLOW (MLD):23.33

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 (%)
1.40	0	0	260.00	1.00E-02	0.00
50.00	0	0	260.00	1.00E-02	0.00
1342.00	0	0	260.00	1.00E-02	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:6

Number of Release Sites: 1.

Release Activity: Chemours 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	1.68	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	8.40E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:6 RELEASE ACTIVITY: Chemours 20 dy
 FACILITY NAME: E.I. DUPONT DE NEMOURS AND COM
 FACILITY LOCATION: JEFFERSON COUNTY TX
 RECEIVING WATER NAME: NECHES R
 REACH NUMBER: 12020003001 FACILITY ON REACH: DISCHARGE TYPE: Direct
 Yes
 NPDES PERMIT #: TX0004669 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.084	8.40E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	4712.12	1034.72	703.93	570.35	NA
CONCENTRATION (µg/L)	1.78E-02	8.12E-02	0.12	0.15	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}	5.37E-09 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	4.13E-07 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	3.07E-06 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 6 RELEASE ACTIVITY: Chemours 20 dy
 FACILITY NAME: E.I. DUPONT DE NEMOURS AND COM
 FACILITY LOCATION: JEFFERSON COUNTY TX
 RECEIVING STREAM NAME: NECHES R
 REACH NUMBER: 12020003001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: TX0004669 GAGING STATION ID: N/A
 GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A
 MEAN FLOW (MLD): 2.00E+04 7q10 FLOW (MLD): 703.93 EFFLUENT FLOW (MLD):23.33

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 (%)
1.40	0	0	20.00	8.40E-02	0.00
50.00	0	0	20.00	8.40E-02	0.00
1342.00	0	0	20.00	8.40E-02	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:7

Number of Release Sites: 1.

Release Activity: Delphi 260 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	2.60	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	260.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:7 RELEASE ACTIVITY: Delphi 260 dy

FACILITY NAME: GMC-DELPHI HARRISON

FACILITY LOCATION: MORaine OH 45439

RECEIVING WATER NAME: GREAT MIAMI R

REACH NUMBER: 05080002009 FACILITY ON REACH: DISCHARGE TYPE: Direct
Yes

NPDES PERMIT #: OH0009431 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.01	1.00E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	2284.23	789.03	531.69	431.64	NA
CONCENTRATION (µg/L)	4.38E-03	1.27E-02	1.88E-02	2.32E-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}	1.72E-08 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	1.32E-06 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	4.80E-07 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 7 RELEASE ACTIVITY: Delphi 260 dy

FACILITY NAME: GMC-DELPHI HARRISON

FACILITY LOCATION: MORaine OH 45439

RECEIVING STREAM NAME: GREAT MIAMI R

REACH NUMBER: 05080002009 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: OH0009431 GAGING STATION ID: N/A

GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A

MEAN FLOW (MLD): 5994.53 7q10 FLOW (MLD): 531.69 EFFLUENT FLOW (MLD):8.19

RESULTS

COC ($\mu\text{g/L}$)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)
1.40	0	0	260.00	1.00E-02	0.00
50.00	0	0	260.00	1.00E-02	0.00
1342.00	0	0	260.00	1.00E-02	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:8

Number of Release Sites: 1.

Release Activity: Delphi 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	1.68	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	8.40E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:8 RELEASE ACTIVITY: Delphi 20 dy

FACILITY NAME: GMC-DELPHI HARRISON

FACILITY LOCATION: MORAIN E OH 45439

RECEIVING WATER NAME: GREAT MIAMI R

REACH NUMBER: 05080002009 FACILITY ON REACH: DISCHARGE TYPE: Direct
Yes

NPDES PERMIT #: OH0009431 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.084	8.40E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	2284.23	789.03	531.69	431.64	NA
CONCENTRATION ($\mu\text{g/L}$)	3.68E-02	0.11	0.16	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}	1.11E-08 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	8.53E-07 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	4.03E-06 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 8 RELEASE ACTIVITY: Delphi 20 dy
 FACILITY NAME: GMC-DELPHI HARRISON
 FACILITY LOCATION: MORaine OH 45439
 RECEIVING STREAM NAME: GREAT MIAMI R
 REACH NUMBER: 05080002009 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: OH0009431 GAGING STATION ID: N/A
 GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A
 MEAN FLOW (MLD): 5994.53 7q10 FLOW (MLD): 531.69 EFFLUENT FLOW (MLD): 8.19

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 (%)
1.40	0	0	20.00	8.40E-02	0.00
50.00	0	0	20.00	8.40E-02	0.00
1342.00	0	0	20.00	8.40E-02	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:9

Number of Release Sites: 1.

Release Activity: Equistar 260 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	2.60	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	260.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

CHEMICAL ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS		
SCENARIO #: 9	RELEASE ACTIVITY: Equistar 260 dy	
FACILITY NAME: MILLENNIUM PETROCHEMICALS INC.		
FACILITY LOCATION: LAPORTE TX 77572		
RECEIVING WATER NAME: GALVESTON BAY		
REACH NUMBER: 12040104028	FACILITY ON REACH: Yes	DISCHARGE TYPE: Direct
NPDES PERMIT #: TX0002836	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.	260.	49.49	0.01	1.00E-02	0.00

AQUATIC EXPOSURE ESTIMATES		
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)
ACUTE SCENARIO	1.00	0.20
CHRONIC SCENARIO	12.50	1.62E-02

FISH INGESTION EXPOSURE ESTIMATES				
Exposure Units	Results	ASSUMPTIONS		
		ED	AT	BW

		(years)	(years)	(kg)	(g/day)
Cancer					
LADD _{pot} (mg/kg/day)	0.00	33.00	78.00	80.00	7.50
LADC _{pot} (mg/kg)	0.00	33.00	78.00	NA	NA
Acute					
ADR _{pot} (mg/kg/day)	0.00	NA	1 day	80.00	279.00

Lakes Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:10

Number of Release Sites: 1.

Release Activity: Equistar 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	3.20	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	0.16	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

CHEMICAL ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS		
SCENARIO #: 10	RELEASE ACTIVITY: Equistar 20 dy	
FACILITY NAME: MILLENNIUM PETROCHEMICALS INC.		
FACILITY LOCATION: LAPORTE TX 77572		
RECEIVING WATER NAME: GALVESTON BAY		
REACH NUMBER: 12040104028	FACILITY ON REACH: Yes	DISCHARGE TYPE: Direct
NPDES PERMIT #: TX0002836	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.	20.	49.49	0.16	0.16	0.00

AQUATIC EXPOSURE ESTIMATES		
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)
ACUTE SCENARIO	1.00	3.23
CHRONIC SCENARIO	12.50	0.26

FISH INGESTION EXPOSURE ESTIMATES					
Exposure Units	Results	ASSUMPTIONS			
		ED	AT	BW	IR

		(years)	(years)	(kg)	(g/day)
Cancer					
LADD _{pot} (mg/kg/day)	0.00	33.00	78.00	80.00	7.50
LADC _{pot} (mg/kg)	0.00	33.00	78.00	NA	NA
Acute					
ADR _{pot} (mg/kg/day)	0.00	NA	1 day	80.00	279.00

Lakes Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:11

Number of Release Sites: 1.

Release Activity: Fairfield 260 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	1.04	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	260.00	0.00/0.00	N/A	N/A
Per Site Release:	4.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 11 RELEASE ACTIVITY: Fairfield 260 dy
 FACILITY NAME: USX CORP FAIRFIELD WORKS
 FACILITY LOCATION: FAIRFIELD AL 35064
 RECEIVING WATER NAME: VILLAGE CR
 REACH NUMBER: 03160111004 FACILITY ON REACH: DISCHARGE TYPE: Direct
 Yes
 NPDES PERMIT #: AL0003646 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.004	4.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	1085.05	1151.89	786.61	786.61	NA
CONCENTRATION (μ g/L)	3.69E-03	3.47E-03	5.09E-03	5.09E-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}	1.44E-08 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	1.11E-06 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.32E-07 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES
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SCENARIO NUMBER: 11	RELEASE ACTIVITY: Fairfield 260 dy	
FACILITY NAME: USX CORP FAIRFIELD WORKS		
FACILITY LOCATION: FAIRFIELD AL 35064		
RECEIVING STREAM NAME: VILLAGE CR		
REACH NUMBER: 03160111004	FACILITY ON REACH: Yes DISCHARGE TYPE: Direct	
NPDES PERMIT NUMBER: AL0003646	GAGING STATION ID: 02460500	
GAGING STATION PERIOD OF RECORD: 02/01/73 - 01/17/82	GAGING STATION NUMBER OF OBSERVATIONS: 3211.00	NUMBER OF STATIONS ON REACH: 3
50 %ile FLOW (MLD): 335.10	10 %ile FLOW (MLD): 163.88	EFFLUENT FLOW (MLD):786.61

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 (%)
1.40	0	0	260.00	4.00E-03	0.00
50.00	0	0	260.00	4.00E-03	0.00
1342.00	0	0	260.00	4.00E-03	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:12

Number of Release Sites: 1.

Release Activity: Fairfield 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	1.06	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	5.30E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:12 RELEASE ACTIVITY: Fairfield 20 dy
 FACILITY NAME: USX CORP FAIRFIELD WORKS
 FACILITY LOCATION: FAIRFIELD AL 35064
 RECEIVING WATER NAME: VILLAGE CR
 REACH NUMBER: 03160111004 FACILITY ON REACH: DISCHARGE TYPE: Direct
 Yes
 NPDES PERMIT #: AL0003646 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.053	5.30E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	1085.05	1151.89	786.61	786.61	NA
CONCENTRATION (µg/L)	4.88E-02	4.60E-02	6.74E-02	6.74E-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}	1.47E-08 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	1.13E-06 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.74E-06 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 12 RELEASE ACTIVITY: Fairfield 20 dy
FACILITY NAME: USX CORP FAIRFIELD WORKS
FACILITY LOCATION: FAIRFIELD AL 35064
RECEIVING STREAM NAME: VILLAGE CR
REACH NUMBER: 03160111004 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
NPDES PERMIT NUMBER:
AL0003646 GAGING STATION ID: 02460500
GAGING STATION PERIOD OF
RECORD: 02/01/73 - 01/17/82 GAGING STATION NUMBER OF STATIONS
 NUMBER OF ON REACH: 3
 OBSERVATIONS: 3211.00
50 %ile FLOW (MLD): 335.10 10 %ile FLOW (MLD): 163.88 EFFLUENT FLOW
 (MLD):786.61

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 (%)
1.40	0	0	20.00	5.30E-02	0.00
50.00	0	0	20.00	5.30E-02	0.00
1342.00	0	0	20.00	5.30E-02	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:13

Number of Release Sites: 1.

Release Activity: Gayston 260 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.78	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	260.00	0.00/0.00	N/A	N/A
Per Site Release:	3.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

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

SCENARIO #: 13 Number of Sites: 1 RELEASE
ACTIVITY: Gayston 260 dy

SIC-CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

SIC-CODE (S): 3315-3317,3351-3357,3463,3497 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	260.	0.003	3.00E-03	0.00	0.00

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	485.40	206.33	132.62	108.72	6.18E-03	1.45E-02	2.26E-02	2.76E-02
ALL	10	43.45	15.35	9.00	7.91	6.90E-02	0.20	0.33	0.38

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	2.42E-08	2.71E-07	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	1.86E-06	2.08E-05	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	5.51E-07	7.40E-06	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 13

RELEASE ACTIVITY: Gayston 260 dy

SIC CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

ASSOCIATED SIC CODES: 3315-3317,3351-3357,3463,3497

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
1.40	7	25	260.00	3.00E-03	0.00	High
50.00	1	5	260.00	3.00E-03	0.00	High
1342.00	0	0	260.00	3.00E-03	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:14

Number of Release Sites: 1.

Release Activity: Gayston 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.82	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	4.10E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

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

SCENARIO #: 14 Number of Sites: 1 RELEASE
ACTIVITY: Gayston 20 dy

SIC-CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

SIC-CODE (S): 3315-3317,3351-3357,3463,3497 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	20.	0.041	4.10E-02	0.00	0.00

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	485.40	206.33	132.62	108.72	8.45E-02	0.20	0.31	0.38
ALL	10	43.45	15.35	9.00	7.91	0.94	2.67	4.56	5.18

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	2.55E-08	2.84E-07	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	1.96E-06	2.19E-05	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	7.53E-06	1.01E-04	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 14

RELEASE ACTIVITY: Gayston 20 dy

SIC CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

ASSOCIATED SIC CODES: 3315-3317,3351-3357,3463,3497

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
1.40	2	8	20.00	4.10E-02	0.00	High
50.00	0	2	20.00	4.10E-02	0.00	High
1342.00	0	0	20.00	4.10E-02	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:15

Number of Release Sites: 1.

Release Activity: GM 260 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	18.20	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	260.00	0.00/0.00	N/A	N/A
Per Site Release:	7.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.32E-04 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 15 RELEASE ACTIVITY: GM 260 dy
 FACILITY NAME: DELPHI HARRISON THERMAL SYS
 FACILITY LOCATION: LOCKPORT NY 14094
 RECEIVING STREAM NAME: EIGHTEENMILE CR E BR
 REACH NUMBER: 04130001018 FACILITY ON REACH: No DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: NY0000558 GAGING STATION ID: N/A
 GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A
 MEAN FLOW (MLD): 105.35 7q10 FLOW (MLD): 11.85 EFFLUENT FLOW (MLD):11.85

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 (%)
1.40	36	131	260.00	7.00E-02	0.00
50.00	0	0	260.00	7.00E-02	0.00
1342.00	0	0	260.00	7.00E-02	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:16

Number of Release Sites: 1.

Release Activity: GM 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	18.40	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	0.92	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:16 RELEASE ACTIVITY: GM 20 dy
 FACILITY NAME: DELPHI HARRISON THERMAL SYS
 FACILITY LOCATION: LOCKPORT NY 14094
 RECEIVING WATER NAME: EIGHTEENMILE CR E BR
 REACH NUMBER: 04130001018 FACILITY ON REACH: DISCHARGE TYPE: Direct No
 NPDES PERMIT #: NY0000558 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.92	0.92	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	41.37	20.01	11.85	11.85	NA
CONCENTRATION (µg/L)	22.24	45.97	77.64	77.64	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}	6.70E-06 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	5.16E-04 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.74E-03 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 16 RELEASE ACTIVITY: GM 20 dy
 FACILITY NAME: DELPHI HARRISON THERMAL SYS
 FACILITY LOCATION: LOCKPORT NY 14094
 RECEIVING STREAM NAME: EIGHTEENMILE CR E BR
 REACH NUMBER: 04130001018 FACILITY ON REACH: No DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: NY0000558 GAGING STATION ID: N/A
 GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A
 MEAN FLOW (MLD): 105.35 7q10 FLOW (MLD): 11.85 EFFLUENT FLOW (MLD):11.85

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 (%)
1.40	5	20	20.00	0.92	0.00
50.00	1	3	20.00	0.92	0.00
1342.00	0	0	20.00	0.92	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:17

Number of Release Sites: 1.

Release Activity: HBFuller 260 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.26	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	260.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

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

SCENARIO #: 17 Number of Sites: 1 RELEASE
ACTIVITY: HBFuller 260 dy

SIC-CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

SIC-CODE (S): 3315-3317,3351-3357,3463,3497 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	260.	0.001	1.00E-03	0.00	0.00

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	485.40	206.33	132.62	108.72	2.06E-03	4.85E-03	7.54E-03	9.20E-03
ALL	10	43.45	15.35	9.00	7.91	2.30E-02	6.51E-02	0.11	0.13

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	8.07E-09	9.02E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	6.21E-07	6.94E-06	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.84E-07	2.47E-06	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 17

RELEASE ACTIVITY: HBFuller 260 dy

SIC CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

ASSOCIATED SIC CODES: 3315-3317,3351-3357,3463,3497

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
1.40	6	21	260.00	1.00E-03	0.00	High
50.00	0	1	260.00	1.00E-03	0.00	High
1342.00	0	0	260.00	1.00E-03	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:18

Number of Release Sites: 1.

Release Activity: HBFuller 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.20	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

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

SCENARIO #: 18 Number of Sites: 1 RELEASE
ACTIVITY:HBFuller 20 dy

SIC-CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

SIC-CODE (S): 3315-3317,3351-3357,3463,3497 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	20.	0.01	1.00E-02	0.00	0.00

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	485.40	206.33	132.62	108.72	2.06E-02	4.85E-02	7.54E-02	9.20E-02
ALL	10	43.45	15.35	9.00	7.91	0.23	0.65	1.11	1.26

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	6.21E-09	6.94E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	4.78E-07	5.34E-06	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.84E-06	2.47E-05	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 18

RELEASE ACTIVITY: HBFuller 20 dy

SIC CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

ASSOCIATED SIC CODES: 3315-3317,3351-3357,3463,3497

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
1.40	1	3	20.00	1.00E-02	0.00	High
50.00	0	1	20.00	1.00E-02	0.00	High
1342.00	0	0	20.00	1.00E-02	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:19

Number of Release Sites: 1.

Release Activity: Hyster 260 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	2.60E-04	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	260.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-06	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

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

SCENARIO #: 19 Number of Sites: 1 RELEASE ACTIVITY:Hyster
260 dy

SIC-CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

SIC-CODE (S): 3315-3317,3351-3357,3463,3497 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	260.	1.00e-06	1.00E-06	0.00	0.00

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	485.40	206.33	132.62	108.72	2.06E-06	4.85E-06	7.54E-06	9.20E-06
ALL	10	43.45	15.35	9.00	7.91	2.30E-05	6.51E-05	1.11E-04	1.26E-04

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	8.07E-12	9.02E-11	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	6.21E-10	6.94E-09	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.84E-10	2.47E-09	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 19

RELEASE ACTIVITY: Hyster 260 dy

SIC CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

ASSOCIATED SIC CODES: 3315-3317,3351-3357,3463,3497

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
1.40	0	0	260.00	1.00E-06	0.00	High
50.00	0	0	260.00	1.00E-06	0.00	High
1342.00	0	0	260.00	1.00E-06	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:20

Number of Release Sites: 1.

Release Activity: Hyster 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	2.34E-04	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	1.17E-05	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

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

SCENARIO #: 20 Number of Sites: 1 RELEASE ACTIVITY:Hyster
20 dy

SIC-CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

SIC-CODE (S): 3315-3317,3351-3357,3463,3497 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	20.	0.00001	1.17E-05	0.00	0.00

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	485.40	206.33	132.62	108.72	2.41E-05	5.67E-05	8.82E-05	1.08E-04
ALL	10	43.45	15.35	9.00	7.91	2.69E-04	7.62E-04	1.30E-03	1.48E-03

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	7.26E-12	8.12E-11	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	5.59E-10	6.24E-09	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	2.15E-09	2.89E-08	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 20

RELEASE ACTIVITY: Hyster 20 dy

SIC CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

ASSOCIATED SIC CODES: 3315-3317,3351-3357,3463,3497

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
1.40	0	0	20.00	1.20E-05	0.00	High
50.00	0	0	20.00	1.20E-05	0.00	High
1342.00	0	0	20.00	1.20E-05	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:21

Number of Release Sites: 1.

Release Activity: MEMC 260 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	7.80E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	260.00	0.00/0.00	N/A	N/A
Per Site Release:	3.00E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:21 RELEASE ACTIVITY: MEMC 260 dy
 FACILITY NAME: MEMC ELECTRONIC MATERIALS INC
 FACILITY LOCATION: MOORE SC 29369
 RECEIVING WATER NAME: S TYGER R
 REACH NUMBER: 03050107022 FACILITY ON REACH: DISCHARGE TYPE: Direct
 Yes
 NPDES PERMIT #: SC0036145 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.0003	3.00E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	132.02	48.63	29.71	24.61	NA
CONCENTRATION (µg/L)	2.27E-03	6.17E-03	1.01E-02	1.22E-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}	8.90E-09 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	6.85E-07 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	2.34E-07 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 21 RELEASE ACTIVITY: MEMC 260 dy
 FACILITY NAME: MEMC ELECTRONIC MATERIALS INC
 FACILITY LOCATION: MOORE SC 29369
 RECEIVING STREAM NAME: S TYGER R
 REACH NUMBER: 03050107022 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: SC0036145 GAGING STATION ID: 02158500
 GAGING STATION PERIOD OF RECORD: 01/01/66 - 11/29/67 GAGING STATION NUMBER OF OBSERVATIONS: 699.00 NUMBER OF STATIONS ON REACH: 1
 50 %ile FLOW (MLD): 327.76 10 %ile FLOW (MLD): 39.14 EFFLUENT FLOW (MLD):2.14

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 (%)
1.40	0	0	260.00	3.00E-04	0.00
50.00	0	0	260.00	3.00E-04	0.00
1342.00	0	0	260.00	3.00E-04	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:22

Number of Release Sites: 3.

Release Activity: MEMC 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.20	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	3.40E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:22 RELEASE ACTIVITY: MEMC 20 dy

FACILITY NAME: MEMC ELECTRONIC MATERIALS INC

FACILITY LOCATION: MOORE SC 29369

RECEIVING WATER NAME: S TYGER R

REACH NUMBER: 03050107022 FACILITY ON REACH: DISCHARGE TYPE: Direct
Yes

NPDES PERMIT #: SC0036145 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.0034	3.40E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	132.02	48.63	29.71	24.61	NA
CONCENTRATION ($\mu\text{g/L}$)	2.58E-02	6.99E-02	0.11	0.14	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}	7.76E-09 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	5.97E-07 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	2.65E-06 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 22 RELEASE ACTIVITY: MEMC 20 dy
 FACILITY NAME: MEMC ELECTRONIC MATERIALS INC
 FACILITY LOCATION: MOORE SC 29369
 RECEIVING STREAM NAME: S TYGER R
 REACH NUMBER: 03050107022 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: SC0036145 GAGING STATION ID: 02158500
 GAGING STATION PERIOD OF RECORD: 01/01/66 - 11/29/67 GAGING STATION NUMBER OF OBSERVATIONS: 699.00 NUMBER OF STATIONS ON REACH: 1
 50 %ile FLOW (MLD): 327.76 10 %ile FLOW (MLD): 39.14 EFFLUENT FLOW (MLD):2.14

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 (%)
1.40	0	0	20.00	3.40E-03	0.00
50.00	0	0	20.00	3.40E-03	0.00
1342.00	0	0	20.00	3.40E-03	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:23

Number of Release Sites: 1.

Release Activity: Piano 260 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.26	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	260.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

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

SCENARIO #: 23 Number of Sites: 1 RELEASE ACTIVITY:Piano
260 dy

SIC-CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

SIC-CODE (S): 3315-3317,3351-3357,3463,3497 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	260.	0.001	1.00E-03	0.00	0.00

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	485.40	206.33	132.62	108.72	2.06E-03	4.85E-03	7.54E-03	9.20E-03
ALL	10	43.45	15.35	9.00	7.91	2.30E-02	6.51E-02	0.11	0.13

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	8.07E-09	9.02E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	6.21E-07	6.94E-06	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.84E-07	2.47E-06	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 23

RELEASE ACTIVITY: Piano 260 dy

SIC CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

ASSOCIATED SIC CODES: 3315-3317,3351-3357,3463,3497

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
1.40	6	21	260.00	1.00E-03	0.00	High
50.00	0	1	260.00	1.00E-03	0.00	High
1342.00	0	0	260.00	1.00E-03	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:24

Number of Release Sites: 1.

Release Activity: Piano 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.19	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	9.30E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

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

SCENARIO #: 24 Number of Sites: 1 RELEASE ACTIVITY: Piano
20 dy

SIC-CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

SIC-CODE (S): 3315-3317,3351-3357,3463,3497 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	20.	0.0093	9.30E-03	0.00	0.00

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	485.40	206.33	132.62	108.72	1.92E-02	4.51E-02	7.01E-02	8.55E-02
ALL	10	43.45	15.35	9.00	7.91	0.21	0.61	1.03	1.18

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	5.77E-09	6.45E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	4.44E-07	4.96E-06	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.71E-06	2.29E-05	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 24

RELEASE ACTIVITY: Piano 20 dy

SIC CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

ASSOCIATED SIC CODES: 3315-3317,3351-3357,3463,3497

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
1.40	1	3	20.00	9.30E-03	0.00	High
50.00	0	1	20.00	9.30E-03	0.00	High
1342.00	0	0	20.00	9.30E-03	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:25

Number of Release Sites: 1.

Release Activity: Rex 260 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.52	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	260.00	0.00/0.00	N/A	N/A
Per Site Release:	2.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:25 RELEASE ACTIVITY: Rex 260 dy

FACILITY NAME: LANSDALE BORO

FACILITY LOCATION: LANSDALE PA 19446

RECEIVING WATER NAME: NESHAMINY R

REACH NUMBER: 02040201011 FACILITY ON REACH: DISCHARGE TYPE: Direct
No

NPDES PERMIT #: PA0026182 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.002	2.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	216.46	60.30	37.12	30.70	NA
CONCENTRATION (µg/L)	9.24E-03	3.32E-02	5.39E-02	6.51E-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}	3.62E-08 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	2.78E-06 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.26E-06 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 25 RELEASE ACTIVITY: Rex 260 dy
FACILITY NAME: LANSDALE BORO
FACILITY LOCATION: LANSDALE PA 19446
RECEIVING STREAM NAME: NESHAMINY R
REACH NUMBER: 02040201011 FACILITY ON REACH: No DISCHARGE TYPE: Direct
NPDES PERMIT NUMBER:
PA0026182 GAGING STATION ID: N/A
GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS
RECORD: N/A NUMBER OF ON REACH: N/A
OBSERVATIONS: N/A
MEAN FLOW (MLD): 919.00 7q10 FLOW (MLD): 37.12 EFFLUENT FLOW
(MLD):10.33

RESULTS					
COC ($\mu\text{g/L}$)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)
1.40	0	0	260.00	2.00E-03	0.00
50.00	0	0	260.00	2.00E-03	0.00
1342.00	0	0	260.00	2.00E-03	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:26

Number of Release Sites: 1.

Release Activity: Rex 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.50	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	2.50E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.57E-05 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 26 RELEASE ACTIVITY: Rex 20 dy
FACILITY NAME: LANSDALE BORO
FACILITY LOCATION: LANSDALE PA 19446
RECEIVING STREAM NAME: NESHAMINY R
REACH NUMBER: 02040201011 FACILITY ON REACH: No DISCHARGE TYPE: Direct
NPDES PERMIT NUMBER:
PA0026182 GAGING STATION ID: N/A
GAGING STATION PERIOD OF
RECORD: N/A GAGING STATION NUMBER OF STATIONS
NUMBER OF ON REACH: N/A
OBSERVATIONS: N/A
MEAN FLOW (MLD): 919.00 7q10 FLOW (MLD): 37.12 EFFLUENT FLOW
(MLD):10.33

RESULTS

COC ($\mu\text{g/L}$)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)
1.40	0	0	20.00	2.50E-02	0.00
50.00	0	0	20.00	2.50E-02	0.00
1342.00	0	0	20.00	2.50E-02	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:27

Number of Release Sites: 1.

Release Activity: Styrolution 260 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	2.60E-03	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	260.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-05	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:27 RELEASE ACTIVITY: Styrolution 260 dy

FACILITY NAME: BASF - JOLIET

FACILITY LOCATION: CHANNAHON IL 60410

RECEIVING WATER NAME: DES PLAINS R

REACH NUMBER: 07120004002 FACILITY ON REACH: DISCHARGE TYPE: Direct
Yes

NPDES PERMIT #: IL0001619 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.00001	1.00E-05	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	7537.30	4032.40	2877.81	2308.84	NA
CONCENTRATION ($\mu\text{g/L}$)	1.33E-06	2.48E-06	3.47E-06	4.33E-06	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}	5.20E-12 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	4.00E-10 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	9.39E-11 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 27 RELEASE ACTIVITY: Styrolution 260 dy

FACILITY NAME: BASF - JOLIET

FACILITY LOCATION: CHANNAHON IL 60410

RECEIVING STREAM NAME: DES PLAINS R

REACH NUMBER: 07120004002 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: IL0001619 GAGING STATION ID: N/A

GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A

MEAN FLOW (MLD): 1.04E+04 7q10 FLOW (MLD): 2877.81 EFFLUENT FLOW (MLD):0.90

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 (%)
1.40	0	0	260.00	1.00E-05	0.00
50.00	0	0	260.00	1.00E-05	0.00
1342.00	0	0	260.00	1.00E-05	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:28

Number of Release Sites: 1.

Release Activity: Styrolution 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.17	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	8.30E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 28 RELEASE ACTIVITY: Styrolution 20 dy
 FACILITY NAME: BASF - JOLIET
 FACILITY LOCATION: CHANNAHON IL 60410
 RECEIVING WATER NAME: DES PLAINS R
 REACH NUMBER: 07120004002 FACILITY ON REACH: DISCHARGE TYPE: Direct
 Yes
 NPDES PERMIT #: IL0001619 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.0083	8.30E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	7537.30	4032.40	2877.81	2308.84	NA
CONCENTRATION ($\mu\text{g/L}$)	1.10E-03	2.06E-03	2.88E-03	3.59E-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}	3.32E-10 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	2.55E-08 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	7.80E-08 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES
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SCENARIO NUMBER: 28	RELEASE ACTIVITY: Styrolution 20 dy	
FACILITY NAME: BASF - JOLIET		
FACILITY LOCATION: CHANNAHON IL 60410		
RECEIVING STREAM NAME: DES PLAINS R		
REACH NUMBER: 07120004002	FACILITY ON REACH: Yes	DISCHARGE TYPE: Direct
NPDES PERMIT NUMBER: IL0001619	GAGING STATION ID: N/A	
GAGING STATION PERIOD OF RECORD: N/A	GAGING STATION NUMBER OF OBSERVATIONS: N/A	NUMBER OF STATIONS ON REACH: N/A
MEAN FLOW (MLD): 1.04E+04	7q10 FLOW (MLD): 2877.81	EFFLUENT FLOW (MLD):0.90

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 (%)
1.40	0	0	20.00	8.30E-03	0.00
50.00	0	0	20.00	8.30E-03	0.00
1342.00	0	0	20.00	8.30E-03	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:29

Number of Release Sites: 1.

Release Activity: Trane 260 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	2.60E-03	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	260.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-05	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

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

SCENARIO #: 29 Number of Sites: 1 RELEASE ACTIVITY:Trane
260 dy

SIC-CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

SIC-CODE (S): 3315-3317,3351-3357,3463,3497 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	260.	0.00001	1.00E-05	0.00	0.00

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	485.40	206.33	132.62	108.72	2.06E-05	4.85E-05	7.54E-05	9.20E-05
ALL	10	43.45	15.35	9.00	7.91	2.30E-04	6.51E-04	1.11E-03	1.26E-03

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	8.07E-11	9.02E-10	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	6.21E-09	6.94E-08	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.84E-09	2.47E-08	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 29

RELEASE ACTIVITY: Trane 260 dy

SIC CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

ASSOCIATED SIC CODES: 3315-3317,3351-3357,3463,3497

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
1.40	0	0	260.00	1.00E-05	0.00	High
50.00	0	0	260.00	1.00E-05	0.00	High
1342.00	0	0	260.00	1.00E-05	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:30

Number of Release Sites: 1.

Release Activity: Trane 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	3.40E-03	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	1.70E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

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

SCENARIO #: 30 Number of Sites: 1 RELEASE ACTIVITY:Trane
20 dy

SIC-CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

SIC-CODE (S): 3315-3317,3351-3357,3463,3497 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	20.	0.00017	1.70E-04	0.00	0.00

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	485.40	206.33	132.62	108.72	3.50E-04	8.24E-04	1.28E-03	1.56E-03
ALL	10	43.45	15.35	9.00	7.91	3.91E-03	1.11E-02	1.89E-02	2.15E-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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	1.06E-10	1.18E-09	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	8.12E-09	9.07E-08	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	3.12E-08	4.19E-07	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 30 RELEASE ACTIVITY: Trane 20 dy

SIC CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

ASSOCIATED SIC CODES: 3315-3317,3351-3357,3463,3497

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
1.40	0	1	20.00	1.70E-04	0.00	High
50.00	0	0	20.00	1.70E-04	0.00	High
1342.00	0	0	20.00	1.70E-04	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:31

Number of Release Sites: 1.

Release Activity: USSteel 260 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.26	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	260.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:31 RELEASE ACTIVITY: USSteel 260 dy
 FACILITY NAME: US STEEL GROUP-USX CORP
 FACILITY LOCATION: FAIRLESS HILLS PA 19030
 RECEIVING WATER NAME: DELAWARE R
 REACH NUMBER: 02040201004 FACILITY ON REACH: DISCHARGE TYPE: Direct
 No
 NPDES PERMIT #: PA0013463 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.001	1.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	1.95E+04	8214.97	6011.49	4798.16	NA
CONCENTRATION ($\mu\text{g/L}$)	5.14E-05	1.22E-04	1.66E-04	2.08E-04	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}	2.01E-10 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	1.55E-08 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	4.61E-09 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 31 RELEASE ACTIVITY: USSteel 260 dy
 FACILITY NAME: US STEEL GROUP-USX CORP
 FACILITY LOCATION: FAIRLESS HILLS PA 19030
 RECEIVING STREAM NAME: DELAWARE R
 REACH NUMBER: 02040201004 FACILITY ON REACH: No DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER:
 PA0013463 GAGING STATION ID: N/A
 GAGING STATION PERIOD OF
 RECORD: N/A GAGING STATION NUMBER OF STATIONS
 ON REACH: N/A
 NUMBER OF
 OBSERVATIONS: N/A
 MEAN FLOW (MLD): 3.28E+04 7q10 FLOW (MLD): 6011.49 EFFLUENT FLOW
 (MLD):120.94

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 (%)
1.40	0	0	260.00	1.00E-03	0.00
50.00	0	0	260.00	1.00E-03	0.00
1342.00	0	0	260.00	1.00E-03	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:32

Number of Release Sites: 1.

Release Activity: USSteel 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.26	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	1.30E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	5.99E-08 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

OTVD (80% WWT)

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:1

Number of Release Sites: 1.

Release Activity: Getzen 260 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	7.80E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	260.00	0.00/0.00	N/A	N/A
Per Site Release:	3.00E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 80

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

SCENARIO #: 1 Number of Sites: 1 RELEASE ACTIVITY: Getzen
260 dy

SIC-CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

SIC-CODE (S): 3315-3317,3351-3357,3463,3497 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
80.00	260.	0.0003	6.00E-05	0.00	0.00

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	485.40	206.33	132.62	108.72	1.24E-04	2.91E-04	4.52E-04	5.52E-04
ALL	10	43.45	15.35	9.00	7.91	1.38E-03	3.91E-03	6.67E-03	7.59E-03

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	4.84E-10	5.41E-09	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	3.73E-08	4.16E-07	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.10E-08	1.48E-07	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OTVD 80

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 1

RELEASE ACTIVITY: Getzen 260 dy

SIC CODE DESCRIPTION: Primary Metal Forming Manuf. (major users of metal working fluids)

ASSOCIATED SIC CODES: 3315-3317,3351-3357,3463,3497

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
1.40	1	3	260.00	3.00E-04	80.00	High
50.00	0	0	260.00	3.00E-04	80.00	High
1342.00	0	0	260.00	3.00E-04	80.00	High

6. OES: DRY CLEANING

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES DRY 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:1

Number of Release Sites: 1.

Release Activity: Boise 289 dy

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

Total Releases:	5.78E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	289.00	0.00/0.00	N/A	N/A
Per Site Release:	2.00E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES DRY 00

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

SCENARIO #: 1 Number of Sites: 1 RELEASE ACTIVITY: Boise
289 dy

SIC-CODE DESCRIPTION: Laundries, Dry Cleaners and Car Washes

SIC-CODE (S): 7211,7213-7219,7542 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	289.	0.0002	2.00E-04	0.00	0.00

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	474.19	176.41	112.78	92.55	4.22E-04	1.13E-03	1.77E-03	2.16E-03
ALL	10	18.26	3.16	1.76	1.48	1.10E-02	6.33E-02	0.11	0.14

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	1.84E-09	4.77E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	1.41E-07	3.67E-06	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	4.29E-08	2.40E-06	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES DRY 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 1 RELEASE ACTIVITY: Boise 289 dy

SIC CODE DESCRIPTION: Laundries, Dry Cleaners and Car Washes

ASSOCIATED SIC CODES: 7211,7213-7219,7542

SIC CODE RESULTS

COC ($\mu\text{g/L}$)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Loading (kg/site/day)	Waste Water Treatment (%)	High/Avg Analysis
1.40	0	0	289.00	2.00E-04	0.00	High
50.00	0	0	289.00	2.00E-04	0.00	High
1342.00	0	0	289.00	2.00E-04	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES DRY 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:2

Number of Release Sites: 1.

Release Activity: Boise 307 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	6.14E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	307.00	0.00/0.00	N/A	N/A
Per Site Release:	2.00E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES DRY 00

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

SCENARIO #: 2 Number of Sites: 1 RELEASE ACTIVITY: Boise
307 dy

SIC-CODE DESCRIPTION: Laundries, Dry Cleaners and Car Washes

SIC-CODE (S): 7211,7213-7219,7542 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	307.	0.0002	2.00E-04	0.00	0.00

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	474.19	176.41	112.78	92.55	4.22E-04	1.13E-03	1.77E-03	2.16E-03
ALL	10	18.26	3.16	1.76	1.48	1.10E-02	6.33E-02	0.11	0.14

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	1.95E-09	5.07E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	1.50E-07	3.90E-06	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	4.29E-08	2.40E-06	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES DRY 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 2 RELEASE ACTIVITY: Boise 307 dy

SIC CODE DESCRIPTION: Laundries, Dry Cleaners and Car Washes

ASSOCIATED SIC CODES: 7211,7213-7219,7542

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
1.40	0	0	307.00	2.00E-04	0.00	High
50.00	0	0	307.00	2.00E-04	0.00	High
1342.00	0	0	307.00	2.00E-04	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES DRY 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:3

Number of Release Sites: 1.

Release Activity: Boise 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	6.00E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	3.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES DRY 00

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

SCENARIO #: 3 Number of Sites: 1 RELEASE ACTIVITY:Boise
20 dy

SIC-CODE DESCRIPTION: Laundries, Dry Cleaners and Car Washes

SIC-CODE (S): 7211,7213-7219,7542 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	20.	0.003	3.00E-03	0.00	0.00

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	474.19	176.41	112.78	92.55	6.33E-03	1.70E-02	2.66E-02	3.24E-02
ALL	10	18.26	3.16	1.76	1.48	0.16	0.95	1.70	2.03

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	1.91E-09	4.95E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	1.47E-07	3.81E-06	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	6.44E-07	3.60E-05	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES DRY 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 3 RELEASE ACTIVITY: Boise 20 dy

SIC CODE DESCRIPTION: Laundries, Dry Cleaners and Car Washes

ASSOCIATED SIC CODES: 7211,7213-7219,7542

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
1.40	0	1	20.00	3.00E-03	0.00	High
50.00	0	0	20.00	3.00E-03	0.00	High
1342.00	0	0	20.00	3.00E-03	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES DRY 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:4

Number of Release Sites: 1.

Release Activity: Unifirst 289 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	1.45E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	289.00	0.00/0.00	N/A	N/A
Per Site Release:	5.00E-05	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES DRY 00

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

SCENARIO #: 4 Number of Sites: 1 RELEASE
ACTIVITY: Unifirst 289 dy

SIC-CODE DESCRIPTION: Laundries, Dry Cleaners and Car Washes

SIC-CODE (S): 7211,7213-7219,7542 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	289.	0.00005	5.00E-05	0.00	0.00

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	474.19	176.41	112.78	92.55	1.05E-04	2.83E-04	4.43E-04	5.40E-04
ALL	10	18.26	3.16	1.76	1.48	2.74E-03	1.58E-02	2.84E-02	3.38E-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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	4.59E-10	1.19E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	3.53E-08	9.17E-07	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.07E-08	5.99E-07	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES DRY 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 4 RELEASE ACTIVITY: Unifirst 289 dy

SIC CODE DESCRIPTION: Laundries, Dry Cleaners and Car Washes

ASSOCIATED SIC CODES: 7211,7213-7219,7542

SIC CODE RESULTS

COC ($\mu\text{g/L}$)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Loading (kg/site/day)	Waste Water Treatment (%)	High/Avg Analysis
1.40	0	0	289.00	5.00E-05	0.00	High
50.00	0	0	289.00	5.00E-05	0.00	High
1342.00	0	0	289.00	5.00E-05	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES DRY 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:5

Number of Release Sites: 1.

Release Activity: Unifirst 307 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	1.23E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	307.00	0.00/0.00	N/A	N/A
Per Site Release:	4.00E-05	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES DRY 00

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

SCENARIO #: 5 Number of Sites: 1 RELEASE
ACTIVITY: Unifirst 307 dy

SIC-CODE DESCRIPTION: Laundries, Dry Cleaners and Car Washes

SIC-CODE (S): 7211,7213-7219,7542 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	307.	0.00004	4.00E-05	0.00	0.00

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	474.19	176.41	112.78	92.55	8.44E-05	2.27E-04	3.55E-04	4.32E-04
ALL	10	18.26	3.16	1.76	1.48	2.19E-03	1.27E-02	2.27E-02	2.70E-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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	3.90E-10	1.01E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	3.00E-08	7.80E-07	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	8.59E-09	4.79E-07	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES DRY 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 5 RELEASE ACTIVITY: Unifirst 307 dy

SIC CODE DESCRIPTION: Laundries, Dry Cleaners and Car Washes

ASSOCIATED SIC CODES: 7211,7213-7219,7542

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
1.40	0	0	307.00	4.00E-05	0.00	High
50.00	0	0	307.00	4.00E-05	0.00	High
1342.00	0	0	307.00	4.00E-05	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES DRY 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:6

Number of Release Sites: 1.

Release Activity: Unifirst 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	1.36E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	6.80E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES DRY 00

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

SCENARIO #: 6 Number of Sites: 1 RELEASE
ACTIVITY: Unifirst 20 dy

SIC-CODE DESCRIPTION: Laundries, Dry Cleaners and Car Washes

SIC-CODE (S): 7211,7213-7219,7542 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	20.	0.00068	6.80E-04	0.00	0.00

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	474.19	176.41	112.78	92.55	1.43E-03	3.85E-03	6.03E-03	7.35E-03
ALL	10	18.26	3.16	1.76	1.48	3.72E-02	0.22	0.39	0.46

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	4.32E-10	1.12E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	3.32E-08	8.63E-07	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.46E-07	8.15E-06	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES DRY 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 6 RELEASE ACTIVITY: Unifirst 20 dy

SIC CODE DESCRIPTION: Laundries, Dry Cleaners and Car Washes

ASSOCIATED SIC CODES: 7211,7213-7219,7542

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
1.40	0	0	20.00	6.80E-04	0.00	High
50.00	0	0	20.00	6.80E-04	0.00	High
1342.00	0	0	20.00	6.80E-04	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES DRY 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:1

Number of Release Sites: 1.

Release Activity: High End 307 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.61	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	307.00	0.00/0.00	N/A	N/A
Per Site Release:	2.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES DRY 80

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

SCENARIO #: 1 Number of Sites: 1 RELEASE ACTIVITY: High
End 307 dy

SIC-CODE DESCRIPTION: Laundries, Dry Cleaners and Car Washes

SIC-CODE (S): 7211,7213-7219,7542 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
80.00	307.	0.002	4.00E-04	0.00	0.00

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	474.19	176.41	112.78	92.55	8.44E-04	2.27E-03	3.55E-03	4.32E-03
ALL	10	18.26	3.16	1.76	1.48	2.19E-02	0.13	0.23	0.27

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	3.90E-09	1.01E-07	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	3.00E-07	7.80E-06	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	8.59E-08	4.79E-06	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES DRY 80

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 1 RELEASE ACTIVITY: High End 307 dy

SIC CODE DESCRIPTION: Laundries, Dry Cleaners and Car Washes

ASSOCIATED SIC CODES: 7211,7213-7219,7542

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
1.40	0	0	307.00	2.00E-03	80.00	High
50.00	0	0	307.00	2.00E-03	80.00	High
1342.00	0	0	307.00	2.00E-03	80.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES DRY 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:2

Number of Release Sites: 1.

Release Activity: Central Tendency 289 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.29	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	289.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES DRY 80

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

SCENARIO #: 2 Number of Sites: 1 RELEASE ACTIVITY: Central Tendency 289 dy

SIC-CODE DESCRIPTION: Laundries, Dry Cleaners and Car Washes

SIC-CODE (S): 7211,7213-7219,7542 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
80.00	289.	0.001	2.00E-04	0.00	0.00

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	474.19	176.41	112.78	92.55	4.22E-04	1.13E-03	1.77E-03	2.16E-03
ALL	10	18.26	3.16	1.76	1.48	1.10E-02	6.33E-02	0.11	0.14

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	1.84E-09	4.77E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	1.41E-07	3.67E-06	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	4.29E-08	2.40E-06	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES DRY 80

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 2 RELEASE ACTIVITY: Central Tendency 289 dy

SIC CODE DESCRIPTION: Laundries, Dry Cleaners and Car Washes

ASSOCIATED SIC CODES: 7211,7213-7219,7542

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
1.40	0	0	289.00	1.00E-03	80.00	High
50.00	0	0	289.00	1.00E-03	80.00	High
1342.00	0	0	289.00	1.00E-03	80.00	High

7 OES: CHEMICAL REACTANT

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES CHEM 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:1

Number of Release Sites: 1.

Release Activity: Alliant 172 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	9.98E-04 (kg/yr)	N/A (kg/yr)	N/A (kg/yr)	N/A (kg/yr)

Non-sludge/Sludge

Release Days/yr:	172.00	0.00/0.00	N/A	N/A
Per Site Release:	5.80E-06 (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: PERC OES CHEM 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:1 RELEASE ACTIVITY: Alliant 172 dy

FACILITY NAME: THIOKOL CORPORATION

FACILITY LOCATION: ELKTON MD 21921

RECEIVING WATER NAME: LITTLE ELK CR

REACH NUMBER: 02060002051 FACILITY ON REACH: DISCHARGE TYPE: Direct
Yes

NPDES PERMIT #: MD0000078 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	172.	5.80e-06	5.80E-06	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	50.94	18.40	10.86	9.06	NA
CONCENTRATION ($\mu\text{g/L}$)	1.14E-04	3.15E-04	5.34E-04	6.40E-04	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}	2.95E-10 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	2.27E-08 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.19E-08 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES CHEM 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 1 RELEASE ACTIVITY: Alliant 172 dy

FACILITY NAME: THIOKOL CORPORATION

FACILITY LOCATION: ELKTON MD 21921

RECEIVING STREAM NAME: LITTLE ELK CR

REACH NUMBER: 02060002051 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: MD0000078 GAGING STATION ID: N/A

GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A

MEAN FLOW (MLD): 181.09 7q10 FLOW (MLD): 10.86 EFFLUENT FLOW (MLD):0.70

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 (%)
1.40	0	0	172.00	6.00E-06	0.00
50.00	0	0	172.00	6.00E-06	0.00
1342.00	0	0	172.00	6.00E-06	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES CHEM 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:2

Number of Release Sites: 1.

Release Activity: Alliant 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	1.00E-03	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	5.00E-05	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.03E-07 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES CHEM 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 2 RELEASE ACTIVITY: Alliant 20 dy

FACILITY NAME: THIOKOL CORPORATION

FACILITY LOCATION: ELKTON MD 21921

RECEIVING STREAM NAME: LITTLE ELK CR

REACH NUMBER: 02060002051 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: MD0000078 GAGING STATION ID: N/A

GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A

MEAN FLOW (MLD): 181.09 7q10 FLOW (MLD): 10.86 EFFLUENT FLOW (MLD):0.70

RESULTS					
COC ($\mu\text{g/L}$)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)
1.40	0	0	20.00	5.00E-05	0.00
50.00	0	0	20.00	5.00E-05	0.00
1342.00	0	0	20.00	5.00E-05	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES CHEM 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:3

Number of Release Sites: 1.

Release Activity: GE 172 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.15	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	172.00	0.00/0.00	N/A	N/A
Per Site Release:	8.70E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

CHEMICAL ID: PERC OES CHEM 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS		
SCENARIO #: 3	RELEASE ACTIVITY: GE 172 dy	
FACILITY NAME: GENERAL ELECTRIC AIRCRAFT ENG.		
FACILITY LOCATION: LYNN MA 01910		
RECEIVING WATER NAME: ATLANTIC OCEAN		
REACH NUMBER: 01090001013	FACILITY ON REACH: Yes	DISCHARGE TYPE: Direct
NPDES PERMIT #: MA0003905	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.	172.	235.54	0.00087	8.70E-04	0.00

AQUATIC EXPOSURE ESTIMATES		
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)
ACUTE SCENARIO	1.00	3.69E-03
CHRONIC SCENARIO	1.00	3.69E-03

FISH INGESTION EXPOSURE ESTIMATES					
Exposure Units	Results	ASSUMPTIONS			
		ED	AT	BW	IR

		(years)	(years)	(kg)	(g/day)
Cancer					
LADD _{pot} (mg/kg/day)	0.00	33.00	78.00	80.00	7.50
LADC _{pot} (mg/kg)	0.00	33.00	78.00	NA	NA
Acute					
ADR _{pot} (mg/kg/day)	0.00	NA	1 day	80.00	279.00

Lakes Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES CHEM 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:4

Number of Release Sites: 1.

Release Activity: GE 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.15	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	7.50E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

CHEMICAL ID: PERC OES CHEM 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS		
SCENARIO #: 4	RELEASE ACTIVITY: GE 20 dy	
FACILITY NAME: GENERAL ELECTRIC AIRCRAFT ENG.		
FACILITY LOCATION: LYNN MA 01910		
RECEIVING WATER NAME: ATLANTIC OCEAN		
REACH NUMBER: 01090001013	FACILITY ON REACH: Yes	DISCHARGE TYPE: Direct
NPDES PERMIT #: MA0003905	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.	20.	235.54	0.0075	7.50E-03	0.00

AQUATIC EXPOSURE ESTIMATES		
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)
ACUTE SCENARIO	1.00	3.18E-02
CHRONIC SCENARIO	1.00	3.18E-02

FISH INGESTION EXPOSURE ESTIMATES					
Exposure Units	Results	ASSUMPTIONS			
		ED	AT	BW	IR

		(years)	(years)	(kg)	(g/day)
Cancer					
LADD _{pot} (mg/kg/day)	0.00	33.00	78.00	80.00	7.50
LADC _{pot} (mg/kg)	0.00	33.00	78.00	NA	NA
Acute					
ADR _{pot} (mg/kg/day)	0.00	NA	1 day	80.00	279.00

Lakes Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES CHEM 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:5

Number of Release Sites: 1.

Release Activity: McCanna 172 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	7.05E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	172.00	0.00/0.00	N/A	N/A
Per Site Release:	4.10E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES CHEM 00

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

SCENARIO #: 5 Number of Sites: 1 RELEASE
ACTIVITY:McCanna 172 dy

SIC-CODE DESCRIPTION: Metal Finishing

SIC-CODE (S): 34xx - 39xx EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	172.	0.00041	4.10E-04	0.00	0.00

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	300.46	107.45	67.50	55.59	1.36E-03	3.82E-03	6.07E-03	7.38E-03
ALL	10	23.74	4.69	2.64	2.27	1.73E-02	8.74E-02	0.16	0.18

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	3.54E-09	4.48E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	2.72E-07	3.44E-06	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.45E-07	3.31E-06	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES CHEM 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 5 RELEASE ACTIVITY: McCanna 172 dy

SIC CODE DESCRIPTION: Metal Finishing

ASSOCIATED SIC CODES: 34xx - 39xx

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
1.40	0	0	172.00	4.10E-04	0.00	High
50.00	0	0	172.00	4.10E-04	0.00	High
1342.00	0	0	172.00	4.10E-04	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES CHEM 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:6

Number of Release Sites: 1.

Release Activity: McCanna 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	7.00E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	3.50E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES CHEM 00

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

SCENARIO #: 6 Number of Sites: 1 RELEASE
ACTIVITY:McCanna 20 dy

SIC-CODE DESCRIPTION: Metal Finishing

SIC-CODE (S): 34xx - 39xx EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	20.	0.0035	3.50E-03	0.00	0.00

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	300.46	107.45	67.50	55.59	1.16E-02	3.26E-02	5.19E-02	6.30E-02
ALL	10	23.74	4.69	2.64	2.27	0.15	0.75	1.33	1.54

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	3.51E-09	4.44E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	2.70E-07	3.42E-06	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.23E-06	2.83E-05	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES CHEM 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 6

RELEASE ACTIVITY: McCanna 20 dy

SIC CODE DESCRIPTION: Metal Finishing

ASSOCIATED SIC CODES: 34xx - 39xx

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
1.40	0	1	20.00	3.50E-03	0.00	High
50.00	0	0	20.00	3.50E-03	0.00	High
1342.00	0	0	20.00	3.50E-03	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES CHEM 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:1

Number of Release Sites: 1.

Release Activity: Ducommun 172 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.45	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	172.00	0.00/0.00	N/A	N/A
Per Site Release:	2.62E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES CHEM 80

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

SCENARIO #: 1 Number of Sites: 1 RELEASE
ACTIVITY: Ducommun 172
dy

SIC-CODE DESCRIPTION: Metal Finishing

SIC-CODE (S): 34xx - 39xx EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
80.00	172.	0.00262	5.24E-04	0.00	0.00

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	300.46	107.45	67.50	55.59	1.74E-03	4.88E-03	7.76E-03	9.43E-03
ALL	10	23.74	4.69	2.64	2.27	2.21E-02	0.11	0.20	0.23

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	4.52E-09	5.72E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	3.48E-07	4.40E-06	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.85E-07	4.23E-06	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES CHEM 80

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 1 RELEASE ACTIVITY: Ducommun 172 dy

SIC CODE DESCRIPTION: Metal Finishing

ASSOCIATED SIC CODES: 34xx - 39xx

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
1.40	0	0	172.00	2.62E-03	80.00	High
50.00	0	0	172.00	2.62E-03	80.00	High
1342.00	0	0	172.00	2.62E-03	80.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES CHEM 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:2

Number of Release Sites: 1.

Release Activity: Weatherford 208 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	2.27	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	208.00	0.00/0.00	N/A	N/A
Per Site Release:	1.09E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES CHEM 80

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:2 RELEASE ACTIVITY: Weatherford 208 dy

FACILITY NAME: WEATHERFORD CITY OF

FACILITY LOCATION: WEATHERFORD TX 76086

RECEIVING WATER NAME: WILLOW CR

REACH NUMBER: 12030102032 FACILITY ON REACH: DISCHARGE TYPE: Direct
No

NPDES PERMIT #: TX0047724 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
80.	208.	0.0109	2.18E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	18.09	10.59	6.13	6.13	NA
CONCENTRATION ($\mu\text{g/L}$)	0.12	0.21	0.36	0.36	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}	3.78E-07 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	2.91E-05 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	7.80E-06 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES CHEM 80

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 2 RELEASE ACTIVITY: Weatherford 208 dy
 FACILITY NAME: WEATHERFORD CITY OF
 FACILITY LOCATION: WEATHERFORD TX 76086
 RECEIVING STREAM NAME: WILLOW CR
 REACH NUMBER: 12030102032 FACILITY ON REACH: No DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: TX0047724 GAGING STATION ID: N/A
 GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A
 MEAN FLOW (MLD): 39.54 7q10 FLOW (MLD): 6.13 EFFLUENT FLOW (MLD):6.13

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 (%)
1.40	0	0	208.00	1.09E-02	80.00
50.00	0	0	208.00	1.09E-02	80.00
1342.00	0	0	208.00	1.09E-02	80.00

8. OES: INDUSTRIAL PROCESSING AID

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:1

Number of Release Sites: 1.

Release Activity: ChevronUT 300 dy

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

Total Releases:	3.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	300.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:1 RELEASE ACTIVITY: ChevronUT 300 dy

FACILITY NAME: CHEVRON U.S.A. INC

FACILITY LOCATION: SALT LAKE CITY UT 84125

RECEIVING WATER NAME: JORDAN R

REACH NUMBER: 16020204001 FACILITY ON REACH: DISCHARGE TYPE: Direct
No

NPDES PERMIT #: UT0000175 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	300.	0.01	1.00E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	127.51	52.86	32.39	26.82	NA
CONCENTRATION ($\mu\text{g/L}$)	7.84E-02	0.19	0.31	0.37	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}	3.55E-07 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	2.73E-05 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	7.16E-06 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:2

Number of Release Sites: 1.

Release Activity: ChevronUT 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	1.74	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	8.70E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	6.23E-05 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:3

Number of Release Sites: 1.

Release Activity: ChevronCA 300 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.90	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	300.00	0.00/0.00	N/A	N/A
Per Site Release:	3.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

CHEMICAL ID: PERC OES IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS		
SCENARIO #: 3	RELEASE ACTIVITY: ChevronCA 300 dy	
FACILITY NAME: CHEVRON PRODUCTS COMPANY		
FACILITY LOCATION: RICHMOND CA 94802		
RECEIVING WATER NAME: SAN PABLO BAY		
REACH NUMBER: 18050002002	FACILITY ON REACH: No	DISCHARGE TYPE: Direct
NPDES PERMIT #: CA0005134	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.	300.	17.21	0.003	3.00E-03	0.00

AQUATIC EXPOSURE ESTIMATES		
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)
ACUTE SCENARIO	1.00	0.17
CHRONIC SCENARIO	10.00	1.74E-02

FISH INGESTION EXPOSURE ESTIMATES				
Exposure Units	Results	ASSUMPTIONS		
		ED	AT	BW

		(years)	(years)	(kg)	(g/day)
Cancer					
LADD _{pot} (mg/kg/day)	0.00	33.00	78.00	80.00	7.50
LADC _{pot} (mg/kg)	0.00	33.00	78.00	NA	NA
Acute					
ADR _{pot} (mg/kg/day)	0.00	NA	1 day	80.00	279.00

Lakes Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:4

Number of Release Sites: 1.

Release Activity: ChevronCA 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.92	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	4.60E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

CHEMICAL ID: PERC OES IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS		
SCENARIO #: 4	RELEASE ACTIVITY: ChevronCA 20 dy	
FACILITY NAME: CHEVRON PRODUCTS COMPANY		
FACILITY LOCATION: RICHMOND CA 94802		
RECEIVING WATER NAME: SAN PABLO BAY		
REACH NUMBER: 18050002002	FACILITY ON REACH: No	DISCHARGE TYPE: Direct
NPDES PERMIT #: CA0005134	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.	20.	17.21	0.046	4.60E-02	0.00

AQUATIC EXPOSURE ESTIMATES		
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)
ACUTE SCENARIO	1.00	2.67
CHRONIC SCENARIO	10.00	0.27

FISH INGESTION EXPOSURE ESTIMATES					
Exposure Units	Results	ASSUMPTIONS			
		ED	AT	BW	IR

		(years)	(years)	(kg)	(g/day)
Cancer					
LADD _{pot} (mg/kg/day)	0.00	33.00	78.00	80.00	7.50
LADC _{pot} (mg/kg)	0.00	33.00	78.00	NA	NA
Acute					
ADR _{pot} (mg/kg/day)	0.00	NA	1 day	80.00	279.00

Lakes Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:5

Number of Release Sites: 1.

Release Activity: CHS 300 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	9.00E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	300.00	0.00/0.00	N/A	N/A
Per Site Release:	3.00E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:5 RELEASE ACTIVITY: CHS 300 dy

FACILITY NAME: NATIONAL COOPERATIVE REFINERY

FACILITY LOCATION: KS

RECEIVING WATER NAME: SUN CR

REACH NUMBER: 11030012013 FACILITY ON REACH: DISCHARGE TYPE: Direct
No

NPDES PERMIT #: KS0000337 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	300.	0.0003	3.00E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
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FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	18.48	11.72	6.81	6.81	NA
CONCENTRATION (µg/L)	1.62E-02	2.56E-02	4.41E-02	4.41E-02	NA

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES				
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Exposure Units	Drinking Water Results	Drinking Water Units	Fish Ingestion Results	Fish Ingestion Units
Cancer				
LADD _{pot}	7.34E-08 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	5.64E-06 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	9.69E-07 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 5 RELEASE ACTIVITY: CHS 300 dy
 FACILITY NAME: NATIONAL COOPERATIVE REFINERY
 FACILITY LOCATION: KS
 RECEIVING STREAM NAME: SUN CR
 REACH NUMBER: 11030012013 FACILITY ON REACH: No DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: GAGING STATION ID: N/A
 KS0000337
 GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS
 RECORD: N/A NUMBER OF ON REACH: N/A
 OBSERVATIONS: N/A
 MEAN FLOW (MLD): 36.60 7q10 FLOW (MLD): 6.81 EFFLUENT FLOW
 (MLD):6.81

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 (%)
1.40	0	0	300.00	3.00E-04	0.00
50.00	0	0	300.00	3.00E-04	0.00
1342.00	0	0	300.00	3.00E-04	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:6

Number of Release Sites: 1.

Release Activity: CHS 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	9.00E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	4.50E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.45E-05 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:7

Number of Release Sites: 1.

Release Activity: Exxon 300 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	6.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	300.00	0.00/0.00	N/A	N/A
Per Site Release:	2.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.19E-04 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 7 RELEASE ACTIVITY: Exxon 300 dy
 FACILITY NAME: EXXONMOBIL OIL CORPORATION
 FACILITY LOCATION: BEAUMONT TX 77704
 RECEIVING STREAM NAME: WILLOW MARSH BAYOU
 REACH NUMBER: 12040201017 FACILITY ON REACH: No DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: TX0068934 GAGING STATION ID: N/A
 GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A
 MEAN FLOW (MLD): 357.53 7q10 FLOW (MLD): 3.61 EFFLUENT FLOW (MLD):3.61

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 (%)
1.40	15	55	300.00	2.00E-02	0.00
50.00	0	0	300.00	2.00E-02	0.00
1342.00	0	0	300.00	2.00E-02	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:8

Number of Release Sites: 1.

Release Activity: Exxon 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	7.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	0.35	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	2.09E-03 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 8 RELEASE ACTIVITY: Exxon 20 dy
 FACILITY NAME: EXXONMOBIL OIL CORPORATION
 FACILITY LOCATION: BEAUMONT TX 77704
 RECEIVING STREAM NAME: WILLOW MARSH BAYOU
 REACH NUMBER: 12040201017 FACILITY ON REACH: No DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: TX0068934 GAGING STATION ID: N/A
 GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A
 MEAN FLOW (MLD): 357.53 7q10 FLOW (MLD): 3.61 EFFLUENT FLOW (MLD):3.61

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 (%)
1.40	4	15	20.00	0.35	0.00
50.00	0	2	20.00	0.35	0.00
1342.00	0	0	20.00	0.35	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:9

Number of Release Sites: 1.

Release Activity: Holly 300 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.90	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	300.00	0.00/0.00	N/A	N/A
Per Site Release:	3.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.29E-05 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 9 RELEASE ACTIVITY: Holly 300 dy

FACILITY NAME: FRONTIER REFINING COMPANY

FACILITY LOCATION: EL DORADO KS 67042

RECEIVING STREAM NAME: WALNUT R

REACH NUMBER: 11030017002 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: GAGING STATION ID: N/A
KS0000761

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS
RECORD: N/A NUMBER OF ON REACH: N/A
OBSERVATIONS: N/A

MEAN FLOW (MLD): 481.16 7q10 FLOW (MLD): 5.07 EFFLUENT FLOW
(MLD):5.07

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 (%)
1.40	1	2	300.00	3.00E-03	0.00
50.00	0	0	300.00	3.00E-03	0.00
1342.00	0	0	300.00	3.00E-03	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:10

Number of Release Sites: 1.

Release Activity: Holly 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.92	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	4.60E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.98E-04 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:11

Number of Release Sites: 1.

Release Activity: Hunt 300 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	3.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	300.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:11 RELEASE ACTIVITY: Hunt 300 dy

FACILITY NAME: HUNT REFINING COMPANY TUSCA

FACILITY LOCATION: TUSCALOOSA AL 35401

RECEIVING WATER NAME: BLACK WARRIOR R

REACH NUMBER: 03160112001 FACILITY ON REACH: DISCHARGE TYPE: Direct
Yes

NPDES PERMIT #: AL0000973 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	300.	0.01	1.00E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	2884.13	456.49	301.74	245.94	NA
CONCENTRATION (µg/L)	3.47E-03	2.19E-02	3.31E-02	4.07E-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}	1.57E-08 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	1.21E-06 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	8.30E-07 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 11 RELEASE ACTIVITY: Hunt 300 dy
 FACILITY NAME: HUNT REFINING COMPANY TUSCA
 FACILITY LOCATION: TUSCALOOSA AL 35401
 RECEIVING STREAM NAME: BLACK WARRIOR R
 REACH NUMBER: 03160112001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: GAGING STATION ID: 02465000
 AL0000973
 GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS
 RECORD: 01/01/66 - 07/18/90 NUMBER OF ON REACH: 1
 OBSERVATIONS: 8963.00
 50 %ile FLOW (MLD): 1.07E+04 10 %ile FLOW (MLD): EFFLUENT FLOW
 2130.45 (MLD):27.78

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 (%)
1.40	0	0	300.00	1.00E-02	0.00
50.00	0	0	300.00	1.00E-02	0.00
1342.00	0	0	300.00	1.00E-02	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:12

Number of Release Sites: 1.

Release Activity: Hunt 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	4.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	0.20	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.66E-05 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:13

Number of Release Sites: 1.

Release Activity: Marathon 300 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	3.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	300.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

CHEMICAL ID: PERC OES IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS		
SCENARIO #: 13	RELEASE ACTIVITY: Marathon 300 dy	
FACILITY NAME: MARATHON ASHLAND PETROLEUM-		
FACILITY LOCATION: GARYVILLE LA 70051		
RECEIVING WATER NAME: L MAUREPAS		
REACH NUMBER: 08070204018	FACILITY ON REACH: No	DISCHARGE TYPE: Direct
NPDES PERMIT #: LA0045683	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.	300.	21.15	0.01	1.00E-02	0.00

AQUATIC EXPOSURE ESTIMATES		
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)
ACUTE SCENARIO	1.00	0.47
CHRONIC SCENARIO	1.00	0.47

FISH INGESTION EXPOSURE ESTIMATES					
Exposure Units	Results	ASSUMPTIONS			
		ED	AT	BW	IR

		(years)	(years)	(kg)	(g/day)
Cancer					
LADD _{pot} (mg/kg/day)	0.00	33.00	78.00	80.00	7.50
LADC _{pot} (mg/kg)	0.00	33.00	78.00	NA	NA
Acute					
ADR _{pot} (mg/kg/day)	0.00	NA	1 day	80.00	279.00

Lakes Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:14

Number of Release Sites: 1.

Release Activity: Marathon 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	2.80	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	0.14	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

CHEMICAL ID: PERC OES IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS		
SCENARIO #: 14	RELEASE ACTIVITY: Marathon 20 dy	
FACILITY NAME: MARATHON ASHLAND PETROLEUM-		
FACILITY LOCATION: GARYVILLE LA 70051		
RECEIVING WATER NAME: L MAUREPAS		
REACH NUMBER: 08070204018	FACILITY ON REACH: No	DISCHARGE TYPE: Direct
NPDES PERMIT #: LA0045683	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.	20.	21.15	0.14	0.14	0.00

AQUATIC EXPOSURE ESTIMATES		
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)
ACUTE SCENARIO	1.00	6.62
CHRONIC SCENARIO	1.00	6.62

FISH INGESTION EXPOSURE ESTIMATES					
Exposure Units	Results	ASSUMPTIONS			
		ED	AT	BW	IR

		(years)	(years)	(kg)	(g/day)
Cancer					
LADD _{pot} (mg/kg/day)	0.00	33.00	78.00	80.00	7.50
LADC _{pot} (mg/kg)	0.00	33.00	78.00	NA	NA
Acute					
ADR _{pot} (mg/kg/day)	0.00	NA	1 day	80.00	279.00

Lakes Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:15

Number of Release Sites: 1.

Release Activity: Occidental 300 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	51.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	300.00	0.00/0.00	N/A	N/A
Per Site Release:	0.17	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

CHEMICAL ID: PERC OES IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS		
SCENARIO #: 15	RELEASE ACTIVITY: Occidental 300 dy	
FACILITY NAME: OCCIDENTAL CHEMICAL CORP		
FACILITY LOCATION: NIAGARA FALLS NY 14302		
RECEIVING WATER NAME: NIAGARA R		
REACH NUMBER: 04120104003	FACILITY ON REACH: Yes	DISCHARGE TYPE: Direct
NPDES PERMIT #: NY0003336	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.	300.	131.81	0.17	0.17	0.00

AQUATIC EXPOSURE ESTIMATES		
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)
ACUTE SCENARIO	1.00	1.29
CHRONIC SCENARIO	1.00	1.29

FISH INGESTION EXPOSURE ESTIMATES				
Exposure Units	Results	ASSUMPTIONS		
		ED	AT	BW

		(years)	(years)	(kg)	(g/day)
Cancer					
LADD _{pot} (mg/kg/day)	0.00	33.00	78.00	80.00	7.50
LADC _{pot} (mg/kg)	0.00	33.00	78.00	NA	NA
Acute					
ADR _{pot} (mg/kg/day)	0.00	NA	1 day	80.00	279.00

Lakes Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:16

Number of Release Sites: 1.

Release Activity: Occidental 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	52.20	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	2.61	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

CHEMICAL ID: PERC OES IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS		
SCENARIO #: 16	RELEASE ACTIVITY: Occidental 20 dy	
FACILITY NAME: OCCIDENTAL CHEMICAL CORP		
FACILITY LOCATION: NIAGARA FALLS NY 14302		
RECEIVING WATER NAME: NIAGARA R		
REACH NUMBER: 04120104003	FACILITY ON REACH: Yes	DISCHARGE TYPE: Direct
NPDES PERMIT #: NY0003336	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.	20.	131.81	2.61	2.61	0.00

AQUATIC EXPOSURE ESTIMATES		
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)
ACUTE SCENARIO	1.00	19.80
CHRONIC SCENARIO	1.00	19.80

FISH INGESTION EXPOSURE ESTIMATES					
Exposure Units	Results	ASSUMPTIONS			
		ED	AT	BW	IR

		(years)	(years)	(kg)	(g/day)
Cancer					
LADD _{pot} (mg/kg/day)	0.00	33.00	78.00	80.00	7.50
LADC _{pot} (mg/kg)	0.00	33.00	78.00	NA	NA
Acute					
ADR _{pot} (mg/kg/day)	0.00	NA	1 day	80.00	279.00

Lakes Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:17

Number of Release Sites: 1.

Release Activity: Tesoro 300 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	9.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	300.00	0.00/0.00	N/A	N/A
Per Site Release:	3.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

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

SCENARIO #: 17 Number of Sites: 1 RELEASE ACTIVITY: Tesoro
300 dy

SIC-CODE DESCRIPTION: Petroleum Refining

SIC-CODE (S): 2911 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	300.	0.03	3.00E-02	0.00	0.00

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	663.21	226.24	145.89	119.52	4.52E-02	0.13	0.21	0.25
ALL	10	20.94	4.48	2.52	2.22	1.43	6.70	11.90	13.51

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	2.04E-07	6.48E-06	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	1.57E-05	4.98E-04	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	5.02E-06	2.54E-04	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 17

RELEASE ACTIVITY: Tesoro 300 dy

SIC CODE DESCRIPTION: Petroleum Refining

ASSOCIATED SIC CODES: 2911

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
1.40	46	169	300.00	3.00E-02	0.00	High
50.00	5	17	300.00	3.00E-02	0.00	High
1342.00	0	0	300.00	3.00E-02	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:18

Number of Release Sites: 1.

Release Activity: Tesoro 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	8.60	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	0.43	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

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

SCENARIO #: 18 Number of Sites: 1 RELEASE ACTIVITY: Tesoro
20 dy

SIC-CODE DESCRIPTION: Petroleum Refining

SIC-CODE (S): 2911 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	20.	0.43	0.43	0.00	0.00

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	663.21	226.24	145.89	119.52	0.65	1.90	2.95	3.60
ALL	10	20.94	4.48	2.52	2.22	20.53	95.98	170.63	193.69

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	1.95E-07	6.19E-06	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	1.50E-05	4.76E-04	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	7.20E-05	3.64E-03	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 18 RELEASE ACTIVITY: Tesoro 20 dy

SIC CODE DESCRIPTION: Petroleum Refining

ASSOCIATED SIC CODES: 2911

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
1.40	5	19	20.00	0.43	0.00	High
50.00	2	7	20.00	0.43	0.00	High
1342.00	0	1	20.00	0.43	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:19

Number of Release Sites: 1.

Release Activity: Dow 300 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	9.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	300.00	0.00/0.00	N/A	N/A
Per Site Release:	3.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.22E-06 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 19 RELEASE ACTIVITY: Dow 300 dy
 FACILITY NAME: DOW CHEM-MIDLAND
 FACILITY LOCATION: MIDLAND MI 48667
 RECEIVING STREAM NAME: TITTABABASSEE R
 REACH NUMBER: 04080201001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: MI0000868 GAGING STATION ID: N/A
 GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A
 MEAN FLOW (MLD): 4310.95 7q10 FLOW (MLD): 631.43 EFFLUENT FLOW (MLD):60.26

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 (%)
1.40	0	0	300.00	3.00E-02	0.00
50.00	0	0	300.00	3.00E-02	0.00
1342.00	0	0	300.00	3.00E-02	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:20

Number of Release Sites: 1.

Release Activity: Dow 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	10.40	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	0.52	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	2.11E-05 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 20 RELEASE ACTIVITY: Dow 20 dy
 FACILITY NAME: DOW CHEM-MIDLAND
 FACILITY LOCATION: MIDLAND MI 48667
 RECEIVING STREAM NAME: TITTABABASSEE R
 REACH NUMBER: 04080201001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: MI0000868 GAGING STATION ID: N/A
 GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A
 MEAN FLOW (MLD): 4310.95 7q10 FLOW (MLD): 631.43 EFFLUENT FLOW (MLD):60.26

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 (%)
1.40	0	1	20.00	0.52	0.00
50.00	0	0	20.00	0.52	0.00
1342.00	0	0	20.00	0.52	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:21

Number of Release Sites: 1.

Release Activity: ValeroOK 300 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	3.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	300.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.46E-05 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:22

Number of Release Sites: 1.

Release Activity: ValeroOK 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	2.20	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	0.11	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.61E-04 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:23

Number of Release Sites: 1.

Release Activity: ValeroTX 300 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	3.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	300.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

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

SCENARIO #: 23 Number of Sites: 1 RELEASE
ACTIVITY: ValeroTX 300 dy

SIC-CODE DESCRIPTION: Organic Chemicals Manufacture

SIC-CODE (S): 2865,2869 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	300.	0.01	1.00E-02	0.00	0.00

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	2825.61	935.49	634.16	514.20	3.54E-03	1.07E-02	1.58E-02	1.94E-02
ALL	10	50.57	9.38	5.41	4.53	0.20	1.07	1.85	2.21

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	1.60E-08	8.94E-07	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	1.23E-06	6.88E-05	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	4.05E-07	4.04E-05	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 23

RELEASE ACTIVITY: ValeroTX 300 dy

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

ASSOCIATED SIC CODES: 2865,2869

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
1.40	12	42	300.00	1.00E-02	0.00	High
50.00	0	2	300.00	1.00E-02	0.00	High
1342.00	0	0	300.00	1.00E-02	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:24

Number of Release Sites: 1.

Release Activity: ValeroTX 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	2.80	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	0.14	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

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

SCENARIO #: 24 Number of Sites: 1 RELEASE
ACTIVITY: ValeroTX 20 dy

SIC-CODE DESCRIPTION: Organic Chemicals Manufacture

SIC-CODE (S): 2865,2869 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	20.	0.14	0.14	0.00	0.00

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	2825.61	935.49	634.16	514.20	4.95E-02	0.15	0.22	0.27
ALL	10	50.57	9.38	5.41	4.53	2.77	14.93	25.88	30.91

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	1.49E-08	8.34E-07	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	1.15E-06	6.42E-05	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	5.67E-06	5.65E-04	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 24

RELEASE ACTIVITY: ValeroTX 20 dy

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

ASSOCIATED SIC CODES: 2865,2869

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
1.40	3	12	20.00	0.14	0.00	High
50.00	0	2	20.00	0.14	0.00	High
1342.00	0	0	20.00	0.14	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:1

Number of Release Sites: 1.

Release Activity: Occidental 300 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	51.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	300.00	0.00/0.00	N/A	N/A
Per Site Release:	0.17	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 80

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

SCENARIO #: 1 Number of Sites: 1 RELEASE
ACTIVITY: Occidental 300 dy

SIC-CODE DESCRIPTION: Organic Chemicals Manufacture

SIC-CODE (S): 2865,2869 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
80.00	300.	0.17	3.40E-02	0.00	0.00

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	2825.61	935.49	634.16	514.20	1.20E-02	3.63E-02	5.36E-02	6.61E-02
ALL	10	50.57	9.38	5.41	4.53	0.67	3.62	6.28	7.51

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	5.44E-08	3.04E-06	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	4.18E-06	2.34E-04	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.38E-06	1.37E-04	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 80

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 1 RELEASE ACTIVITY: Occidental 300 dy

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

ASSOCIATED SIC CODES: 2865,2869

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
1.40	25	92	300.00	0.17	80.00	High
50.00	3	11	300.00	0.17	80.00	High
1342.00	0	0	300.00	0.17	80.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES IND 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:2

Number of Release Sites: 1.

Release Activity: Tesoro 300 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	9.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	300.00	0.00/0.00	N/A	N/A
Per Site Release:	3.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

CHEMICAL ID: PERC OES IND 80

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS		
SCENARIO #: 2	RELEASE ACTIVITY: Tesoro 300 dy	
FACILITY NAME: LOS ANGELES COUNTY SAN DIST		
FACILITY LOCATION: CARSON CA 90745		
RECEIVING WATER NAME: PACIFIC OCEAN		
REACH NUMBER: 18070104003	FACILITY ON REACH: Yes	DISCHARGE TYPE: Direct
NPDES PERMIT #: CA0053813	EXPOSED POPULATION: Adult	

WWT REMOVAL (%)	RELEASE DAYS	PLANT FLOW (MLD)	PRETREAT RELEASE (kg/site/day)	POST-TREAT RELEASE (kg/site/day)	BCF (L/kg)
80.	300.	1494.88	0.03	6.00E-03	0.00

AQUATIC EXPOSURE ESTIMATES		
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)
ACUTE SCENARIO	166.00	2.42E-05
CHRONIC SCENARIO	166.00	2.42E-05

FISH INGESTION EXPOSURE ESTIMATES				
Exposure Units	Results	ASSUMPTIONS		
		ED	AT	BW

		(years)	(years)	(kg)	(g/day)
Cancer					
LADD _{pot} (mg/kg/day)	0.00	33.00	78.00	80.00	7.50
LADC _{pot} (mg/kg)	0.00	33.00	78.00	NA	NA
Acute					
ADR _{pot} (mg/kg/day)	0.00	NA	1 day	80.00	279.00

Lakes Comments:

9. OES: OTHER INDUSTRIAL USES

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:3

Number of Release Sites: 1.

Release Activity: Exxon 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	1.25	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	5.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	4.70E-08 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:4

Number of Release Sites: 1.

Release Activity: Exxon 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	1.18	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	5.90E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	5.54E-07 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:5

Number of Release Sites: 1.

Release Activity: Natrium 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	7.50	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	3.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.00E-07 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:6

Number of Release Sites: 1.

Release Activity: Natrium 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	7.80	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	0.39	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.30E-06 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 6 RELEASE ACTIVITY: Natrium 20 dy

FACILITY NAME: PPG INDUSTRIES INC.

FACILITY LOCATION: NEW MARTINSVILLE WV 26155

RECEIVING STREAM NAME: OHIO R

REACH NUMBER: 05030201051 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: WV0004359 GAGING STATION ID: N/A

GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A

MEAN FLOW (MLD): 9.57E+04 7q10 FLOW (MLD): 8396.41 EFFLUENT FLOW (MLD):378.44

RESULTS					
COC ($\mu\text{g/L}$)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)
1.40	0	0	20.00	0.39	0.00
50.00	0	0	20.00	0.39	0.00
1342.00	0	0	20.00	0.39	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:7

Number of Release Sites: 1.

Release Activity: OxyVinyls 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	77.50	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	0.31	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: PERC OES OtherInd 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:7 RELEASE ACTIVITY: OxyVinyls 250 dy

FACILITY NAME: OXY VINYLs LP

FACILITY LOCATION: DEER PARK TX 77536

RECEIVING WATER NAME: BUFFALO BAYOU

REACH NUMBER: 12040104015 FACILITY ON REACH: DISCHARGE TYPE: Direct
No

NPDES PERMIT #: TX0007412 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	0.31	0.31	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER

FLOW DESCRIPTOR	Harmonic Mean	3Q5	7Q10	1Q10	PLANT
FLOW (MLD)	1170.86	467.49	309.27	309.27	NA
CONCENTRATION (µg/L)	0.26	0.66	1.00	1.00	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}	9.97E-07 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	7.67E-05 mg/L		0.00 mg/kg	
Acute				

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	2.51E-05 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 7 RELEASE ACTIVITY: OxyVinyls 250 dy
 FACILITY NAME: OXY VINYLs LP
 FACILITY LOCATION: DEER PARK TX 77536
 RECEIVING STREAM NAME: BUFFALO BAYOU
 REACH NUMBER: 12040104015 FACILITY ON REACH: No DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: TX0007412 GAGING STATION ID: N/A
 GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A
 MEAN FLOW (MLD): 2746.48 7q10 FLOW (MLD): 309.27 EFFLUENT FLOW (MLD):309.27

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 (%)
1.40	10	38	250.00	0.31	0.00
50.00	0	0	250.00	0.31	0.00
1342.00	0	0	250.00	0.31	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:8

Number of Release Sites: 1.

Release Activity: OxyVinyls 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	77.60	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	3.88	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	3.14E-04 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 8 RELEASE ACTIVITY: OxyVinyls 20 dy
 FACILITY NAME: OXY VINYLs LP
 FACILITY LOCATION: DEER PARK TX 77536
 RECEIVING STREAM NAME: BUFFALO BAYOU
 REACH NUMBER: 12040104015 FACILITY ON REACH: No DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: TX0007412 GAGING STATION ID: N/A
 GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A
 MEAN FLOW (MLD): 2746.48 7q10 FLOW (MLD): 309.27 EFFLUENT FLOW (MLD):309.27

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 (%)
1.40	5	17	20.00	3.88	0.00
50.00	0	0	20.00	3.88	0.00
1342.00	0	0	20.00	3.88	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:9

Number of Release Sites: 1.

Release Activity: Princeton 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.25	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

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

SCENARIO #: 9 Number of Sites: 1 RELEASE
ACTIVITY: Princeton 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.	0.001	1.00E-03	0.00	0.00

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	3.47E-03	8.07E-03	1.28E-02	1.51E-02
ALL	10	39.60	13.29	7.76	7.57	2.53E-02	7.52E-02	0.13	0.13

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	1.31E-08	9.51E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	1.01E-06	7.32E-06	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	3.06E-07	2.85E-06	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 9

RELEASE ACTIVITY: Princeton 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
1.40	0	0	250.00	1.00E-03	0.00	High
50.00	0	0	250.00	1.00E-03	0.00	High
1342.00	0	0	250.00	1.00E-03	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:10

Number of Release Sites: 1.

Release Activity: Princeton 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.13	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	6.60E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

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

SCENARIO #: 10 Number of Sites: 1 RELEASE
ACTIVITY: Princeton 20 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	20.	0.0066	6.60E-03	0.00	0.00

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	2.29E-02	5.33E-02	8.44E-02	9.99E-02
ALL	10	39.60	13.29	7.76	7.57	0.17	0.50	0.85	0.87

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	6.91E-09	5.02E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	5.31E-07	3.86E-06	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	2.02E-06	1.88E-05	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 10

RELEASE ACTIVITY: Princeton 20 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
1.40	0	1	20.00	6.60E-03	0.00	High
50.00	0	0	20.00	6.60E-03	0.00	High
1342.00	0	0	20.00	6.60E-03	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:11

Number of Release Sites: 1.

Release Activity: TreeTop 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	7.50E-03	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	3.00E-05	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

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

SCENARIO #: 11 Number of Sites: 1 RELEASE
ACTIVITY: TreeTop 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.	0.00003	3.00E-05	0.00	0.00

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	1.04E-04	2.42E-04	3.84E-04	4.54E-04
ALL	10	39.60	13.29	7.76	7.57	7.58E-04	2.26E-03	3.87E-03	3.96E-03

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	3.92E-10	2.85E-09	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	3.02E-08	2.20E-07	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	9.18E-09	8.55E-08	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 11

RELEASE ACTIVITY: TreeTop 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
1.40	0	0	250.00	3.00E-05	0.00	High
50.00	0	0	250.00	3.00E-05	0.00	High
1342.00	0	0	250.00	3.00E-05	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:12

Number of Release Sites: 1.

Release Activity: TreeTop 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	7.60E-03	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	3.80E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

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

SCENARIO #: 12 Number of Sites: 1 RELEASE
ACTIVITY: TreeTop 20 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	20.	0.00038	3.80E-04	0.00	0.00

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	1.32E-03	3.07E-03	4.86E-03	5.75E-03
ALL	10	39.60	13.29	7.76	7.57	9.60E-03	2.86E-02	4.90E-02	5.02E-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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	3.98E-10	2.89E-09	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	3.06E-08	2.22E-07	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.16E-07	1.08E-06	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 12

RELEASE ACTIVITY: TreeTop 20 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
1.40	0	0	20.00	3.80E-04	0.00	High
50.00	0	0	20.00	3.80E-04	0.00	High
1342.00	0	0	20.00	3.80E-04	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:13

Number of Release Sites: 1.

Release Activity: Vesuvius 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.25	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

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

SCENARIO #: 13 Number of Sites: 1 RELEASE
ACTIVITY: Vesuvius 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.	0.001	1.00E-03	0.00	0.00

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	3.47E-03	8.07E-03	1.28E-02	1.51E-02
ALL	10	39.60	13.29	7.76	7.57	2.53E-02	7.52E-02	0.13	0.13

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	1.31E-08	9.51E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	1.01E-06	7.32E-06	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	3.06E-07	2.85E-06	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 13

RELEASE ACTIVITY: Vesuvius 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
1.40	0	0	250.00	1.00E-03	0.00	High
50.00	0	0	250.00	1.00E-03	0.00	High
1342.00	0	0	250.00	1.00E-03	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:14

Number of Release Sites: 1.

Release Activity: Vesuvius 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	3.00E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	1.50E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

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

SCENARIO #: 14 Number of Sites: 1 RELEASE
ACTIVITY: Vesuvius 20 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	20.	0.0015	1.50E-03	0.00	0.00

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	5.21E-03	1.21E-02	1.92E-02	2.27E-02
ALL	10	39.60	13.29	7.76	7.57	3.79E-02	0.11	0.19	0.20

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	1.57E-09	1.14E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	1.21E-07	8.78E-07	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	4.59E-07	4.27E-06	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 14

RELEASE ACTIVITY: Vesuvius 20 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
1.40	0	0	20.00	1.50E-03	0.00	High
50.00	0	0	20.00	1.50E-03	0.00	High
1342.00	0	0	20.00	1.50E-03	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:15

Number of Release Sites: 1.

Release Activity: Warne 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	2.50E-04	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-06	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.76E-06 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 15 RELEASE ACTIVITY: Warne 250 dy
 FACILITY NAME: DEPT OF WATER RESOURCES
 FACILITY LOCATION: CASTAIC CA 91310
 RECEIVING STREAM NAME: GORMON CR
 REACH NUMBER: 18070102022 FACILITY ON REACH: Unk DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: CA0059188 GAGING STATION ID: N/A
 GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A
 MEAN FLOW (MLD): 11.38 7q10 FLOW (MLD): 1.00E-02 EFFLUENT FLOW (MLD):1.00E-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 (%)
1.40	0	0	250.00	1.00E-06	0.00
50.00	0	0	250.00	1.00E-06	0.00
1342.00	0	0	250.00	1.00E-06	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:16

Number of Release Sites: 1.

Release Activity: Warne 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	2.82E-04	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	1.41E-05	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	2.49E-05 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherInd 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 16 RELEASE ACTIVITY: Warne 20 dy
 FACILITY NAME: DEPT OF WATER RESOURCES
 FACILITY LOCATION: CASTAIC CA 91310
 RECEIVING STREAM NAME: GORMON CR
 REACH NUMBER: 18070102022 FACILITY ON REACH: Unk DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: CA0059188 GAGING STATION ID: N/A
 GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A
 MEAN FLOW (MLD): 11.38 7q10 FLOW (MLD): 1.00E-02 EFFLUENT FLOW (MLD):1.00E-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 (%)
1.40	0	0	20.00	1.40E-05	0.00
50.00	0	0	20.00	1.40E-05	0.00
1342.00	0	0	20.00	1.40E-05	0.00

10. OES: OTHER COMMERCIAL USES

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:1

Number of Release Sites: 1.

Release Activity: Union 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.75	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	3.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

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

SCENARIO #: 1 Number of Sites: 1 RELEASE ACTIVITY: Union
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.	0.003	3.00E-03	0.00	0.00

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	1.04E-02	2.42E-02	3.84E-02	4.54E-02
ALL	10	39.60	13.29	7.76	7.57	7.58E-02	0.23	0.39	0.40

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	3.92E-08	2.85E-07	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	3.02E-06	2.20E-05	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	9.18E-07	8.55E-06	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:2

Number of Release Sites: 1.

Release Activity: Union 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.72	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	3.60E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

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

SCENARIO #: 2 Number of Sites: 1 RELEASE ACTIVITY: Union
20 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	20.	0.036	3.60E-02	0.00	0.00

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	0.12	0.29	0.46	0.55
ALL	10	39.60	13.29	7.76	7.57	0.91	2.71	4.64	4.76

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	3.77E-08	2.74E-07	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	2.90E-06	2.11E-05	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.10E-05	1.03E-04	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 2 RELEASE ACTIVITY: Union 20 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
1.40	3	10	20.00	3.60E-02	0.00	High
50.00	0	0	20.00	3.60E-02	0.00	High
1342.00	0	0	20.00	3.60E-02	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:3

Number of Release Sites: 1.

Release Activity: Confluence 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	7.50E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	3.00E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

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

SCENARIO #: 3 Number of Sites: 1 RELEASE
ACTIVITY: Confluence 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.	0.0003	3.00E-04	0.00	0.00

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	1.04E-03	2.42E-03	3.84E-03	4.54E-03
ALL	10	39.60	13.29	7.76	7.57	7.58E-03	2.26E-02	3.87E-02	3.96E-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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	3.92E-09	2.85E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	3.02E-07	2.20E-06	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	9.18E-08	8.55E-07	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 3

RELEASE ACTIVITY: Confluence 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
1.40	0	0	250.00	3.00E-04	0.00	High
50.00	0	0	250.00	3.00E-04	0.00	High
1342.00	0	0	250.00	3.00E-04	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:4

Number of Release Sites: 1.

Release Activity: Confluence 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	7.40E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	3.70E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

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

SCENARIO #: 4 Number of Sites: 1 RELEASE
ACTIVITY: Confluence 20 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	20.	0.0037	3.70E-03	0.00	0.00

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	1.28E-02	2.99E-02	4.73E-02	5.60E-02
ALL	10	39.60	13.29	7.76	7.57	9.34E-02	0.28	0.48	0.49

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	3.87E-09	2.82E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	2.98E-07	2.17E-06	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.13E-06	1.05E-05	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 4

RELEASE ACTIVITY: Confluence 20 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
1.40	0	0	20.00	3.70E-03	0.00	High
50.00	0	0	20.00	3.70E-03	0.00	High
1342.00	0	0	20.00	3.70E-03	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:5

Number of Release Sites: 1.

Release Activity: Wynkoop 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	5.00E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	2.00E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

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

SCENARIO #: 5 Number of Sites: 1 RELEASE
ACTIVITY: Wynkoop 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.	0.0002	2.00E-04	0.00	0.00

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	6.94E-04	1.61E-03	2.56E-03	3.03E-03
ALL	10	39.60	13.29	7.76	7.57	5.05E-03	1.50E-02	2.58E-02	2.64E-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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	2.62E-09	1.90E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	2.01E-07	1.46E-06	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	6.12E-08	5.70E-07	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 5 RELEASE ACTIVITY: Wynkoop 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
1.40	0	0	250.00	2.00E-04	0.00	High
50.00	0	0	250.00	2.00E-04	0.00	High
1342.00	0	0	250.00	2.00E-04	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:6

Number of Release Sites: 1.

Release Activity: Wynkoop 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	3.80E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	1.90E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

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

SCENARIO #: 6 Number of Sites: 1 RELEASE
ACTIVITY: Wynkoop 20 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	20.	0.0019	1.90E-03	0.00	0.00

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	6.60E-03	1.53E-02	2.43E-02	2.88E-02
ALL	10	39.60	13.29	7.76	7.57	4.80E-02	0.14	0.24	0.25

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	1.99E-09	1.45E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	1.53E-07	1.11E-06	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	5.81E-07	5.41E-06	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 6

RELEASE ACTIVITY: Wynkoop 20 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
1.40	0	0	20.00	1.90E-03	0.00	High
50.00	0	0	20.00	1.90E-03	0.00	High
1342.00	0	0	20.00	1.90E-03	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:7

Number of Release Sites: 1.

Release Activity: StPaul 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	1.00E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	4.00E-05	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

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

SCENARIO #: 7 Number of Sites: 1 RELEASE ACTIVITY: StPaul
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.	0.00004	4.00E-05	0.00	0.00

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	1.39E-04	3.23E-04	5.12E-04	6.06E-04
ALL	10	39.60	13.29	7.76	7.57	1.01E-03	3.01E-03	5.15E-03	5.28E-03

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	5.23E-10	3.81E-09	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	4.02E-08	2.93E-07	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.22E-08	1.14E-07	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 7

RELEASE ACTIVITY: StPaul 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
1.40	0	0	250.00	4.00E-05	0.00	High
50.00	0	0	250.00	4.00E-05	0.00	High
1342.00	0	0	250.00	4.00E-05	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:8

Number of Release Sites: 1.

Release Activity: StPaul 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	1.06E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	5.30E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

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

SCENARIO #: 8 Number of Sites: 1 RELEASE ACTIVITY: StPaul
20 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	20.	0.00053	5.30E-04	0.00	0.00

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	1.84E-03	4.28E-03	6.78E-03	8.02E-03
ALL	10	39.60	13.29	7.76	7.57	1.34E-02	3.99E-02	6.83E-02	7.00E-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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	5.55E-10	4.03E-09	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	4.27E-08	3.10E-07	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.62E-07	1.51E-06	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 8 RELEASE ACTIVITY: StPaul 20 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
1.40	0	0	20.00	5.30E-04	0.00	High
50.00	0	0	20.00	5.30E-04	0.00	High
1342.00	0	0	20.00	5.30E-04	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:9

Number of Release Sites: 1.

Release Activity: BPI 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	7.50E-03	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	3.00E-05	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

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

SCENARIO #: 9 Number of Sites: 1 RELEASE ACTIVITY: BPI
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.	0.00003	3.00E-05	0.00	0.00

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	1.04E-04	2.42E-04	3.84E-04	4.54E-04
ALL	10	39.60	13.29	7.76	7.57	7.58E-04	2.26E-03	3.87E-03	3.96E-03

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	3.92E-10	2.85E-09	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	3.02E-08	2.20E-07	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	9.18E-09	8.55E-08	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 9

RELEASE ACTIVITY: BPI 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
1.40	0	0	250.00	3.00E-05	0.00	High
50.00	0	0	250.00	3.00E-05	0.00	High
1342.00	0	0	250.00	3.00E-05	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:10

Number of Release Sites: 1.

Release Activity: BPI 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	8.60E-03	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	4.30E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

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

SCENARIO #: 10 Number of Sites: 1 RELEASE ACTIVITY: BPI 20 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	20.	0.00043	4.30E-04	0.00	0.00

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	1.49E-03	3.47E-03	5.50E-03	6.51E-03
ALL	10	39.60	13.29	7.76	7.57	1.09E-02	3.24E-02	5.54E-02	5.68E-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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	4.50E-10	3.27E-09	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	3.46E-08	2.52E-07	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.32E-07	1.23E-06	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 10

RELEASE ACTIVITY: BPI 20 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
1.40	0	0	20.00	4.30E-04	0.00	High
50.00	0	0	20.00	4.30E-04	0.00	High
1342.00	0	0	20.00	4.30E-04	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:11

Number of Release Sites: 1.

Release Activity: Safeway 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	5.00E-03	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	2.00E-05	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

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

SCENARIO #: 11 Number of Sites: 1 RELEASE
ACTIVITY: Safeway 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.	0.00002	2.00E-05	0.00	0.00

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	6.94E-05	1.61E-04	2.56E-04	3.03E-04
ALL	10	39.60	13.29	7.76	7.57	5.05E-04	1.50E-03	2.58E-03	2.64E-03

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	2.62E-10	1.90E-09	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	2.01E-08	1.46E-07	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	6.12E-09	5.70E-08	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 11

RELEASE ACTIVITY: Safeway 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
1.40	0	0	250.00	2.00E-05	0.00	High
50.00	0	0	250.00	2.00E-05	0.00	High
1342.00	0	0	250.00	2.00E-05	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:12

Number of Release Sites: 1.

Release Activity: Safeway 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	4.00E-03	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	2.00E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

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

SCENARIO #: 12 Number of Sites: 1 RELEASE
ACTIVITY: Safeway 20 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	20.	0.0002	2.00E-04	0.00	0.00

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	6.94E-04	1.61E-03	2.56E-03	3.03E-03
ALL	10	39.60	13.29	7.76	7.57	5.05E-03	1.50E-02	2.58E-02	2.64E-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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	2.09E-10	1.52E-09	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	1.61E-08	1.17E-07	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	6.12E-08	5.70E-07	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 12 RELEASE ACTIVITY: Safeway 20 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
1.40	0	0	20.00	2.00E-04	0.00	High
50.00	0	0	20.00	2.00E-04	0.00	High
1342.00	0	0	20.00	2.00E-04	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:13

Number of Release Sites: 1.

Release Activity: ICRR 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	2.50E-03	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-05	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

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

SCENARIO #: 13 Number of Sites: 1 RELEASE ACTIVITY: ICRR
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.	0.00001	1.00E-05	0.00	0.00

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	3.47E-05	8.07E-05	1.28E-04	1.51E-04
ALL	10	39.60	13.29	7.76	7.57	2.53E-04	7.52E-04	1.29E-03	1.32E-03

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	1.31E-10	9.51E-10	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	1.01E-08	7.32E-08	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	3.06E-09	2.85E-08	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 13

RELEASE ACTIVITY: ICRR 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
1.40	0	0	250.00	1.00E-05	0.00	High
50.00	0	0	250.00	1.00E-05	0.00	High
1342.00	0	0	250.00	1.00E-05	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:14

Number of Release Sites: 1.

Release Activity: ICRR 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	3.20E-03	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	1.60E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

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

SCENARIO #: 14 Number of Sites: 1 RELEASE ACTIVITY: ICRR
20 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	20.	0.00016	1.60E-04	0.00	0.00

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	5.56E-04	1.29E-03	2.05E-03	2.42E-03
ALL	10	39.60	13.29	7.76	7.57	4.04E-03	1.20E-02	2.06E-02	2.11E-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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	1.67E-10	1.22E-09	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	1.29E-08	9.37E-08	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	4.89E-08	4.56E-07	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES OtherCom 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 14 RELEASE ACTIVITY: ICRR 20 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
1.40	0	0	20.00	1.60E-04	0.00	High
50.00	0	0	20.00	1.60E-04	0.00	High
1342.00	0	0	20.00	1.60E-04	0.00	High

11. OES: WASTE HANDLING, DISPOSAL, TREATMENT AND RECYCLING

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:1

Number of Release Sites: 1.

Release Activity: CleanWater 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	1.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	4.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 00

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

SCENARIO #: 1 Number of Sites: 1 RELEASE
ACTIVITY: CleanWater 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.	0.004	4.00E-03	0.00	0.00

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	1.39E-02	3.23E-02	5.12E-02	6.06E-02
ALL	10	39.60	13.29	7.76	7.57	0.10	0.30	0.52	0.53

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	5.23E-08	3.81E-07	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	4.02E-06	2.93E-05	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.22E-06	1.14E-05	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 1

RELEASE ACTIVITY: CleanWater 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
1.40	2	7	250.00	4.00E-03	0.00	High
50.00	0	0	250.00	4.00E-03	0.00	High
1342.00	0	0	250.00	4.00E-03	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:2

Number of Release Sites: 1.

Release Activity: CleanWater 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.94	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	4.70E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 00

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

SCENARIO #: 2 Number of Sites: 1 RELEASE
ACTIVITY: CleanWater 20 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	20.	0.047	4.70E-02	0.00	0.00

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	0.38	0.60	0.71
ALL	10	39.60	13.29	7.76	7.57	1.19	3.54	6.06	6.21

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	4.92E-08	3.58E-07	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	3.78E-06	2.75E-05	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.44E-05	1.34E-04	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 2

RELEASE ACTIVITY: CleanWater 20 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
1.40	3	11	20.00	4.70E-02	0.00	High
50.00	0	0	20.00	4.70E-02	0.00	High
1342.00	0	0	20.00	4.70E-02	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:3

Number of Release Sites: 1.

Release Activity: Higgins 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	5.00E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	2.00E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 00

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

SCENARIO #: 3 Number of Sites: 1 RELEASE
ACTIVITY:Higgins 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.	0.0002	2.00E-04	0.00	0.00

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	6.94E-04	1.61E-03	2.56E-03	3.03E-03
ALL	10	39.60	13.29	7.76	7.57	5.05E-03	1.50E-02	2.58E-02	2.64E-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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	2.62E-09	1.90E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	2.01E-07	1.46E-06	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	6.12E-08	5.70E-07	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:4

Number of Release Sites: 1.

Release Activity: Higgins 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	5.00E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	2.50E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 00

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

SCENARIO #: 4 Number of Sites: 1 RELEASE
ACTIVITY:Higgins 20 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	20.	0.0025	2.50E-03	0.00	0.00

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	8.68E-03	2.02E-02	3.20E-02	3.79E-02
ALL	10	39.60	13.29	7.76	7.57	6.31E-02	0.19	0.32	0.33

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	2.62E-09	1.90E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	2.01E-07	1.46E-06	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	7.65E-07	7.12E-06	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:5

Number of Release Sites: 1.

Release Activity: Durez 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	2.50E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

CHEMICAL ID: PERC OES Waste 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS		
SCENARIO #: 5	RELEASE ACTIVITY: Durez 250 dy	
FACILITY NAME: OCCIDENTAL CHEMICAL-DUREZ DIV		
FACILITY LOCATION: NORTH TONAWANDA NY 141200535		
RECEIVING WATER NAME: NIAGARA R		
REACH NUMBER: 04120104007	FACILITY ON REACH: Yes	DISCHARGE TYPE: Direct
NPDES PERMIT #: NY0001198	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.	1.88	0.0001	1.00E-04	0.00

AQUATIC EXPOSURE ESTIMATES		
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)
ACUTE SCENARIO	1.00	5.32E-02
CHRONIC SCENARIO	1.00	5.32E-02

FISH INGESTION EXPOSURE ESTIMATES				
Exposure Units	Results	ASSUMPTIONS		
		ED	AT	BW

		(years)	(years)	(kg)	(g/day)
Cancer					
LADD _{pot} (mg/kg/day)	0.00	33.00	78.00	80.00	7.50
LADC _{pot} (mg/kg)	0.00	33.00	78.00	NA	NA
Acute					
ADR _{pot} (mg/kg/day)	0.00	NA	1 day	80.00	279.00

Lakes Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:6

Number of Release Sites: 1.

Release Activity: Durez 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	1.00E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	5.00E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

CHEMICAL ID: PERC OES Waste 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS		
SCENARIO #: 6	RELEASE ACTIVITY: Durez 20 dy	
FACILITY NAME: OCCIDENTAL CHEMICAL-DUREZ DIV		
FACILITY LOCATION: NORTH TONAWANDA NY 141200535		
RECEIVING WATER NAME: NIAGARA R		
REACH NUMBER: 04120104007	FACILITY ON REACH: Yes	DISCHARGE TYPE: Direct
NPDES PERMIT #: NY0001198	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.	20.	1.88	0.0005	5.00E-04	0.00

AQUATIC EXPOSURE ESTIMATES		
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)
ACUTE SCENARIO	1.00	0.27
CHRONIC SCENARIO	1.00	0.27

FISH INGESTION EXPOSURE ESTIMATES					
Exposure Units	Results	ASSUMPTIONS			
		ED	AT	BW	IR

		(years)	(years)	(kg)	(g/day)
Cancer					
LADD _{pot} (mg/kg/day)	0.00	33.00	78.00	80.00	7.50
LADC _{pot} (mg/kg)	0.00	33.00	78.00	NA	NA
Acute					
ADR _{pot} (mg/kg/day)	0.00	NA	1 day	80.00	279.00

Lakes Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:7

Number of Release Sites: 1.

Release Activity: Oiltanking 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.75	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	3.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	7.29E-06 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 00

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 7 RELEASE ACTIVITY: Oiltanking 250 dy
 FACILITY NAME: ROLLINS ENVIRONMENTAL SER
 FACILITY LOCATION: DEER PARK TX 77536
 RECEIVING STREAM NAME: BUFFALO BAYOU
 REACH NUMBER: 12040104015 FACILITY ON REACH: No DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: TX0005941 GAGING STATION ID: N/A
 GAGING STATION PERIOD OF RECORD: N/A GAGING STATION NUMBER OF OBSERVATIONS: N/A NUMBER OF STATIONS ON REACH: N/A
 MEAN FLOW (MLD): 2746.48 7q10 FLOW (MLD): 9.15 EFFLUENT FLOW (MLD):9.15

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 (%)
1.40	0	0	250.00	3.00E-03	0.00
50.00	0	0	250.00	3.00E-03	0.00
1342.00	0	0	250.00	3.00E-03	0.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:8

Number of Release Sites: 1.

Release Activity: Oiltanking 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.84	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	4.20E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.02E-04 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:9

Number of Release Sites: 1.

Release Activity: Pinewood 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.25	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	1.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 00

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

SCENARIO #: 9 Number of Sites: 1 RELEASE
ACTIVITY: Pinewood 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.	0.001	1.00E-03	0.00	0.00

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	3.47E-03	8.07E-03	1.28E-02	1.51E-02
ALL	10	39.60	13.29	7.76	7.57	2.53E-02	7.52E-02	0.13	0.13

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	1.31E-08	9.51E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	1.01E-06	7.32E-06	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	3.06E-07	2.85E-06	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 00

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:10

Number of Release Sites: 1.

Release Activity: Pinewood 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.15	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	7.50E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 00

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

SCENARIO #: 10 Number of Sites: 1 RELEASE
ACTIVITY: Pinewood 20 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	20.	0.0075	7.50E-03	0.00	0.00

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	2.60E-02	6.06E-02	9.59E-02	0.11
ALL	10	39.60	13.29	7.76	7.57	0.19	0.56	0.97	0.99

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	7.85E-09	5.71E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	6.04E-07	4.39E-06	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	2.29E-06	2.14E-05	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 00

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 10

RELEASE ACTIVITY: Pinewood 20 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
1.40	0	2	20.00	7.50E-03	0.00	High
50.00	0	0	20.00	7.50E-03	0.00	High
1342.00	0	0	20.00	7.50E-03	0.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:1

Number of Release Sites: 1.

Release Activity: CleanHarborsTX 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	87.50	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	0.35	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

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

SCENARIO #: 1 Number of Sites: 1 RELEASE
ACTIVITY: CleanHarborsTX
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)
80.00	250.	0.35	7.00E-02	0.00	0.00

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	0.24	0.57	0.90	1.06
ALL	10	39.60	13.29	7.76	7.57	1.77	5.27	9.02	9.25

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	9.16E-07	6.66E-06	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	7.04E-05	5.12E-04	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	2.14E-05	1.99E-04	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 1

RELEASE ACTIVITY: CleanHarborsTX 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
1.40	47	172	250.00	0.35	80.00	High
50.00	0	2	250.00	0.35	80.00	High
1342.00	0	0	250.00	0.35	80.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:2

Number of Release Sites: 1.

Release Activity: CleanHarborsTX 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	87.40	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	4.37	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

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

SCENARIO #: 2 Number of Sites: 1 RELEASE
ACTIVITY: CleanHarborsTX
20 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)
80.00	20.	4.37	0.87	0.00	0.00

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	3.03	7.06	11.18	13.23
ALL	10	39.60	13.29	7.76	7.57	22.07	65.76	112.63	115.46

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	9.15E-07	6.65E-06	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	7.04E-05	5.12E-04	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	2.67E-04	2.49E-03	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 2

RELEASE ACTIVITY: CleanHarborsTX 20 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
1.40	5	20	20.00	4.37	80.00	High
50.00	2	7	20.00	4.37	80.00	High
1342.00	0	0	20.00	4.37	80.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:3

Number of Release Sites: 1.

Release Activity: CleanHarborsAR 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	10.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	4.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

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

SCENARIO #: 3 Number of Sites: 1 RELEASE
ACTIVITY: CleanHarborsAR
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)
80.00	250.	0.04	8.00E-03	0.00	0.00

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	2.78E-02	6.46E-02	0.10	0.12
ALL	10	39.60	13.29	7.76	7.57	0.20	0.60	1.03	1.06

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	1.05E-07	7.61E-07	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	8.05E-06	5.85E-05	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	2.45E-06	2.28E-05	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 3

RELEASE ACTIVITY: CleanHarborsAR 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
1.40	7	24	250.00	4.00E-02	80.00	High
50.00	0	0	250.00	4.00E-02	80.00	High
1342.00	0	0	250.00	4.00E-02	80.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:4

Number of Release Sites: 1.

Release Activity: CleanHarborsAR 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	9.20	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	0.46	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

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

SCENARIO #: 4 Number of Sites: 1 RELEASE
ACTIVITY: CleanHarborsAR
20 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)
80.00	20.	0.46	9.20E-02	0.00	0.00

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	0.32	0.74	1.18	1.39
ALL	10	39.60	13.29	7.76	7.57	2.32	6.92	11.86	12.15

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	9.63E-08	7.00E-07	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	7.41E-06	5.39E-05	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	2.81E-05	2.62E-04	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 4

RELEASE ACTIVITY: CleanHarborsAR 20 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
1.40	4	15	20.00	0.46	80.00	High
50.00	0	0	20.00	0.46	80.00	High
1342.00	0	0	20.00	0.46	80.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:5

Number of Release Sites: 1.

Release Activity: CleanHarborsOH 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	7.50E-03	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	3.00E-05	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	7.33E-09 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:6

Number of Release Sites: 1.

Release Activity: Heritage 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	1.00E-04	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	4.00E-07	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	2.71E-13 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:7

Number of Release Sites: 1.

Release Activity: SafetyKleenKY 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	337.50	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	1.35	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

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

SCENARIO #: 7 Number of Sites: 1 RELEASE
ACTIVITY: SafetyKleenKY
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)
80.00	250.	1.35	0.27	0.00	0.00

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	0.94	2.18	3.45	4.09
ALL	10	39.60	13.29	7.76	7.57	6.82	20.32	34.79	35.67

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	3.53E-06	2.57E-05	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	2.72E-04	1.98E-03	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	8.26E-05	7.69E-04	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 7

RELEASE ACTIVITY: SafetyKleenKY 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
1.40	64	235	250.00	1.35	80.00	High
50.00	6	22	250.00	1.35	80.00	High
1342.00	0	0	250.00	1.35	80.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:8

Number of Release Sites: 1.

Release Activity: SafetyKleenKY 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	338.40	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	16.92	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

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

SCENARIO #: 8 Number of Sites: 1 RELEASE
ACTIVITY: SafetyKleenKY
20 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)
80.00	20.	16.92	3.38	0.00	0.00

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	11.75	27.33	43.28	51.23
ALL	10	39.60	13.29	7.76	7.57	85.45	254.63	436.08	447.03

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	3.54E-06	2.58E-05	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	2.72E-04	1.98E-03	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.03E-03	9.64E-03	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 8

RELEASE ACTIVITY: SafetyKleenKY 20 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
1.40	5	20	20.00	16.92	80.00	High
50.00	4	15	20.00	16.92	80.00	High
1342.00	0	0	20.00	16.92	80.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:9

Number of Release Sites: 1.

Release Activity: SafetyKleenIN 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	67.50	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	0.27	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES		
ADR _{pot}	1.92E-05 mg/kg/day	0.00 mg/kg/day

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 9 RELEASE ACTIVITY: SafetyKleenIN 250 dy
 FACILITY NAME: EAST CHICAGO_MUNICIPAL STP
 FACILITY LOCATION: EAST CHICAGO IN 46312
 RECEIVING STREAM NAME:
 REACH NUMBER: 04040001010 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct
 NPDES PERMIT NUMBER: GAGING STATION ID: 04093200
 IN0022829
 GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS
 RECORD: 01/01/66 - 11/15/87 NUMBER OF ON REACH: 1
 OBSERVATIONS: 1780.00
 50 %ile FLOW (MLD): 26.91 10 %ile FLOW (MLD): 2.45 EFFLUENT FLOW
 (MLD):66.94

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 (%)
1.40	40	148	250.00	0.27	80.00
50.00	3	10	250.00	0.27	80.00
1342.00	1	3	250.00	0.27	80.00

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:10

Number of Release Sites: 1.

Release Activity: Tier 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	30.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

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

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

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

SCENARIO #: 10 Number of Sites: 1 RELEASE ACTIVITY: Tier
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)
80.00	250.	0.12	2.40E-02	0.00	0.00

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	8.33E-02	0.19	0.31	0.36
ALL	10	39.60	13.29	7.76	7.57	0.61	1.81	3.09	3.17

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	3.14E-07	2.28E-06	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	2.41E-05	1.76E-04	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	7.34E-06	6.84E-05	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 10

RELEASE ACTIVITY: Tier 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
1.40	25	90	250.00	0.12	80.00	High
50.00	0	0	250.00	0.12	80.00	High
1342.00	0	0	250.00	0.12	80.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:11

Number of Release Sites: 1.

Release Activity: Tradebe 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	1.25	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	250.00	0.00/0.00	N/A	N/A
Per Site Release:	5.00E-03	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

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

SCENARIO #: 11 Number of Sites: 1 RELEASE
ACTIVITY: Tradebe 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)
80.00	250.	0.005	1.00E-03	0.00	0.00

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	3.47E-03	8.07E-03	1.28E-02	1.51E-02
ALL	10	39.60	13.29	7.76	7.57	2.53E-02	7.52E-02	0.13	0.13

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	1.31E-08	9.51E-08	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	1.01E-06	7.32E-06	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	3.06E-07	2.85E-06	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 11

RELEASE ACTIVITY: Tradebe 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
1.40	0	0	250.00	5.00E-03	80.00	High
50.00	0	0	250.00	5.00E-03	80.00	High
1342.00	0	0	250.00	5.00E-03	80.00	High

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:12

Number of Release Sites: 1.

Release Activity: Tradebe 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	1.36	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:	20.00	0.00/0.00	N/A	N/A
Per Site Release:	6.80E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Remarks:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

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

SCENARIO #: 12 Number of Sites: 1 RELEASE
ACTIVITY: Tradebe 20 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)
80.00	20.	0.068	1.36E-02	0.00	0.00

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	4.72E-02	0.11	0.17	0.21
ALL	10	39.60	13.29	7.76	7.57	0.34	1.02	1.75	1.80

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						

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
LADD _{pot}	1.42E-08	1.04E-07	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	1.09E-06	7.96E-06	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	4.16E-06	3.88E-05	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: PERC OES Waste 80

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 12

RELEASE ACTIVITY: Tradebe 20 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
1.40	1	4	20.00	6.80E-02	80.00	High
50.00	0	0	20.00	6.80E-02	80.00	High
1342.00	0	0	20.00	6.80E-02	80.00	High