Final Risk Evaluation for Trichloroethylene

Supplemental Information File:

Aquatic Exposure Modeling Outputs from E-FAST

CASRN: 79-01-6

November 2020

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MANUFACTURING

Chemical ID: TCE-0%

Assessor:

Scenario#:4 Number of Release Sites: 1.

Release Activity: Axiall 350 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	444.50	444.50 N/A		N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

350.00	0.00 0.00/0.00 N/A		N/A
1.27	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:4 RELEASE ACTIVITY: Axiall 350 dy

FACILITY NAME: GEORGIA-GULF-CHEMICALS & VINYL

FACILITY LOCATION: PLAQUEMINE LA 70764

RECEIVING WATER NAME: MISSISSIPPI R

REACH NUMBER: 08070100007 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: LA0007129 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	350.	1.27	1.27	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10					PLANT
FLOW (MLD)	8.12E+05	2.98E+05	2.47E+05	1.92E+05	NA
CONCENTRATION (µg/L)	1.56E-03	4.27E-03	5.14E-03	6.61E-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}	8.25E-09	mg/kg/day	0.00 mg/kg/day			
LADC _{pot}	6.34E-07	mg/L	0.00	mg/kg		
Acute						
ADR _{pot}	1.62E-07	mg/kg/day	0.00	mg/kg/day		

Surface Water Comments:

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 4 RELEASE ACTIVITY: Axiall 350 dy

FACILITY NAME: GEORGIA-GULF-CHEMICALS & VINYL

FACILITY LOCATION: PLAQUEMINE LA 70764

RECEIVING STREAM NAME: MISSISSIPPI R

REACH NUMBER: 08070100007 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: LA0007129 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 1.14E+06 7q10 FLOW (MLD): 2.47E+05 EFFLUENT FLOW

(MLD):30.86

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 (%)	
3.00	0	0	350.00	1.27	0.00	
788.00	0	0	350.00	1.27	0.00	
920.00	0	0	350.00	1.27	0.00	
1.44E+04	0	0	350.00	1.27	0.00	

Chemical ID: TCE-0

Assessor:

Scenario#:2 Number of Release Sites: 1.

Release Activity: Axiall 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE	
	Non-sludge/Sludge				
Total Releases:	443.00	N/A	N/A	N/A	
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)	

Non-sludge/Sludge

Release Days/yr: Per Site Release:

20.00	0.00/0.00	N/A	N/A
22.15	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:2 RELEASE ACTIVITY: Axiall 20 dy

FACILITY NAME: GEORGIA-GULF-CHEMICALS & VINYL

FACILITY LOCATION: PLAQUEMINE LA 70764

RECEIVING WATER NAME: MISSISSIPPI R

REACH NUMBER: 08070100007 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: LA0007129 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	22.15	22.15	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER							
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLAN							
FLOW (MLD)	8.12E+05	2.98E+05	2.47E+05	1.92E+05	NA		
CONCENTRATION (µg/L)	2.73E-02	7.44E-02	8.97E-02	0.12	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}	8.22E-09	mg/kg/day	0.00 mg/kg/day				
LADC _{pot}	6.32E-07	mg/L	0.00	mg/kg			
Acute							
ADR _{pot}	2.82E-06	mg/kg/day	0.00	mg/kg/day			

Surface Water Comments:

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 2 RELEASE ACTIVITY: Axiall 20 dy

FACILITY NAME: GEORGIA-GULF-CHEMICALS & VINYL

FACILITY LOCATION: PLAQUEMINE LA 70764

RECEIVING STREAM NAME: MISSISSIPPI R

REACH NUMBER: 08070100007 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: LA0007129 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 1.14E+06 7q10 FLOW (MLD): 2.47E+05 EFFLUENT FLOW

(MLD):30.86

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 (%)		
3.00	0	0	20.00	22.15	0.00		
788.00	0	0	20.00	22.15	0.00		
920.00	0	0	20.00	22.15	0.00		
1.44E+04	0	0	20.00	22.15	0.00		

Chemical ID: TCE-81

Assessor:

Scenario#:7 Number of Release Sites: 1.

Release Activity: Olin 350 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	24.15	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

350.00	0.00/0.00	N/A	N/A	
6.90E-02	N/A/0.00	N/A	N/A	
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)	

Chemical ID: TCE-81

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

SCENARIO #: 7 Number of Sites: 1 RELEASE ACTIVITY:Olin 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)
81.00	350.	0.069	1.31E-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	4.64E-03	1.40E-02	2.07E-02	2.55E-02	
ALL	10	50.57	9.38	5.41	4.53	0.26	1.40	2.42	2.89	

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES							
Exposure Units	Drinking Water Results		Drinking Water Units	Fish Ingestion Results		Fish Ingestion Units	
	50%	10%		50%	10%		
Cancer							
$LADD_{pot}$	2.45E-08	1.37E-06	mg/kg/day	0.00	0.00	mg/kg/day	
LADC _{pot}	1.88E-06	1.05E-04	mg/L	0.00	0.00	mg/kg	
Acute							
ADR_{pot}	5.31E-07	5.29E-05	mg/kg/day	0.00	0.00	mg/kg/day	

Chemical ID: TCE-81

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 7 RELEASE ACTIVITY: Olin 350 dy

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

	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			
3.00	10	37	350.00	6.90E-02	81.00	High			
788.00	0	0	350.00	6.90E-02	81.00	High			
920.00	0	0	350.00	6.90E-02	81.00	High			
1.44E+04	0	0	350.00	6.90E-02	81.00	High			

Chemical ID: TCE-81

Assessor:

Scenario#:4 Number of Release Sites: 1.

Release Activity: Olin 20 dy

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

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
1.20	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-81

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

SCENARIO #: 4 Number of Sites: 1 RELEASE ACTIVITY:Olin 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)
81.00	20.	1.2	0.23	0.00	0.00

	AQUATIC EXPOSURE ESTIMATES - SURFACE WATER									
PLANT TYPE	% ILE FACILITY		STREAM FI	LOW (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	8.07E-02	0.24	0.36	0.44	
ALL	10	50.57	9.38	5.41	4.53	4.51	24.31	42.14	50.33	

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES									
Exposure Units	Drinking Water Results		Drinking Water Units	Fish Ingestion Results		Fish Ingestion Units			
	50%	50% 10%		6 10%	50%	10%			
		C	Cancer						
$LADD_{pot}$	2.43E-08	1.36E-06	mg/kg/day	0.00	0.00	mg/kg/day			
LADC _{pot}	1.87E-06	1.05E-04	mg/L	0.00	0.00	mg/kg			
Acute									
$\mathrm{ADR}_{\mathrm{pot}}$	9.23E-06	9.21E-04	mg/kg/day	0.00	0.00	mg/kg/day			

Chemical ID: TCE-81

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 4 RELEASE ACTIVITY: Olin 20 dy

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

	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					
3.00	3	11	20.00	1.20	81.00	High					
788.00	0	0	20.00	1.20	81.00	High					
920.00	0	0	20.00	1.20	81.00	High					
1.44E+04	0	0	20.00	1.20	81.00	High					

Chemical ID: TCE-81

Assessor:

ENVIRONMENTAL RELEASES	S
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Scenario#:8

Number of Release Sites: 1.

Release Activity:

Solvents 350 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	5.25	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr: Per Site Release:

(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)
1.50E-02	N/A/0.00	N/A	N/A
350.00	0.00/0.00	N/A	N/A

Chemical ID: TCE-81

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

SCENARIO #: 8 Number of Sites: 1 RELEASE ACTIVITY:Solvents

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)
81.00	350.	0.015	2.85E-03	0.00	0.00

	AQUATIC EXPOSURE ESTIMATES - SURFACE WATER									
PLANT TYPE	% ILE FACILITY		TREAM FI	LOW (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	1.01E-03	3.05E-03	4.49E-03	5.54E-03	
ALL	10	50.57	9.38	5.41	4.53	5.64E-02	0.30	0.53	0.63	

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%		50%	10%			
		C	Cancer					
$LADD_{pot}$	5.32E-09	2.97E-07	mg/kg/day	0.00	0.00	mg/kg/day		
LADC _{pot}	4.09E-07	2.29E-05	mg/L	0.00	0.00	mg/kg		
Acute								
ADR_{pot}	1.15E-07	1.15E-05	mg/kg/day	0.00	0.00	mg/kg/day		

Chemical ID: TCE-81

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 8 RELEASE ACTIVITY: Solvents 350 dy

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

	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					
3.00	5	17	350.00	1.50E-02	81.00	High					
788.00	0	0	350.00	1.50E-02	81.00	High					
920.00	0	0	350.00	1.50E-02	81.00	High					
1.44E+04	0	0	350.00	1.50E-02	81.00	High					

Chemical ID: TCE-81

Assessor:

Scenario#:9 Number of Release Sites: 1.

Release Activity: Solvents 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE		
	Non-sludge/Sludge					
Total Releases:	5.40	N/A	N/A	N/A		
Total Releases.	3.10	14/11	14/11	1 1/2 1		

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
0.27	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-81

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

SCENARIO #: 9 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)
81.00	20.	0.27	5.13E-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	1.82E-02	5.48E-02	8.09E-02	9.98E-02	
ALL	10	50.57	9.38	5.41	4.53	1.01	5.47	9.48	11.32	

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								
$LADD_{pot}$	5.47E-09	3.06E-07	mg/kg/day	0.00	0.00	mg/kg/day		
LADC _{pot}	4.21E-07	2.35E-05	mg/L	0.00	0.00	mg/kg		
Acute								
ADR_{pot}	2.08E-06	2.07E-04	mg/kg/day	0.00	0.00	mg/kg/day		

Chemical ID: TCE-81

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 9 RELEASE ACTIVITY: Solvents 20 dy

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

SIC CODE RESULTS									
COC (µg/L)	Vaar COC Dave COC		Release Loading (kg/site/day)		Waste Water Treatment (%)	High/Avg Analysis			
3.00	1	5	20.00	0.27	81.00	High			
788.00	0	0	20.00	0.27	81.00	High			
920.00	0	0	20.00	0.27	81.00	High			
1.44E+04	0	0	20.00	0.27	81.00	High			

Chemical ID: TCE-0%

Assessor:

Scenario#:5 Number of Release Sites: 1.

Release Activity: Solvents 350 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE		
	Non-sludge/Sludge					
Total Releases:	5.25	N/A	N/A	N/A		
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)		

Non-sludge/Sludge

Release Days/yr: Per Site Release:

350.00	0.00/0.00	N/A	N/A
1.50E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0%

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

SCENARIO #: 5 Number of Sites: 1 RELEASE ACTIVITY:Solvents

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.	0.015	1.50E-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	5.31E-03	1.60E-02	2.37E-02	2.92E-02	
ALL	10	50.57	9.38	5.41	4.53	0.30	1.60	2.77	3.31	

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES							
Exposure Units	Drinking Water Results		Drinking Water Units	Fish Ingestion Results		Fish Ingestion Units	
	50%	10%		50%	10%		
Cancer							
$LADD_{pot}$	2.80E-08	1.56E-06	mg/kg/day	0.00	0.00	mg/kg/day	
LADC _{pot}	2.15E-06	1.20E-04	mg/L	0.00	0.00	mg/kg	
Acute							
ADR _{pot}	6.07E-07	6.06E-05	mg/kg/day	0.00	0.00	mg/kg/day	

Chemical ID: TCE-0%

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 5 RELEASE ACTIVITY: Solvents 350 dy

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

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	
3.00	11	40	350.00	1.50E-02	0.00	High	
788.00	0	0	350.00	1.50E-02	0.00	High	
920.00	0	0	350.00	1.50E-02	0.00	High	
1.44E+04	0	0	350.00	1.50E-02	0.00	High	

Chemical ID: TCE-0%

Assessor:

Scenario#:6 Number of Release Sites: 1.

Release Activity: Solvents 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE	
	Non-sludge/Sludge				
Total Releases:	5.40	N/A	N/A	N/A	
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)	

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
0.27	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0%

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

SCENARIO #: 6 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.	0.27	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	2825.61	935.49	634.16	514.20	9.56E-02	0.29	0.43	0.53
ALL	10	50.57	9.38	5.41	4.53	5.34	28.78	49.91	59.60

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES								
Exposure Units	Drinking Water Results		Drinking Water Units	Fish Ingestion Results		Fish Ingestion Units		
	50%	10%		50%	10%			
	Cancer							
$LADD_{pot}$	2.88E-08	1.61E-06	mg/kg/day	0.00	0.00	mg/kg/day		
LADC _{pot}	2.22E-06	1.24E-04	mg/L	0.00	0.00	mg/kg		
Acute								
ADR_{pot}	1.09E-05	1.09E-03	mg/kg/day	0.00	0.00	mg/kg/day		

Chemical ID: TCE-0%

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 6 RELEASE ACTIVITY: Solvents 20 dy

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

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	
3.00	3	12	20.00	0.27	0.00	High	
788.00	0	0	20.00	0.27	0.00	High	
920.00	0	0	20.00	0.27	0.00	High	
1.44E+04	0	0	20.00	0.27	0.00	High	

PROCESSING AS A REACTANT

Chemical ID: TCE-81

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:18 Number of Release Sites: 440.

Release Activity: 440 350 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	770.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

350.00	0.00/0.00	N/A	N/A
5.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-81

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

SCENARIO #: 18 Number of Sites: 440 RELEASE ACTIVITY:440 350 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)
81.00	350.	0.005	9.50E-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	3.36E-04	1.02E-03	1.50E-03	1.85E-03		
ALL	10	50.57	50.57 9.38 5.41 4.53 1.88E-02 0.10 0.18					0.21			

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%			
		C	Cancer					
LADD _{pot}	1.77E-09	9.91E-08	mg/kg/day	0.00	0.00	mg/kg/day		
LADC _{pot}	1.36E-07	7.62E-06	mg/L	0.00	0.00	mg/kg		
Acute								
ADR _{pot} 3.85E-08 3.84E-06 mg/kg/day 0.00 0.00 mg/kg/day								

Chemical ID: TCE-81

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 18 RELEASE ACTIVITY: 440 350 dy

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

	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				
3.00	1	5	350.00	5.00E-03	81.00	High				
788.00	0	0	350.00	5.00E-03	81.00	High				
920.00	0	0	350.00	5.00E-03	81.00	High				
1.44E+04	0	0	350.00	5.00E-03	81.00	High				

Chemical ID: TCE 81

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:2

Number of Release Sites: 440.

Release Activity:

440 Unknown 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE	
	Non-sludge/Sludge				
Total Releases:	783.20	N/A	N/A	N/A	
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)	

Non-sludge/Sludge

Release Days/yr:

20.00 N/AN/A0.00/0.00Per Site Release: 8.90E-02 N/A/0.00N/AN/A

(kg/site/day) (kg/site/day) (kg/site/day) (kg/site/day)

Chemical ID: TCE 81

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

SCENARIO #: 2 Number of Sites: 440 RELEASE ACTIVITY:440

Unknown 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)
81.00	20.	0.089	1.69E-02	0.00	0.00

	AQUATIC EXPOSURE ESTIMATES - SURFACE WATER								
PLANT TYPE	% ILE FACILITY		STREAM FLOW (MLD) STREAM				STREAM C	ONC. (µg/l)	
		Harmonic Mean 30Q5 7Q10 1Q10 Harmonic Mean 30Q5 7Q10					7Q10	1Q10	
ALL	50	2825.61	935.49	634.16	514.20	5.98E-03	1.81E-02	2.67E-02	3.29E-02
ALL	10	50.57	9.38	5.41	4.53	0.33	1.80	3.13	3.73

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES								
Exposure Units	Drinking Water Results		Drinking Water Units	Fish Ingest	ion Results	Fish Ingestion Units		
	50%	10%		50%	10%			
		C	Cancer					
$\mathrm{LADD}_{\mathrm{pot}}$	1.80E-09	1.01E-07	mg/kg/day	0.00	0.00	mg/kg/day		
LADC _{pot}	1.39E-07	7.75E-06	mg/L	0.00	0.00	mg/kg		
Acute								
ADR _{pot}	6.85E-07	6.83E-05	mg/kg/day	0.00	0.00	mg/kg/day		

Chemical ID: TCE 81

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 2 RELEASE ACTIVITY: 440 Unknown 20 dy

SIC CODE DESCRIPTION: Organic Chemicals Manufacture

	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				
3.00	1	2	20.00	8.90E-02	81.00	High				
788.00	0	0	20.00	8.90E-02	81.00	High				
920.00	0	0	20.00	8.90E-02	81.00	High				
1.44E+04	0	0	20.00	8.90E-02	81.00	High				

Chemical ID: TCE-0%

Assessor:

Scenario#:14

Number of Release Sites: 440.

Release Activity:

440 350 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE	
	Non-sludge/Sludge				
Total Releases:	770.00	N/A	N/A	N/A	
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)	

Non-sludge/Sludge

Release Days/yr: Per Site Release:

(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)
5.00E-03	N/A/0.00	N/A	N/A
350.00	0.00/0.00	N/A	N/A

Chemical ID: TCE-0%

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

SCENARIO #: 14 Number of Sites: 440 RELEASE ACTIVITY:440 350 dy

SIC-CODE DESCRIPTION: Organic Chemicals Manufacture

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

WWT REMOVAL (%)	RELEASE DAYS PRETREATMED RELEASE (kg/site/day)		POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	350.	0.005	5.00E-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	1.77E-03	5.34E-03	7.88E-03	9.72E-03
ALL	10	50.57	9.38	5.41	4.53	9.89E-02	0.53	0.92	1.10

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES								
Exposure Units	Drinking Water Results		Drinking Water Units	Fish Ingestion Results		Fish Ingestion Units		
	50%	10%		50%	10%			
Cancer								
$LADD_{pot}$	9.33E-09	5.21E-07	mg/kg/day	0.00	0.00	mg/kg/day		
LADC _{pot}	7.18E-07	4.01E-05	mg/L	0.00	0.00	mg/kg		
Acute								
ADR_{pot}	2.02E-07	2.02E-05	mg/kg/day	0.00	0.00	mg/kg/day		

Chemical ID: TCE-0%

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 14 RELEASE ACTIVITY: 440 350 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				
3.00	6	23	350.00	5.00E-03	0.00	High				
788.00	0	0	350.00	5.00E-03	0.00	High				
920.00	0	0	350.00	5.00E-03	0.00	High				
1.44E+04	0	0	350.00	5.00E-03	0.00	High				

Chemical ID: TCE

Assessor:

ENVIRONMENTAL RELEASES	
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Scenario#:4

Number of Release Sites: 440.

Release Activity:

440 Unknown 20 dy

Release Description:	WATER LANDFILL		STACK	FUGITIVE	
	Non-sludge/Sludge				
Total Releases:	783.20	N/A	N/A	N/A	
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)	

Non-sludge/Sludge

Release Days/yr:

20.00 0.00/0.00N/AN/APer Site Release: 8.90E-02 N/A/0.00N/AN/A

(kg/site/day) (kg/site/day) (kg/site/day) (kg/site/day)

Chemical ID: TCE

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

SCENARIO #: 4 Number of Sites: 440 RELEASE ACTIVITY:440

Unknown 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.	0.089	8.90E-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	3.15E-02	9.51E-02	0.14	0.17	
ALL	10	50.57	9.38	5.41	4.53	1.76	9.49	16.45	19.65	

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							
$\mathrm{LADD}_{\mathrm{pot}}$	9.49E-09	5.30E-07	mg/kg/day	0.00	0.00	mg/kg/day	
LADC _{pot}	7.30E-07	4.08E-05	mg/L	0.00	0.00	mg/kg	
Acute							
ADR_{pot}	3.60E-06	3.59E-04	mg/kg/day	0.00	0.00	mg/kg/day	

SIC Code Comments:

Chemical ID: TCE

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 4 RELEASE ACTIVITY: 440 Unknown 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				
3.00	2	7	20.00	8.90E-02	0.00	High				
788.00	0	0	20.00	8.90E-02	0.00	High				
920.00	0	0	20.00	8.90E-02	0.00	High				
1.44E+04	0	0	20.00	8.90E-02	0.00	High				

Chemical ID: TCE-0%

Assessor:

Scenario#:15

Number of Release Sites: 1.

Release Activity:

Arkema 350 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE	
	Non-sludge/Sludge				
Total Releases:	5.95	N/A	N/A	N/A	
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)	

Non-sludge/Sludge

Release Days/yr: Per Site Release:

350.00	0.00/0.00	N/A	N/A
1.70E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:15 RELEASE ACTIVITY: Arkema 350 dy

FACILITY NAME: ATOFINA CHEMICALS INC

FACILITY LOCATION: CALVERT CITY KY 42029

RECEIVING WATER NAME: TENNESSEE R

REACH NUMBER: 06040006017 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: KY0003603 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	350.	0.017	1.70E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER							
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT		
FLOW (MLD)	8.62E+04	3.01E+04	2.31E+04	1.82E+04	NA		
CONCENTRATION (μg/L)	1.97E-04	5.65E-04	7.37E-04	9.32E-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}	1.04E-09 mg/kg/day 0.00 mg/kg/day				
LADC _{pot}	8.00E-08 mg/L 0.00 mg/kg				
Acute					
ADR _{pot}	2.14E-08	mg/kg/day	0.00	mg/kg/day	

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 15 RELEASE ACTIVITY: Arkema 350 dy

FACILITY NAME: ATOFINA CHEMICALS INC

FACILITY LOCATION: CALVERT CITY KY 42029

RECEIVING STREAM NAME: TENNESSEE R

REACH NUMBER: 06040006017 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: KY0003603 GAGING STATION ID: 03609500

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/66 - 10/09/84 NUMBER OF REACH: 1

OBSERVATIONS: 6858.00

(MLD):18.27

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 (%)	
3.00	0	0	350.00	1.70E-02	0.00	
788.00	0	0	350.00	1.70E-02	0.00	
920.00	0	0	350.00	1.70E-02	0.00	
1.44E+04	0	0	350.00	1.70E-02	0.00	

Chemical ID: TCE

Assessor:

Scenario#:2 Number of Release Sites: 1.

Release Activity: Arkema 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE	
	Non-sludge/Sludge				
Total Releases:	5.90	N/A	N/A	N/A	
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)	

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
0.29	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:2 RELEASE ACTIVITY: Arkema 20 dy

FACILITY NAME: ATOFINA CHEMICALS INC

FACILITY LOCATION: CALVERT CITY KY 42029

RECEIVING WATER NAME: TENNESSEE R

REACH NUMBER: 06040006017 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: KY0003603 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.295	0.29	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	8.62E+04	3.01E+04	2.31E+04	1.82E+04	NA	
CONCENTRATION (μg/L) 3.42E-03 9.80E-03 1.28E-02 1.62E-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}	1.03E-09 mg/kg/day 0.00 mg/kg/day				
LADC _{pot}	7.94E-08 mg/L 0.00 mg/kg				
Acute					
ADR _{pot}	3.71E-07	mg/kg/day	0.00	mg/kg/day	

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 2 RELEASE ACTIVITY: Arkema 20 dy

FACILITY NAME: ATOFINA CHEMICALS INC

FACILITY LOCATION: CALVERT CITY KY 42029

RECEIVING STREAM NAME: TENNESSEE R

REACH NUMBER: 06040006017 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: KY0003603 GAGING STATION ID: 03609500

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/66 - 10/09/84 NUMBER OF REACH: 1

OBSERVATIONS: 6858.00

(MLD):18.27

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 (%)
3.00	0	0	20.00	0.29	0.00
788.00	0	0	20.00	0.29	0.00
920.00	0	0	20.00	0.29	0.00
1.44E+04	0	0	20.00	0.29	0.00

Chemical ID: TCE-0%

Assessor:

Scenario#:18 Number of Release Sites: 1.

Release Activity: Honey 350 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	4.48	N/A	N/A	N/A
Total Releases.	4.40	IN/A	IN/A	IN/A

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

350.00	0.00/0.00	N/A	N/A
1.28E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:18 RELEASE ACTIVITY: Honey 350 dy

FACILITY NAME: ALLIED-SIGNAL INC-GEISMAR

FACILITY LOCATION: GEISMAR LA 70734 RECEIVING WATER NAME: MISSISSIPPI R

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

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.	0.0128	1.28E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	8.12E+05	2.98E+05	2.47E+05	1.92E+05	NA	
CONCENTRATION (µg/L)	1.58E-05	4.30E-05	5.18E-05	6.66E-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}	8.31E-11	8.31E-11 mg/kg/day		mg/kg/day		
LADC _{pot}	6.39E-09 mg/L		0.00	mg/kg		
Acute						
ADR _{pot}	1.63E-09	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 18 RELEASE ACTIVITY: Honey 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: LA0006181 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 1.14E+06 7q10 FLOW (MLD): 2.47E+05 EFFLUENT FLOW

(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 (%)		
3.00	0	0	350.00	1.28E-02	0.00		
788.00	0	0	350.00	1.28E-02	0.00		
920.00	0	0	350.00	1.28E-02	0.00		
1.44E+04	0	0	350.00	1.28E-02	0.00		

Chemical ID: TCE

Assessor:

Scenario#:13

Number of Release Sites: 1.

Release Activity:

Honeywell 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	4.48	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr: Per Site Release:

20.00	0.00/0.00	N/A	N/A
0.22	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:13 RELEASE ACTIVITY: Honeywell 20 dy

FACILITY NAME: ALLIED-SIGNAL INC-GEISMAR

FACILITY LOCATION: GEISMAR LA 70734 RECEIVING WATER NAME: MISSISSIPPI R

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

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.	20.	0.224	0.22	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLAN						
FLOW (MLD)	8.12E+05	2.98E+05	2.47E+05	1.92E+05	NA	
CONCENTRATION (µg/L)	2.76E-04	7.53E-04	9.07E-04	1.17E-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}	8.31E-11 mg/kg/day		0.00 mg/kg/day			
LADC _{pot}	6.39E-09 mg/L		0.00	mg/kg		
Acute						
ADR_{pot}	2.85E-08	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 13 RELEASE ACTIVITY: Honeywell 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: LA0006181 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 1.14E+06 7q10 FLOW (MLD): 2.47E+05 EFFLUENT FLOW

(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 (%)		
3.00	0	0	20.00	0.22	0.00		
788.00	0	0	20.00	0.22	0.00		
920.00	0	0	20.00	0.22	0.00		
1.44E+04	0	0	20.00	0.22	0.00		

Chemical ID: TCE-0%

Assessor:

ENVIRONMENTAL RELEASES								
Scenario#:19		Number of Release Sites: 1.						
Release Activity:	Praxair 350 dy	Praxair 350 dy						
Release Description:	WATER	WATER LANDFILL STACK FUGITIVE Non-sludge/Sludge						
Total Releases:	0.59	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:	1.69E-03	N/A/0.00	N/A	N/A				
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)				

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS					
SCENARIO #: 19 RELEASE ACTIVITY: Praxair 350 dy					
FACILITY NAME: PRAXAIR INC					
FACILITY LOCATION: TONAWA	ANDA NY 14151				
RECEIVING WATER NAME: NIA	RECEIVING WATER NAME: NIAGARA R				
REACH NUMBER: 04120104008 FACILITY ON REACH: No DISCHARGE TYPE: Direct					
NPDES PERMIT #: NY0000281 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	0.00169	1.69E-03	0.00

AQUATIC EXPOSURE ESTIMATES					
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)			
ACUTE SCENARIO	1.00	169.00			
CHRONIC SCENARIO	1.00	169.00			

FISH INGESTION EXPOSURE ESTIMATES					
	ASSUMPTIONS				
Exposure Units	Results	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:

Assessor:

Chemical ID: TCE

ENVIRONMENTAL RELEASES

Scenario#:45 Number of Release Sites: 1.

Release Activity: Praxair 20 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:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
3.00E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS				
SCENARIO #: 45 RELEASE ACTIVITY: Praxair 20 dy				
FACILITY NAME: PRAXAIR INC				
FACILITY LOCATION: TONAWA	ANDA NY 14151			
RECEIVING WATER NAME: NIA	AGARA R			
REACH NUMBER: 04120104008 FACILITY ON REACH: No DISCHARGE TYPE: Direct				
NPDES PERMIT #: NY0000281	S PERMIT #: NY0000281 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	0.03	3.00E-02	0.00

AQUATIC EXPOSURE ESTIMATES					
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)			
ACUTE SCENARIO	1.00	3000.00			
CHRONIC SCENARIO	1.00	3000.00			

FISH INGESTION EXPOSURE ESTIMATES					
ASSUMPTIONS					
Exposure Units	Results	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:

OTVD

Includes releases for open-top vapor degreasing, closed-loop degreasing, conveyorized degreasing, web degreasing, cold cleaning, and metalworking fluids

Chemical ID: TCE-0

Assessor:

Scenario#:3 Number of Release Sites: 1.

Release Activity: Texas 260 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	1.30	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A
5.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:3 RELEASE ACTIVITY: Texas 260 dy

FACILITY NAME: TEXAS INSTRUMENTS INC. FACILITY LOCATION: ATTLEBORO MA 02703

RECEIVING WATER NAME: SEEKONK R

REACH NUMBER: 01090004023 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: MA0001791 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.005	5.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	995.05	404.05	265.93	216.94	NA
CONCENTRATION (µg/L)	5.02E-03	1.24E-02	1.88E-02	2.30E-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}	1.97E-08 mg/kg/day 0.00 mg/kg/day			mg/kg/day		
LADC _{pot}	1.51E-06 mg/L 0.00 mg/kg			mg/kg		
Acute						
ADR _{pot}	4.69E-07	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 3 RELEASE ACTIVITY: Texas 260 dy

FACILITY NAME: TEXAS INSTRUMENTS INC. FACILITY LOCATION: ATTLEBORO MA 02703

RECEIVING STREAM NAME: SEEKONK R

REACH NUMBER: 01090004023 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: MA0001791 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 2322.27 7q10 FLOW (MLD): 265.93 EFFLUENT FLOW

(MLD):7.06

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 (%)		
3.00	0	0	260.00	5.00E-03	0.00		
788.00	0	0	260.00	5.00E-03	0.00		
920.00	0	0	260.00	5.00E-03	0.00		
1.44E+04	0	0	260.00	5.00E-03	0.00		

Chemical ID: TCE-0

Assessor:

Scenario#:4 Number of Release Sites: 1.

Release Activity: Texas 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	1.34	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
6.70E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:4 RELEASE ACTIVITY: Texas 20 dy

FACILITY NAME: TEXAS INSTRUMENTS INC.

FACILITY LOCATION: ATTLEBORO MA 02703 RECEIVING WATER NAME: SEEKONK R

REACH NUMBER: 01090004023 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: MA0001791 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.067	6.70E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	995.05	404.05	265.93	216.94	NA
CONCENTRATION (µg/L)	6.73E-02	0.17	0.25	0.31	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}	2.03E-08	2.03E-08 mg/kg/day		mg/kg/day		
LADC _{pot}	1.56E-06 mg/L		0.00	mg/kg		
Acute						
ADR_{pot}	6.28E-06	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 4 RELEASE ACTIVITY: Texas 20 dy

FACILITY NAME: TEXAS INSTRUMENTS INC. FACILITY LOCATION: ATTLEBORO MA 02703

RECEIVING STREAM NAME: SEEKONK R

REACH NUMBER: 01090004023 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: MA0001791 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 2322.27 7q10 FLOW (MLD): 265.93 EFFLUENT FLOW

(MLD):7.06

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 (%)		
3.00	0	0	20.00	6.70E-02	0.00		
788.00	0	0	20.00	6.70E-02	0.00		
920.00	0	0	20.00	6.70E-02	0.00		
1.44E+04	0	0	20.00	6.70E-02	0.00		

Chemical ID: TCE-0

Assessor:

Scenario#:5 Number of Release Sites: 1.

Release Activity: Accellent 260 dy

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

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)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:5 RELEASE ACTIVITY: Accellent 260 dy

FACILITY NAME: UNIFORM TUBE INC

FACILITY LOCATION: COLLEGEVILLE PA 19426

RECEIVING WATER NAME: PERKIOMEN CR

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

NPDES PERMIT #: PA0042617 EXPOSED POPULATION: Adult

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

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	281.27	75.79	47.03	38.83	NA	
CONCENTRATION (μg/L) 7.11E-03 2.64E-02 4.25E-02 5.15E-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}	2.79E-08 mg/kg/day 0.00 mg/kg/day					
LADC _{pot}	2.14E-06 mg/L 0.00 mg/kg					
Acute						
ADR _{pot}	9.99E-07	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 5 RELEASE ACTIVITY: Accellent 260 dy

FACILITY NAME: UNIFORM TUBE INC

FACILITY LOCATION: COLLEGEVILLE PA 19426

RECEIVING STREAM NAME: PERKIOMEN CR

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

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

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 1213.02 7q10 FLOW (MLD): 47.03 EFFLUENT FLOW

(MLD):6.00E-02

RESULTS						
COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)	
3.00	0	0	260.00	2.00E-03	0.00	
788.00	0	0	260.00	2.00E-03	0.00	
920.00	0	0	260.00	2.00E-03	0.00	
1.44E+04	0	0	260.00	2.00E-03	0.00	

Chemical ID: TCE-0

Assessor:

Scenario#:6 Number of Release Sites: 1.

Release Activity: Accellent 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	0.58	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
2.90E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:6 RELEASE ACTIVITY: Accellent 20 dy

FACILITY NAME: UNIFORM TUBE INC

FACILITY LOCATION: COLLEGEVILLE PA 19426

RECEIVING WATER NAME: PERKIOMEN CR

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

NPDES PERMIT #: PA0042617 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.029	2.90E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	281.27	75.79	47.03	38.83	NA	
CONCENTRATION (μg/L) 0.10 0.38 0.62 0.75 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}	3.11E-08 mg/kg/day 0.00 mg/kg/day					
LADC _{pot}	2.39E-06 mg/L 0.00 mg/kg					
Acute						
ADR _{pot}	1.45E-05	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 6 RELEASE ACTIVITY: Accellent 20 dy

FACILITY NAME: UNIFORM TUBE INC

FACILITY LOCATION: COLLEGEVILLE PA 19426

RECEIVING STREAM NAME: PERKIOMEN CR

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

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

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 1213.02 7q10 FLOW (MLD): 47.03 EFFLUENT FLOW

(MLD):6.00E-02

RESULTS							
COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)		
3.00	0	0	20.00	2.90E-02	0.00		
788.00	0	0	20.00	2.90E-02	0.00		
920.00	0	0	20.00	2.90E-02	0.00		
1.44E+04	0	0	20.00	2.90E-02	0.00		

Chemical ID: TCE-0

Assessor:

Scenario#:7 Number of Release Sites: 1.

Release Activity: Ametek 260 dy

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

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A	
1.00E-03	N/A/0.00	N/A	N/A	
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)	

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:7 RELEASE ACTIVITY: Ametek 260 dy

FACILITY NAME: PENNRIDGE WWT AUTH

FACILITY LOCATION: SELLERSVILLE PA 189600031 RECEIVING WATER NAME: PERKIOMEN CR E BR

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

NPDES PERMIT #: PA0020460 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.001	1.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	88.62	27.01	16.16	13.44	NA	
CONCENTRATION (µg/L)	1.13E-02	3.70E-02	6.19E-02	7.44E-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}	4.42E-08 mg/kg/day 0.00 mg/kg/day			mg/kg/day			
LADC _{pot}	3.40E-06 mg/L 0.00 mg/kg			mg/kg			
Acute							
ADR _{pot}	1.40E-06 mg/kg/day 0.00 mg/kg/day						

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 7 RELEASE ACTIVITY: Ametek 260 dy

FACILITY NAME: PENNRIDGE WWT AUTH

FACILITY LOCATION: SELLERSVILLE PA 189600031 RECEIVING STREAM NAME: PERKIOMEN CR E BR

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

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

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

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

(MLD):10.29

RESULTS							
COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)		
3.00	0	0	260.00	1.00E-03	0.00		
788.00	0	0	260.00	1.00E-03	0.00		
920.00	0	0	260.00	1.00E-03	0.00		
1.44E+04	0	0	260.00	1.00E-03	0.00		

Chemical ID: TCE-0

Assessor:

Scenario#:8 Number of Release Sites: 1.

Release Activity: Ametek 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	0.22	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr: Per Site Release:

20.00	0.00/0.00	N/A	N/A
1.10E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:8 RELEASE ACTIVITY: Ametek 20 dy

FACILITY NAME: PENNRIDGE WWT AUTH

FACILITY LOCATION: SELLERSVILLE PA 189600031 RECEIVING WATER NAME: PERKIOMEN CR E BR

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

NPDES PERMIT #: PA0020460 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.011	1.10E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	88.62	27.01	16.16	13.44	NA	
CONCENTRATION (µg/L)	0.12	0.41	0.68	0.82	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}	3.74E-08 mg/kg/day 0.00 mg/kg/day						
LADC _{pot}	2.88E-06	2.88E-06 mg/L		mg/kg			
Acute							
ADR _{pot}	1.54E-05 mg/kg/day 0.00 mg/kg/day						

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 8 RELEASE ACTIVITY: Ametek 20 dy

FACILITY NAME: PENNRIDGE WWT AUTH

FACILITY LOCATION: SELLERSVILLE PA 189600031 RECEIVING STREAM NAME: PERKIOMEN CR E BR

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

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

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

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

(MLD):10.29

	RESULTS								
COC (μg/L) Percent of Year COC Exceeded		Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)				
3.00	0	0	20.00	1.10E-02	0.00				
788.00	0	0	20.00	1.10E-02	0.00				
920.00	0	0	20.00	1.10E-02	0.00				
1.44E+04	0	0	20.00	1.10E-02	0.00				

Chemical ID: TCE-0

Assessor:

Scenario#:9

Number of Release Sites: 1.

Release Activity:

Atk 260 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:	260.00	0.00/0.00	N/A	N/A

Per Site Release:

260.00	0.00/0.00	N/A	N/A
5.00E-04	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:9 RELEASE ACTIVITY: Atk 260 dy

FACILITY NAME: ATK TACTICAL SYSTEMS CO. LLC

FACILITY LOCATION: ROCKET CENTER WV 26726

RECEIVING WATER NAME: POTOMAC R N BR

REACH NUMBER: 02070002018 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: WV0020371 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.0005	5.00E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	747.42	248.73	160.93	131.75	NA	
CONCENTRATION (µg/L)	6.69E-04	2.01E-03	3.11E-03	3.80E-03	NA	

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES					
Exposure Units Drinking Water Results Drinking Water Units Fish Ingestion Results Units Results Units					
Cancer					
LADD _{pot}	2.62E-09 mg/kg/day 0.00 mg/kg/day				
LADC _{pot}	2.02E-07 mg/L 0.00 mg/kg				
Acute					
ADR _{pot}	7.61E-08	mg/kg/day	0.00	mg/kg/day	

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 9 RELEASE ACTIVITY: Atk 260 dy

FACILITY NAME: ATK TACTICAL SYSTEMS CO. LLC

FACILITY LOCATION: ROCKET CENTER WV 26726 RECEIVING STREAM NAME: POTOMAC R N BR

REACH NUMBER: 02070002018 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: WV0020371 GAGING STATION ID: 01600000

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/66 - 05/21/89 NUMBER OF REACH: 1

OBSERVATIONS: 7406.00

(MLD):0.18

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 (%)
3.00	0	0	260.00	5.00E-04	0.00
788.00	0	0	260.00	5.00E-04	0.00
920.00	0	0	260.00	5.00E-04	0.00
1.44E+04	0	0	260.00	5.00E-04	0.00

Chemical ID: TCE-0

Assessor:

Scenario#:10 Number of Release Sites: 1.

Release Activity: Atk 20 dy

Release Description:	WATER	WATER LANDFILL		FUGITIVE
	Non-sludge/Sludge			
Total Releases:	0.12	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
6.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:10 RELEASE ACTIVITY: Atk 20 dy

FACILITY NAME: ATK TACTICAL SYSTEMS CO. LLC

FACILITY LOCATION: ROCKET CENTER WV 26726

RECEIVING WATER NAME: POTOMAC R N BR

REACH NUMBER: 02070002018 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: WV0020371 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.006	6.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	747.42	248.73	160.93	131.75	NA
CONCENTRATION (µg/L)	8.03E-03	2.41E-02	3.73E-02	4.55E-02	NA

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES					
Exposure Units	Drinking Water Results	Drinking Water Units	Fish Ingestion Results	Fish Ingestion Units	
Cancer					
LADD _{pot}	DD _{pot} 2.42E-09 mg/kg/day 0.00 mg/kg/day				
LADC _{pot}	1.86E-07 mg/L 0.00 mg/kg				
Acute					
ADR _{pot}	9.14E-07	mg/kg/day	0.00	mg/kg/day	

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 10 RELEASE ACTIVITY: Atk 20 dy

FACILITY NAME: ATK TACTICAL SYSTEMS CO. LLC FACILITY LOCATION: ROCKET CENTER WV 26726

RECEIVING STREAM NAME: POTOMAC R N BR

REACH NUMBER: 02070002018 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: WV0020371 GAGING STATION ID: 01600000

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/66 - 05/21/89 NUMBER OF REACH: 1

OBSERVATIONS: 7406.00

(MLD):0.18

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 (%)	
3.00	0	0	20.00	6.00E-03	0.00	
788.00	0	0	20.00	6.00E-03	0.00	
920.00	0	0	20.00	6.00E-03	0.00	
1.44E+04	0	0	20.00	6.00E-03	0.00	

Chemical ID: TCE

Assessor:

Scenario#:1

Number of Release Sites: 1.

Release Activity:

NASA 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	508.80	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)
25.44	N/A/0.00	N/A	N/A
20.00	0.00/0.00	N/A	N/A

CHEMICAL ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS				
SCENARIO #: 1	ELEASE ACTIVITY: NASA 20 dy			
FACILITY NAME: AIR PROD & 0	CHEM INC-NEW ORLEAN			
FACILITY LOCATION: NEW OR	LEANS LA 70129			
RECEIVING WATER NAME: INTRACOASTAL WATERWAY				
REACH NUMBER: 08090203008 FACILITY ON REACH: No DISCHARGE TYPE: Direct				
NPDES PERMIT #: LA0003280 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.	2.56	25.44	25.44	0.00

AQUATIC EXPOSURE ESTIMATES					
MIXING ZONE DILUTION FACTOR WATER CONCENTRATION (1					
ACUTE SCENARIO	1.00	9937.50			
CHRONIC SCENARIO	1.00	9937.50			

FISH INGESTION EXPOSURE ESTIMATES					
ASSUMPTIONS					
Exposure Units	Results	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:

Chemical ID: TCE

Assessor:

Scenario#:2 Number of Release Sites: 1.

Release Activity: NASA 260 dy

Release Description:	WATER	LANDFILL STACK		FUGITIVE	
	Non-sludge/Sludge				
Total Releases:	509.60	N/A	N/A	N/A	
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)	

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A
1.96	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

CHEMICAL ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS				
SCENARIO #: 2 RELEASE ACTIVITY: NASA 260 dy				
FACILITY NAME: AIR PROD & O	CHEM INC-NEW ORLEAN			
FACILITY LOCATION: NEW OR	LEANS LA 70129			
RECEIVING WATER NAME: INTRACOASTAL WATERWAY				
REACH NUMBER: 08090203008 FACILITY ON REACH: No DISCHARGE TYPE: Direct				
NPDES PERMIT #: LA0003280 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.	2.56	1.96	1.96	0.00

AQUATIC EXPOSURE ESTIMATES					
MIXING ZONE DILUTION FACTOR WATER CONCENTRATION (u					
ACUTE SCENARIO	1.00	765.63			
CHRONIC SCENARIO	1.00	765.63			

FISH INGESTION EXPOSURE ESTIMATES					
ASSUMPTIONS					
Exposure Units	Results	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:

Chemical ID: TCE

Assessor:

ENVIRONMENTAL RELEASES	ENVIR	ONMENT	TAL REI	LEASES
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Scenario#:3

Number of Release Sites: 1.

Release Activity:

GM 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	34.24	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr: Per Site Release:

(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)
1.71	N/A/0.00	N/A	N/A
20.00	0.00/0.00	N/A	N/A

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:3 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: No DISCHARGE TYPE: Direct

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.	1.71	1.71	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	41.37	20.01	11.85	11.85	NA	
CONCENTRATION (µg/L)	41.38	85.54	144.47	144.47	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}	1.25E-05	mg/kg/day	0.00 mg/kg/day			
LADC _{pot}	9.59E-04	mg/L	0.00	mg/kg		
Acute						
ADR _{pot}	3.24E-03	3.24E-03 mg/kg/day 0.00 mg/kg/day				

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 3 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 GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: 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 (%)		
3.00	5	20	20.00	1.71	0.00		
788.00	0	0	20.00	1.71	0.00		
920.00	0	0	20.00	1.71	0.00		
1.44E+04	0	0	20.00	1.71	0.00		

Chemical ID: TCE

Assessor:

Scenario#:4 Number of Release Sites: 1.

Release Activity: GM 260 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	33.80	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:
 0.13
 N/A/0.00
 N/A
 N/A

(kg/site/day) (kg/site/day) (kg/site/day) (kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:4 RELEASE ACTIVITY: GM 260 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: No DISCHARGE TYPE: Direct

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.	260.	0.13	0.13	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	41.37	20.01	11.85	11.85	NA	
CONCENTRATION (µg/L)	3.14	6.50	10.97	10.97	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}	1.23E-05 mg/kg/day 0.00 mg/kg/d		mg/kg/day			
LADC _{pot}	9.47E-04	mg/L	0.00 mg/kg			
Acute						
ADR _{pot}	2.46E-04	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 4 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 GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: 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 (%)		
3.00	32	117	260.00	0.13	0.00		
788.00	0	0	260.00	0.13	0.00		
920.00	0	0	260.00	0.13	0.00		
1.44E+04	0	0	260.00	0.13	0.00		

Chemical ID: TCE

Assessor:

Scenario#:5

Number of Release Sites: 1.

Release Activity:

Akebono 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	17.94	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr: Per Site Release:

20.00	0.00/0.00	N/A	N/A	
0.90	N/A/0.00	N/A	N/A	
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)	

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:5 RELEASE ACTIVITY: Akebono 20 dy

FACILITY NAME: ELIZABETHTOWN STP

FACILITY LOCATION: ELIZABETHTOWN KY 42701

RECEIVING WATER NAME: VALLEY CR

REACH NUMBER: 05110001048 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: KY0022039 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.897	0.90	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	60.74	24.13	14.38	11.97	NA	
CONCENTRATION (µg/L)	14.77	37.18	62.38	74.92	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}	4.45E-06 mg/kg/day 0.00 mg/kg/day					
LADC _{pot}	3.42E-04 mg/L 0.00 mg/l			mg/kg		
Acute						
ADR _{pot}	1.41E-03 mg/kg/day 0.00 mg/kg/day					

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 5 RELEASE ACTIVITY: Akebono 20 dy

FACILITY NAME: ELIZABETHTOWN STP

FACILITY LOCATION: ELIZABETHTOWN KY 42701

RECEIVING STREAM NAME: VALLEY CR

REACH NUMBER: 05110001048 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: KY0022039 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 189.29 7q10 FLOW (MLD): 14.38 EFFLUENT FLOW

(MLD):6.29

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 (%)		
3.00	4	16	20.00	0.90	0.00		
788.00	0	0	20.00	0.90	0.00		
920.00	0	0	20.00	0.90	0.00		
1.44E+04	0	0	20.00	0.90	0.00		

Chemical ID: TCE

Assessor:

Scenario#:6 Number of Release Sites: 1.

Release Activity: Akebono 260 dy

Release Description:	WATER	WATER LANDFILL		FUGITIVE
	Non-sludge/Sludge			
Total Releases:	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)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:6 RELEASE ACTIVITY: Akebono 260 dy

FACILITY NAME: ELIZABETHTOWN STP

FACILITY LOCATION: ELIZABETHTOWN KY 42701

RECEIVING WATER NAME: VALLEY CR

REACH NUMBER: 05110001048 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: KY0022039 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.07	7.00E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	60.74	24.13	14.38	11.97	NA	
CONCENTRATION (µg/L)	1.15	2.90	4.87	5.85	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}	4.52E-06	4.52E-06 mg/kg/day 0.00 m				
LADC _{pot}	3.47E-04	3.47E-04 mg/L		mg/kg		
Acute						
ADR _{pot}	1.10E-04 mg/kg/day 0.00 mg/kg/day					

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 6 RELEASE ACTIVITY: Akebono 260 dy

FACILITY NAME: ELIZABETHTOWN STP

FACILITY LOCATION: ELIZABETHTOWN KY 42701

RECEIVING STREAM NAME: VALLEY CR

REACH NUMBER: 05110001048 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: KY0022039 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 189.29 7q10 FLOW (MLD): 14.38 EFFLUENT FLOW

(MLD):6.29

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 (%)		
3.00	7	27	260.00	7.00E-02	0.00		
788.00	0	0	260.00	7.00E-02	0.00		
920.00	0	0	260.00	7.00E-02	0.00		
1.44E+04	0	0	260.00	7.00E-02	0.00		

Chemical ID: TCE

Assessor:

Scenario#:7

Number of Release Sites: 1.

Release Activity:

Delphi 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE	
	Non-sludge/Sludge				
Total Releases:	9.30	9.30 N/A		N/A	
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)	

Non-sludge/Sludge

Release Days/yr: Per Site Release:

20.00	0.00/0.00	N/A	N/A
0.47	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:7 RELEASE ACTIVITY: Delphi 20 dy

FACILITY NAME: GMC-DELPHI HARRISON FACILITY LOCATION: MORAINE OH 45439 RECEIVING WATER NAME: GREAT MIAMI R

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

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.	0.465	0.47	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	2284.23	789.03	531.69	431.64	NA	
CONCENTRATION (μg/L) 0.20 0.59 0.87 1.08 NA						

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES							
Exposure Units	Drinking Water Results Drinking Water Units Fish Ingestion Results Units						
Cancer							
LADD _{pot}	6.13E-08	6.13E-08 mg/kg/day 0.00 mg/kg/day					
LADC _{pot}	4.72E-06 mg/L 0.00 mg/kg						
Acute							
ADR _{pot}	2.23E-05 mg/kg/day 0.00 mg/kg/day						

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 7 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 GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: 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 (%)		
3.00	0	0	20.00	0.47	0.00		
788.00	0	0	20.00	0.47	0.00		
920.00	0	0	20.00	0.47	0.00		
1.44E+04	0	0	20.00	0.47	0.00		

Chemical ID: TCE

Assessor:

Scenario#:8 Number of Release Sites: 1.

Release Activity: Delphi 260 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE	
	Non-sludge/Sludge				
Total Releases:	10.40	N/A	N/A	N/A	

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A
4.00E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:8 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: Yes DISCHARGE TYPE: Direct

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.	0.04	4.00E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	2284.23	789.03	531.69	431.64	NA	
CONCENTRATION (µg/L)	1.75E-02	5.07E-02	7.52E-02	9.27E-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}	6.86E-08	mg/kg/day	0.00 mg/kg/day			
LADC _{pot}	5.28E-06 mg/L		0.00	mg/kg		
Acute						
ADR _{pot}	1.92E-06	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 8 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 GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: 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 (%)	
3.00	0	0	260.00	4.00E-02	0.00	
788.00	0	0	260.00	4.00E-02	0.00	
920.00	0	0	260.00	4.00E-02	0.00	
1.44E+04	0	0	260.00	4.00E-02	0.00	

Chemical ID: TCE

ENVIRONMENTAL RELEASES

Assessor:

Scenario#:11 Number of Release Sites: 1.

Release Activity: Chemours 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE	
	Non-sludge/Sludge				
Total Releases:	6.68	N/A	N/A	N/A	
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)	

Non-sludge/Sludge

Release Days/yr: 20.00
Per Site Release: 0.33

20.00	0.00/0.00	N/A	N/A
0.33	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:11 RELEASE ACTIVITY: Chemours 20 dy

FACILITY NAME: E I DUPONT DE NEMOURS & CO FACILITY LOCATION: PARKERSBURG WV 26181

RECEIVING WATER NAME: OHIO R

REACH NUMBER: 05030202039 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: WV0001279 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.334	0.33	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT					PLANT	
FLOW (MLD)	4.75E+04	1.34E+04	9979.15	7936.80	NA	
CONCENTRATION (µg/L)	7.03E-03	2.49E-02	3.35E-02	4.21E-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}	2.12E-09	2.12E-09 mg/kg/day 0.00 mg/kg/day				
LADC _{pot}	1.63E-07	mg/L	0.00 mg/kg			
Acute						
ADR _{pot}	9.44E-07	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 11 RELEASE ACTIVITY: Chemours 20 dy

FACILITY NAME: E I DUPONT DE NEMOURS & CO FACILITY LOCATION: PARKERSBURG WV 26181

RECEIVING STREAM NAME: OHIO R

REACH NUMBER: 05030202039 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: WV0001279 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 1.20E+05 7q10 FLOW (MLD): 9979.15 EFFLUENT FLOW

(MLD):216.75

	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 (%)		
3.00	0	0	20.00	0.33	0.00		
788.00	0	0	20.00	0.33	0.00		
920.00	0	0	20.00	0.33	0.00		
1.44E+04	0	0	20.00	0.33	0.00		

Assessor:

Chemical ID: TCE

ENVIRONMENTAL RELEASES

Scenario#:12 Number of Release Sites: 1.

Release Activity: Chemours 260 dy

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

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A
3.00E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:12 RELEASE ACTIVITY: Chemours 260 dy

FACILITY NAME: E I DUPONT DE NEMOURS & CO FACILITY LOCATION: PARKERSBURG WV 26181

RECEIVING WATER NAME: OHIO R

REACH NUMBER: 05030202039 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: WV0001279 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.03	3.00E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER							
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT		
FLOW (MLD)	4.75E+04	1.34E+04	9979.15	7936.80	NA		
CONCENTRATION (µg/L)	6.31E-04	2.24E-03	3.01E-03	3.78E-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}	2.47E-09	mg/kg/day 0.00 mg/kg/da		mg/kg/day				
LADC _{pot}	1.90E-07	mg/L 0		0 mg/kg				
Acute								
ADR _{pot}	8.48E-08	mg/kg/day	0.00	mg/kg/day				

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 12 RELEASE ACTIVITY: Chemours 260 dy

FACILITY NAME: E I DUPONT DE NEMOURS & CO FACILITY LOCATION: PARKERSBURG WV 26181

RECEIVING STREAM NAME: OHIO R

REACH NUMBER: 05030202039 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: WV0001279 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 1.20E+05 7q10 FLOW (MLD): 9979.15 EFFLUENT FLOW

(MLD):216.75

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 (%)			
3.00	0	0	260.00	3.00E-02	0.00			
788.00	0	0	260.00	3.00E-02	0.00			
920.00	0	0	260.00	3.00E-02	0.00			
1.44E+04	0	0	260.00	3.00E-02	0.00			

Chemical ID: TCE-0%

Assessor:

Scenario#:9 Number of Release Sites: 1.

Release Activity: Equistar 260 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	5.20	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A
2.00E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0%

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

SCENARIO #: 9

Number of Sites: 1

RELEASE ACTIVITY:Equistar

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.	0.02	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	485.40	206.33	132.62	108.72	4.12E-02	9.69E-02	0.15	0.18
ALL	10	43.45	15.35	9.00	7.91	0.46	1.30	2.22	2.53

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							
$\mathrm{LADD}_{\mathrm{pot}}$	1.61E-07	1.80E-06	mg/kg/day	0.00	0.00	mg/kg/day	
LADC _{pot}	1.24E-05	1.39E-04	mg/L	0.00	0.00	mg/kg	
Acute							
ADR_{pot}	3.67E-06	4.93E-05	mg/kg/day	0.00	0.00	mg/kg/day	

SIC Code Comments:

Chemical ID: TCE-0%

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 9 RELEASE ACTIVITY: Equistar 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		
3.00	10	38	260.00	2.00E-02	0.00	High		
788.00	0	1	260.00	2.00E-02	0.00	High		
920.00	0	1	260.00	2.00E-02	0.00	High		
1.44E+04	0	0	260.00	2.00E-02	0.00	High		

Chemical ID: TCE

Assessor:

Scenario#:1 Number of Release Sites: 1.

Release Activity: Equistar 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	4.40	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	(0.00/0.00	N/A	N/A
0.22	1	N/A/0.00	N/A	N/A
(kg/site/da	ay) (k	g/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

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

SCENARIO #: 1

Number of Sites: 1

RELEASE ACTIVITY: Equistar

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.	0.22	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	485.40	206.33	132.62	108.72	0.45	1.07	1.66	2.02
ALL	10	43.45	15.35	9.00	7.91	5.06	14.33	24.44	27.81

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						
$\mathrm{LADD}_{\mathrm{pot}}$	1.37E-07	1.53E-06	mg/kg/day	0.00	0.00	mg/kg/day	
LADC _{pot}	1.05E-05	1.17E-04	mg/L	0.00	0.00	mg/kg	
Acute							
ADR_{pot}	4.04E-05	5.43E-04	mg/kg/day	0.00	0.00	mg/kg/day	

SIC Code Comments:

Chemical ID: TCE

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 1 RELEASE ACTIVITY: Equistar 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
3.00	3	12	20.00	0.22	0.00	High
788.00	0	1	20.00	0.22	0.00	High
920.00	0	1	20.00	0.22	0.00	High
1.44E+04	0	0	20.00	0.22	0.00	High

Chemical ID: TCE

Assessor:

ENVIRONMENTAL	DELEVEES
ENVIKONWENTAL	KELEASES

Scenario#:17

Number of Release Sites: 1.

Release Activity:

GE 20 dy

Release Description:	WATER	WATER LANDFILL		FUGITIVE
	Non-sludge/Sludge			
Total Releases:	2.56	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr: Per Site Release:

20.00	0.00/0.00	N/A	N/A
0.13	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

CHEMICAL ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS			
SCENARIO #: 17	ELEASE ACTIVITY: GE 20 dy		
FACILITY NAME: GENERAL EL	FACILITY NAME: GENERAL ELECTRIC AIRCRAFT ENG.		
FACILITY LOCATION: LYNN M.	A 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	0.128	0.13	0.00

AQUATIC EXPOSURE ESTIMATES					
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)			
ACUTE SCENARIO	1.00	0.54			
CHRONIC SCENARIO	1.00	0.54			

FISH INGESTION EXPOSURE ESTIMATES					
		ASSUMPTIONS			
Exposure Units	Results	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:

Chemical ID: TCE

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:18 Number of Release Sites: 1.

Release Activity: GE 260 dy

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

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A	
1.00E-02	N/A/0.00	N/A	N/A	
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)	

CHEMICAL ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS				
SCENARIO #: 18 RELEASE ACTIVITY: GE 260 dy				
FACILITY NAME: GENERAL EL	ECTRIC AIRCRAFT ENG.			
FACILITY LOCATION: LYNN M	A 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.	260.	235.54	0.01	1.00E-02	0.00

AQUATIC EXPOSURE ESTIMATES					
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)			
ACUTE SCENARIO	1.00	4.25E-02			
CHRONIC SCENARIO	1.00	4.25E-02			

FISH INGESTION EXPOSURE ESTIMATES					
			ASSUMI	PTIONS	
Exposure Units	Results	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:

Chemical ID: TCE

Assessor:

ENVIRONMENTAL RELEASES	RONMENTAL RELEASI	ES
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Scenario#:21

Number of Release Sites: 1.

Release Activity:

Certa 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE	
	Non-sludge/Sludge				
Total Releases:	2.14	N/A	N/A	N/A	
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)	

Non-sludge/Sludge

Release Days/yr: Per Site Release:

(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)
0.11	N/A/0.00	N/A	N/A
20.00	0.00/0.00	N/A	N/A

Chemical ID: TCE

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

SCENARIO #: 21

Number of Sites: 1

RELEASE ACTIVITY:Certa 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.	0.107	0.11	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	0.22	0.52	0.81	0.98
ALL	10	43.45	15.35	9.00	7.91	2.46	6.97	11.89	13.53

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
Exposure Units	Drinking Water Results		Drinking Water Results Drinking Water Units Fish Ingestion Result		ion Results	Fish Ingestion Units
	50%	10%		50%	10%	
Cancer						
$LADD_{pot}$	6.64E-08	7.42E-07	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	5.11E-06	5.71E-05	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	1.96E-05	2.64E-04	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

Chemical ID: TCE

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 21 RELEASE ACTIVITY: Certa 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		
3.00	2	9	20.00	0.11	0.00	High		
788.00	0	1	20.00	0.11	0.00	High		
920.00	0	1	20.00	0.11	0.00	High		
1.44E+04	0	0	20.00	0.11	0.00	High		

Chemical ID: TCE

Assessor:

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ENVIR	CONMEN	FAL RE	LEASES

Scenario#:22 Number of Release Sites: 1.

Release Activity: Certa 260 dy

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

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A
1.00E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

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

SCENARIO #: 22

Number of Sites: 1

RELEASE ACTIVITY:Certa 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.	0.01	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								
$LADD_{pot}$	8.07E-08	9.02E-07	mg/kg/day	0.00	0.00	mg/kg/day		
LADC _{pot}	6.21E-06	6.94E-05	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:

Chemical ID: TCE

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 22 RELEASE ACTIVITY: Certa 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		
3.00	8	28	260.00	1.00E-02	0.00	High		
788.00	0	0	260.00	1.00E-02	0.00	High		
920.00	0	0	260.00	1.00E-02	0.00	High		
1.44E+04	0	0	260.00	1.00E-02	0.00	High		

Chemical ID: TCE

Assessor:

ENVIRONMENTAL	DELEVEE
ENVIKONWENTAL	KELEASES

Scenario#:23 Number of Release Sites: 1.

Release Activity: GM IN 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE		
	Non-sludge/Sludge					
Total Releases:	1.72	N/A	N/A	N/A		
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)		

Non-sludge/Sludge

Release Days/yr: Per Site Release:

20.00	0.00/0.00	N/A	N/A
8.60E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:23 RELEASE ACTIVITY: GM IN 20 dy

FACILITY NAME: DELPHI AUTOMOTIVE SYSTEMS LLC

FACILITY LOCATION: KOKOMO IN 469049005

RECEIVING WATER NAME: WILDCAT CR

REACH NUMBER: 05120107009 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: IN0001830 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.086	8.60E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	258.26	79.93	49.69	41.01	NA	
CONCENTRATION (µg/L)	0.33	1.08	1.73	2.10	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}	7.72E-06 mg/L		0.00	mg/kg			
Acute							
ADR _{pot}	4.08E-05	mg/kg/day	0.00	mg/kg/day			

Surface Water Comments:

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 23 RELEASE ACTIVITY: GM IN 20 dy

FACILITY NAME: DELPHI AUTOMOTIVE SYSTEMS LLC

FACILITY LOCATION: KOKOMO IN 469049005

RECEIVING STREAM NAME: WILDCAT CR

REACH NUMBER: 05120107009 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: IN0001830 GAGING STATION ID: 03333700

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/66 - 12/12/90 NUMBER OF REACH: 3

OBSERVATIONS: 9113.00

50 %ile FLOW (MLD): 229.92 10 %ile FLOW (MLD): 68.49 EFFLUENT FLOW

(MLD):7.57

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 (%)	
3.00	0	0	20.00	8.60E-02	0.00	
788.00	0	0	20.00	8.60E-02	0.00	
920.00	0	0	20.00	8.60E-02	0.00	
1.44E+04	0	0	20.00	8.60E-02	0.00	

Chemical ID: TCE

Assessor:

Scenario#:24 Number of Release Sites: 1.

Release Activity: GM IN 260 dy

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

Non-sludge/Sludge

Release Days/yr: Per Site Release:

260.00	0.00/0.00	N/A	N/A
1.00E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:24 RELEASE ACTIVITY: GM IN 260 dy

FACILITY NAME: DELPHI AUTOMOTIVE SYSTEMS LLC

FACILITY LOCATION: KOKOMO IN 469049005

RECEIVING WATER NAME: WILDCAT CR

REACH NUMBER: 05120107009 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: IN0001830 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	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	258.26	79.93	49.69	41.01	NA	
CONCENTRATION (µg/L)	3.87E-02	0.13	0.20	0.24	NA	

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES						
Exposure Units	Drinking Water Results Drinking Water Units Fish Ingestion Results Units Units					
Cancer						
LADD _{pot}	1.52E-07 mg/kg/day 0.00 mg/kg/day					
LADC _{pot}	1.17E-05 mg/L 0.00 mg/kg			mg/kg		
Acute						
ADR _{pot}	4.74E-06	mg/kg/day	0.00	mg/kg/day		

Surface Water Comments:

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 24 RELEASE ACTIVITY: GM IN 260 dy

FACILITY NAME: DELPHI AUTOMOTIVE SYSTEMS LLC

FACILITY LOCATION: KOKOMO IN 469049005

RECEIVING STREAM NAME: WILDCAT CR

REACH NUMBER: 05120107009 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: IN0001830 GAGING STATION ID: 03333700

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/66 - 12/12/90 NUMBER OF REACH: 3

OBSERVATIONS: 9113.00

50 %ile FLOW (MLD): 229.92 10 %ile FLOW (MLD): 68.49 EFFLUENT FLOW

(MLD):7.57

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 (%)	
3.00	0	0	260.00	1.00E-02	0.00	
788.00	0	0	260.00	1.00E-02	0.00	
920.00	0	0	260.00	1.00E-02	0.00	
1.44E+04	0	0	260.00	1.00E-02	0.00	

Assessor:

Chemical ID: TCE

ENVIRONMENTAL RELEASES

Scenario#:25 Number of Release Sites: 1.

Release Activity: Amphenol 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	1.64	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
8.20E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:25 RELEASE ACTIVITY: Amphenol 20 dy

FACILITY NAME: AEROSPACE OPERATIONS

FACILITY LOCATION: SIDNEY NY 13838

RECEIVING WATER NAME: SUSQUEHANNA R

REACH NUMBER: 02050101009 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: NY0003824 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.082	8.20E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLAN					PLANT	
FLOW (MLD)	1134.35	315.59	205.91	168.28	NA	
CONCENTRATION (µg/L)	7.23E-02	0.26	0.40	0.49	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}	2.18E-08	mg/kg/day	0.00 mg/kg/day			
LADC _{pot}	1.68E-06 mg/L		0.00	mg/kg		
Acute						
ADR _{pot}	9.84E-06	mg/kg/day	9.84E-06 mg/kg/day 0.00 mg/kg/day			

Surface Water Comments:

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 25 RELEASE ACTIVITY: Amphenol 20 dy

FACILITY NAME: AEROSPACE OPERATIONS

FACILITY LOCATION: SIDNEY NY 13838

RECEIVING STREAM NAME: SUSQUEHANNA R

REACH NUMBER: 02050101009 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NY0003824 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 4129.08 7q10 FLOW (MLD): 205.91 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 (%)				
3.00	0	0	20.00	8.20E-02	0.00				
788.00	0	0	20.00	8.20E-02	0.00				
920.00	0	0	20.00	8.20E-02	0.00				
1.44E+04	0	0	20.00	8.20E-02	0.00				

Assessor:

Chemical ID: TCE

ENVIRONMENTAL RELEASES

Scenario#:26 Number of Release Sites: 1.

Release Activity: Amphenol 260 dy

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

Per Site Release: 1.00E-02

 260.00
 0.00/0.00
 N/A
 N/A

 1.00E-02
 N/A/0.00
 N/A
 N/A

(kg/site/day) (kg/site/day) (kg/site/day) (kg/site/day)

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:26 RELEASE ACTIVITY: Amphenol 260 dy

FACILITY NAME: AEROSPACE OPERATIONS

FACILITY LOCATION: SIDNEY NY 13838

RECEIVING WATER NAME: SUSQUEHANNA R

REACH NUMBER: 02050101009 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: NY0003824 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	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	1134.35	315.59	205.91	168.28	NA	
CONCENTRATION (µg/L)	8.82E-03	3.17E-02	4.86E-02	5.94E-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}	3.45E-08 mg/kg/day		0.00 mg/kg/day			
LADC _{pot}	2.66E-06 mg/L		0.00	mg/kg		
Acute						
ADR_{pot}	1.20E-06	mg/kg/day	0.00	mg/kg/day		

Surface Water Comments:

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 26 RELEASE ACTIVITY: Amphenol 260 dy

FACILITY NAME: AEROSPACE OPERATIONS

FACILITY LOCATION: SIDNEY NY 13838

RECEIVING STREAM NAME: SUSQUEHANNA R

REACH NUMBER: 02050101009 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NY0003824 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 4129.08 7q10 FLOW (MLD): 205.91 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 (%)				
3.00	0	0	260.00	1.00E-02	0.00				
788.00	0	0	260.00	1.00E-02	0.00				
920.00	0	0	260.00	1.00E-02	0.00				
1.44E+04	0	0	260.00	1.00E-02	0.00				

Chemical ID: TCE

Assessor:

Scenario#:27 Number of Release Sites: 1.

Release Activity: Emerson 20 dy

Release Description:	WATER	WATER LANDFILL		FUGITIVE
	Non-sludge/Sludge			
T 15 1	1.60	27/1	27/1	
Total Releases:	1.62	N/A	N/A	N/A

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

	20.00	0.00/0.00	N/A	N/A	
Ī	8.10E-02	N/A/0.00	N/A	N/A	
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)	

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:27 RELEASE ACTIVITY: Emerson 20 dy

FACILITY NAME: MAYSVILLE STP

FACILITY LOCATION: MAYSVILLE KY 41056

RECEIVING WATER NAME: OHIO R

REACH NUMBER: 05090201020 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: KY0020257 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.081	8.10E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	8.14E+04	2.05E+04	1.55E+04	1.23E+04	NA	
CONCENTRATION (µg/L)	9.95E-04	3.94E-03	5.22E-03	6.58E-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}	3.00E-10 mg/kg/day		0.00 mg/kg/day		
LADC _{pot}	2.31E-08 mg/L		0.00	mg/kg	
Acute					
ADR_{pot}	1.49E-07	mg/kg/day	0.00	mg/kg/day	

Surface Water Comments:

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 27 RELEASE ACTIVITY: Emerson 20 dy

FACILITY NAME: MAYSVILLE STP

FACILITY LOCATION: MAYSVILLE KY 41056

RECEIVING STREAM NAME: OHIO R

REACH NUMBER: 05090201020 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: KY0020257 GAGING STATION ID: 03238000

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 02/01/66 - 09/29/75 NUMBER OF REACH: 1

OBSERVATIONS: 1826.00

(MLD):3.79

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 (%)
3.00	0	0	20.00	8.10E-02	0.00
788.00	0	0	20.00	8.10E-02	0.00
920.00	0	0	20.00	8.10E-02	0.00
1.44E+04	0	0	20.00	8.10E-02	0.00

Chemical ID: TCE

Assessor:

Scenario#:2 Number of Release Sites: 1.

Emerson 260 dy Release Activity:

Release Description:	WATER	LANDFILL	STACK	FUGITIVE	
	Non-sludge/Sludge				
Total Releases:	1.61	N/A	N/A	N/A	

Non-sludge/Sludge

Release Days/yr: Per Site Release:

260.00 N/AN/A 0.00/0.00 6.20E-03 N/A/0.00N/AN/A

(kg/site/day) (kg/site/day) (kg/site/day) (kg/site/day)

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:2 RELEASE ACTIVITY: Emerson 260 dy

FACILITY NAME: MAYSVILLE STP

FACILITY LOCATION: MAYSVILLE KY 41056

RECEIVING WATER NAME: OHIO R

REACH NUMBER: 05090201020 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: KY0020257 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.0062	6.20E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	8.14E+04	2.05E+04	1.55E+04	1.23E+04	NA
CONCENTRATION (µg/L)	7.61E-05	3.02E-04	4.00E-04	5.04E-04	NA

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES					
Exposure Units Drinking Water Results Drinking Water Units Fish Ingestion Results Units Results Units					
Cancer					
LADD _{pot}	2.98E-10 mg/kg/day 0.00 mg/kg/day			mg/kg/day	
LADC _{pot}	2.29E-08 mg/L 0.00 mg/kg			mg/kg	
Acute					
ADR _{pot}	1.14E-08	mg/kg/day	0.00	mg/kg/day	

Surface Water Comments:

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 2 RELEASE ACTIVITY: Emerson 260 dy

FACILITY NAME: MAYSVILLE STP

FACILITY LOCATION: MAYSVILLE KY 41056

RECEIVING STREAM NAME: OHIO R

REACH NUMBER: 05090201020 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: KY0020257 GAGING STATION ID: 03238000

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 02/01/66 - 09/29/75 NUMBER OF REACH: 1

OBSERVATIONS: 1826.00

(MLD):3.79

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 (%)	
3.00	1	3	260.00	6.20E-03	0.00	
788.00	1	3	260.00	6.20E-03	0.00	
920.00	1	3	260.00	6.20E-03	0.00	
1.44E+04	1	3	260.00	6.20E-03	0.00	

Chemical ID: TCE

Assessor:

Scenario#:31 Number of Release Sites: 1.

Release Activity: Olean 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE	
	Non-sludge/Sludge				
Total Releases:	1.36	N/A	N/A	N/A	
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)	

Non-sludge/Sludge

Release Days/yr: Per Site Release:

20.00	0.00/0.00	N/A	N/A
6.80E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:31 RELEASE ACTIVITY: Olean 20 dy

FACILITY NAME: OLEAN (C) WWTF

FACILITY LOCATION: OLEAN NY 14760

RECEIVING WATER NAME: ALLEGHENY R

REACH NUMBER: 05010001016 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: NY0027162 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.068	6.80E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	2165.44	787.94	530.93	431.03	NA
CONCENTRATION (µg/L)	3.14E-02	8.63E-02	0.13	0.16	NA

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES				
Exposure Units	Drinking Water Results	Drinking Water Units	Fish Ingestion Results	Fish Ingestion Units
Cancer				
LADD _{pot}	9.46E-09	mg/kg/day	0.00	mg/kg/day
LADC _{pot}	7.28E-07	mg/L	0.00	mg/kg
Acute				
ADR _{pot}	3.27E-06	mg/kg/day	0.00	mg/kg/day

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 31 RELEASE ACTIVITY: Olean 20 dy

FACILITY NAME: OLEAN (C) WWTF

FACILITY LOCATION: OLEAN NY 14760

RECEIVING STREAM NAME: ALLEGHENY R

REACH NUMBER: 05010001016 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NY0027162 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 5363.47 7q10 FLOW (MLD): 530.93 EFFLUENT FLOW

(MLD):15.34

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 (%)
3.00	0	0	20.00	6.80E-02	0.00
788.00	0	0	20.00	6.80E-02	0.00
920.00	0	0	20.00	6.80E-02	0.00
1.44E+04	0	0	20.00	6.80E-02	0.00

Chemical ID: TCE

Assessor:

Scenario#:32 Number of Release Sites: 1.

Release Activity: Olean 260 dy

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

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A
1.00E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:32 RELEASE ACTIVITY: Olean 260 dy

FACILITY NAME: OLEAN (C) WWTF

FACILITY LOCATION: OLEAN NY 14760

RECEIVING WATER NAME: ALLEGHENY R

REACH NUMBER: 05010001016 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: NY0027162 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	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	2165.44	787.94	530.93	431.03	NA
CONCENTRATION (µg/L)	4.62E-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}	1.81E-08 mg/kg/day 0.00 mg/kg/day			mg/kg/day	
LADC _{pot}	1.39E-06	1.39E-06 mg/L		mg/kg	
Acute					
ADR _{pot}	4.81E-07	mg/kg/day	0.00	mg/kg/day	

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 32 RELEASE ACTIVITY: Olean 260 dy

FACILITY NAME: OLEAN (C) WWTF

FACILITY LOCATION: OLEAN NY 14760

RECEIVING STREAM NAME: ALLEGHENY R

REACH NUMBER: 05010001016 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NY0027162 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 5363.47 7q10 FLOW (MLD): 530.93 EFFLUENT FLOW

(MLD):15.34

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 (%)
3.00	0	0	260.00	1.00E-02	0.00
788.00	0	0	260.00	1.00E-02	0.00
920.00	0	0	260.00	1.00E-02	0.00
1.44E+04	0	0	260.00	1.00E-02	0.00

Assessor:

Chemical ID: TCE

EN	IVIRONMENTAL RELEASES
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Scenario#:33 Number of Release Sites: 1.

Release Activity: Hollingsworth 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	1.22	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr: Per Site Release:

20.00	0.00/0.00	N/A	N/A
6.10E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

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

SCENARIO #: 33 Number of Sites: 1 RELEASE

ACTIVITY:Hollingsworth 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.	0.061	6.10E-02	0.00	0.00

	AQUATIC EXPOSURE ESTIMATES - SURFACE WATER											
PLANT TYPE	% ILE FACILITY		STREAM FI	LOW (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	0.13	0.30	0.46	0.56			
ALL	10	43.45	15.35	9.00	7.91	1.40	3.97	6.78	7.71			

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES											
Exposure Units	Drinking Water Results		Drinking Water Units	Fish Ingest	ion Results	Fish Ingestion Units					
	50%	10%		50%	10%						
	Cancer										
$LADD_{pot}$	3.79E-08	4.23E-07	mg/kg/day	0.00	0.00	mg/kg/day					
LADC _{pot}	2.91E-06	3.25E-05	mg/L	0.00	0.00	mg/kg					
Acute											
ADR_{pot}	1.12E-05	1.51E-04	mg/kg/day	0.00	0.00	mg/kg/day					

SIC Code Comments:

Chemical ID: TCE

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 33 RELEASE ACTIVITY: Hollingsworth 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							
3.00	2	6	20.00	6.10E-02	0.00	High							
788.00	0	1	20.00	6.10E-02	0.00	High							
920.00	0	0	20.00	6.10E-02	0.00	High							
1.44E+04	0	0	20.00	6.10E-02	0.00	High							

Assessor:

Chemical ID: TCE

ENVIRONMENTAL RELEASES

Scenario#:34 Number of Release Sites: 1.

Hollingsworth 260 dy Release Activity:

Release Description:	WATER LANDFILL		STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	1.22	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:	4.69E-03	N/A/0.00	N/A	N/A

4.69E-03 N/A/0.00N/AN/A(kg/site/day) (kg/site/day) (kg/site/day) (kg/site/day)

Chemical ID: TCE

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

SCENARIO #: 34 Number of Sites: 1 RELEASE

ACTIVITY: Hollingsworth 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.	0.00469	4.69E-03	0.00	0.00

	AQUATIC EXPOSURE ESTIMATES - SURFACE WATER											
PLANT TYPE	% ILE FACILITY		STREAM FI	LOW (MLD)	1	STREAM C	ONC. (µg/l)				
		Harmonic Mean	30Q5	7Q10	1Q10	Harmonic Mean	30Q5	7Q10	1Q10			
ALL	50	485.40	206.33	132.62	108.72	9.66E-03	2.27E-02	3.54E-02	4.31E-02			
ALL	10	43.45	15.35	9.00	7.91	0.11	0.31	0.52	0.59			

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES											
Exposure Units	Drinking Water Results		Drinking Water Units	Fish Ingest	ion Results	Fish Ingestion Units					
	50%	10%		50%	10%						
		C	Cancer								
$LADD_{pot}$	3.79E-08	4.23E-07	mg/kg/day	0.00	0.00	mg/kg/day					
LADC _{pot}	2.91E-06	3.25E-05	mg/L	0.00	0.00	mg/kg					
Acute											
ADR_{pot}	8.61E-07	1.16E-05	mg/kg/day	0.00	0.00	mg/kg/day					

SIC Code Comments:

Chemical ID: TCE

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 34 RELEASE ACTIVITY: Hollingsworth 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							
3.00	7	24	260.00	4.69E-03	0.00	High							
788.00	0	0	260.00	4.69E-03	0.00	High							
920.00	0	0	260.00	4.69E-03	0.00	High							
1.44E+04	0	0	260.00	4.69E-03	0.00	High							

Chemical ID: TCE

Assessor:

Scenario#:37 Number of Release Sites: 1.

Release Activity: Trelleborg 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE	
	Non-sludge/Sludge				
Total Releases:	0.94	N/A	N/A	N/A	
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)	

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
4.70E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:37 RELEASE ACTIVITY: Trelleborg 20 dy

FACILITY NAME: TRELLEBORG YSH INC-SANDUSKY

FACILITY LOCATION: SANDUSKY MI 48471

RECEIVING WATER NAME: BLACK R

REACH NUMBER: 04090001008 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: MI0028142 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.047	4.70E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	17.47	3.66	2.04	1.72	NA	
CONCENTRATION (µg/L)	2.69	12.85	23.04	27.30	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}	8.11E-07 mg/kg/day 0.00 mg/kg/day			mg/kg/day	
LADC _{pot}	6.24E-05 mg/L 0.00 mg/kg			mg/kg	
Acute					
ADR _{pot}	4.87E-04	mg/kg/day	0.00	mg/kg/day	

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 37 RELEASE ACTIVITY: Trelleborg 20 dy

FACILITY NAME: TRELLEBORG YSH INC-SANDUSKY

FACILITY LOCATION: SANDUSKY MI 48471

RECEIVING STREAM NAME: BLACK R

REACH NUMBER: 04090001008 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: MI0028142 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 132.74 7q10 FLOW (MLD): 2.04 EFFLUENT FLOW

(MLD):0.63

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 (%)	
3.00	1	4	20.00	4.70E-02	0.00	
788.00	0	0	20.00	4.70E-02	0.00	
920.00	0	0	20.00	4.70E-02	0.00	
1.44E+04	0	0	20.00	4.70E-02	0.00	

Assessor:

Chemical ID: TCE

ENVIRONMENTAL RELEASES	
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Scenario#:38 Number of Release Sites: 1.

Release Activity: Trelleborg 260 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	0.94	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A
3.60E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:38 RELEASE ACTIVITY: Trelleborg 260 dy

FACILITY NAME: TRELLEBORG YSH INC-SANDUSKY

FACILITY LOCATION: SANDUSKY MI 48471

RECEIVING WATER NAME: BLACK R

REACH NUMBER: 04090001008 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: MI0028142 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.0036	3.60E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	17.47	3.66	2.04	1.72	NA	
CONCENTRATION (µg/L)	0.21	0.98	1.76	2.09	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}	8.07E-07	mg/kg/day	0.00 mg/kg/day			
LADC _{pot}	6.21E-05 mg/L		0.00	mg/kg		
Acute						
ADR _{pot}	3.73E-05	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 38 RELEASE ACTIVITY: Trelleborg 260 dy

FACILITY NAME: TRELLEBORG YSH INC-SANDUSKY

FACILITY LOCATION: SANDUSKY MI 48471

RECEIVING STREAM NAME: BLACK R

REACH NUMBER: 04090001008 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: MI0028142 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 132.74 7q10 FLOW (MLD): 2.04 EFFLUENT FLOW

(MLD):0.63

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 (%)
3.00	0	1	260.00	3.60E-03	0.00
788.00	0	0	260.00	3.60E-03	0.00
920.00	0	0	260.00	3.60E-03	0.00
1.44E+04	0	0	260.00	3.60E-03	0.00

Chemical ID: TCE

Assessor:

Scenario#:39

Number of Release Sites: 1.

Release Activity:

Timken 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:
Per Site Release:

	20.00	0.00/0.00	N/A	N/A	
	4.60E-02	N/A/0.00	N/A	N/A	
-	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)	

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:39 RELEASE ACTIVITY: Timken 20 dy

FACILITY NAME: BELTON INDUSTRIES INC

FACILITY LOCATION: BELTON SC 29627

RECEIVING WATER NAME: BROAD MOUTH CR

REACH NUMBER: 03050109079 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: SC0000698 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.046	4.60E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	17.46	5.89	3.34	2.81	NA
CONCENTRATION (µg/L)	2.63	7.81	13.77	16.37	NA

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES							
Drinking Water Drinking Water Fish Ingestion Results Units Results Units							
Cancer							
LADD _{pot}	7.94E-07 mg/kg/day 0.00 mg/kg/day						
LADC _{pot}	6.11E-05	mg/L	0.00	mg/kg			
Acute							
ADR _{pot}	2.96E-04 mg/kg/day 0.00 mg/kg/day						

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 39 RELEASE ACTIVITY: Timken 20 dy

FACILITY NAME: BELTON INDUSTRIES INC

FACILITY LOCATION: BELTON SC 29627

RECEIVING STREAM NAME: BROAD MOUTH CR

REACH NUMBER: 03050109079 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: SC0000698 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 74.58 7q10 FLOW (MLD): 3.34 EFFLUENT FLOW

(MLD):0.18

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 (%)	
3.00	1	5	20.00	4.60E-02	0.00	
788.00	0	0	20.00	4.60E-02	0.00	
920.00	0	0	20.00	4.60E-02	0.00	
1.44E+04	0	0	20.00	4.60E-02	0.00	

Chemical ID: TCE

Assessor:

Scenario#:40 Number of Release Sites: 1.

Release Activity: Timken 260 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	0.92	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A	
3.55E-03	N/A/0.00	N/A	N/A	
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)	

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:40 RELEASE ACTIVITY: Timken 260 dy

FACILITY NAME: BELTON INDUSTRIES INC

FACILITY LOCATION: BELTON SC 29627

RECEIVING WATER NAME: BROAD MOUTH CR

REACH NUMBER: 03050109079 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: SC0000698 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.00355	3.55E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT					PLANT
FLOW (MLD)	17.46	5.89	3.34	2.81	NA
CONCENTRATION (µg/L)	0.20	0.60	1.06	1.26	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}	7.96E-07 mg/kg/day 0.00 mg/kg/day			mg/kg/day	
LADC _{pot}	6.13E-05 mg/L 0.00 mg/kg			mg/kg	
Acute					
ADR _{pot}	2.28E-05	mg/kg/day	0.00	mg/kg/day	

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 40 RELEASE ACTIVITY: Timken 260 dy

FACILITY NAME: BELTON INDUSTRIES INC

FACILITY LOCATION: BELTON SC 29627

RECEIVING STREAM NAME: BROAD MOUTH CR

REACH NUMBER: 03050109079 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: SC0000698 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 74.58 7q10 FLOW (MLD): 3.34 EFFLUENT FLOW

(MLD):0.18

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 (%)
3.00	1	2	260.00	3.55E-03	0.00
788.00	0	0	260.00	3.55E-03	0.00
920.00	0	0	260.00	3.55E-03	0.00
1.44E+04	0	0	260.00	3.55E-03	0.00

Assessor:

Chemical ID: TCE

ENVIRONMENTAL	RELEASES

Scenario#:43 Number of Release Sites: 1.

Release Activity: Johnson 20 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: Per Site Release:

20.00	0.00/0.00	N/A	N/A
3.00E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:43 RELEASE ACTIVITY: Johnson 20 dy

FACILITY NAME: COLEMAN COMPANY WICHITA

FACILITY LOCATION: KS 67219

RECEIVING WATER NAME: ARKANSAS R

REACH NUMBER: 11030010001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: KS0000850 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 30Q5 7Q10 1Q10 PLANT					PLANT
FLOW (MLD)	333.96	67.35	41.62	34.40	NA
CONCENTRATION (µg/L)	8.98E-02	0.45	0.72	0.87	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}	2.71E-08 mg/kg/day 0.00 mg/kg/day			mg/kg/day	
LADC _{pot}	2.08E-06	mg/L	0.00	mg/kg	
Acute					
ADR _{pot}	1.69E-05	mg/kg/day	0.00	mg/kg/day	

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 43 RELEASE ACTIVITY: Johnson 20 dy

FACILITY NAME: COLEMAN COMPANY WICHITA

FACILITY LOCATION: KS 67219

RECEIVING STREAM NAME: ARKANSAS R

REACH NUMBER: 11030010001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: KS0000850 GAGING STATION ID: 07143330

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/66 - 09/29/89 NUMBER OF REACH: 1

OBSERVATIONS: 8674.00

(MLD):3.78

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 (%)
3.00	0	0	20.00	3.00E-02	0.00
788.00	0	0	20.00	3.00E-02	0.00
920.00	0	0	20.00	3.00E-02	0.00
1.44E+04	0	0	20.00	3.00E-02	0.00

Assessor:

Chemical ID: TCE

ENVIRONMENTAL RELEASES

Scenario#:44 Number of Release Sites: 1.

Release Activity: Johnson 260 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE	
	Non-sludge/Sludge				
Total Releases:	0.59	N/A	N/A	N/A	
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)	

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A
2.28E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:44 RELEASE ACTIVITY: Johnson 260 dy

FACILITY NAME: COLEMAN COMPANY WICHITA

FACILITY LOCATION: KS 67219

RECEIVING WATER NAME: ARKANSAS R

REACH NUMBER: 11030010001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: KS0000850 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.00228	2.28E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER							
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT		
FLOW (MLD) 333.96		67.35	41.62	34.40	NA		
CONCENTRATION (µg/L)	6.83E-03	3.39E-02	5.48E-02	6.63E-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}	2.67E-08	mg/kg/day	0.00 mg/kg/day			
LADC _{pot}	2.06E-06	mg/L	0.00	mg/kg		
Acute						
ADR _{pot}	1.28E-06 mg/kg/day 0.00 mg/kg/day			mg/kg/day		

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 44 RELEASE ACTIVITY: Johnson 260 dy

FACILITY NAME: COLEMAN COMPANY WICHITA

FACILITY LOCATION: KS 67219

RECEIVING STREAM NAME: ARKANSAS R

REACH NUMBER: 11030010001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: KS0000850 GAGING STATION ID: 07143330

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/66 - 09/29/89 NUMBER OF REACH: 1

OBSERVATIONS: 8674.00

(MLD):3.78

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 (%)		
3.00	0	0	260.00	2.28E-03	0.00		
788.00	0	0	260.00	2.28E-03	0.00		
920.00	0	0	260.00	2.28E-03	0.00		
1.44E+04	0	0	260.00	2.28E-03	0.00		

Chemical ID: TCE

Assessor:

Scenario#:47 Number of Release Sites: 1.

Release Activity: Natl Rail 20 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:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
2.60E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

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

SCENARIO #: 47

Number of Sites: 1

RELEASE ACTIVITY: Natl Rail

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.	0.026	2.60E-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	485.40	206.33	132.62	108.72	5.36E-02	0.13	0.20	0.24
ALL	10	43.45	15.35	9.00	7.91	0.60	1.69	2.89	3.29

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES							
Exposure Units	Drinking Water Results		Drinking Water Units	Fish Ingestion Results		Fish Ingestion Units	
	50%	10%		50%	10%		
Cancer							
$LADD_{pot}$	1.61E-08	1.80E-07	mg/kg/day	0.00	0.00	mg/kg/day	
LADC _{pot}	1.24E-06	1.39E-05	mg/L	0.00	0.00	mg/kg	
Acute							
ADR_{pot}	4.77E-06	6.42E-05	mg/kg/day	0.00	0.00	mg/kg/day	

SIC Code Comments:

Chemical ID: TCE

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 47

RELEASE ACTIVITY: Natl Rail 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		
3.00	1	3	20.00	2.60E-02	0.00	High		
788.00	0	0	20.00	2.60E-02	0.00	High		
920.00	0	0	20.00	2.60E-02	0.00	High		
1.44E+04	0	0	20.00	2.60E-02	0.00	High		

Assessor:

Chemical ID: TCE

ENV	TRONMENTAL RELEASES
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Scenario#:48 Number of Release Sites: 1.

Release Activity: Natl Rail 260 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	0.53	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

 Per Site Release:
 2.03E-03
 N/A/0.00
 N/A

(kg/site/day) (kg/site/day) (kg/site/day) (kg/site/day)

N/A

N/A

Chemical ID: TCE

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

SCENARIO #: 48

Number of Sites: 1

RELEASE ACTIVITY: Natl Rail

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.	0.00203	2.03E-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	4.18E-03	9.84E-03	1.53E-02	1.87E-02
ALL	10	43.45	15.35	9.00	7.91	4.67E-02	0.13	0.23	0.26

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							
$LADD_{pot}$	1.64E-08	1.83E-07	mg/kg/day	0.00	0.00	mg/kg/day	
LADC _{pot}	1.26E-06	1.41E-05	mg/L	0.00	0.00	mg/kg	
Acute							
ADR _{pot}	3.73E-07	5.01E-06	mg/kg/day	0.00	0.00	mg/kg/day	

SIC Code Comments:

Chemical ID: TCE

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 48 RELEASE ACTIVITY: Natl Rail 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	
3.00	6	21	260.00	2.03E-03	0.00	High	
788.00	0	0	260.00	2.03E-03	0.00	High	
920.00	0	0	260.00	2.03E-03	0.00	High	
1.44E+04	0	0	260.00	2.03E-03	0.00	High	

Chemical ID: TCE

Assessor:

Scenario#:49 Number of Release Sites: 1.

Release Activity: Electrolux 20 dy

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

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
2.60E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:49 RELEASE ACTIVITY: Electrolux 20 dy

FACILITY NAME: FRIGIDAIRE HOME PRODUCTS

FACILITY LOCATION: GREENVILLE MI 48838

RECEIVING WATER NAME: FLAT R

REACH NUMBER: 04050006024 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: MI0002135 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.026	2.60E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	311.87	184.07	117.84	96.68	NA
CONCENTRATION (µg/L)	8.34E-02	0.14	0.22	0.27	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}	2.51E-08 mg/kg/day 0.00 mg/kg/day			mg/kg/day
LADC _{pot}	1.93E-06 mg/L 0.00 mg/kg			mg/kg
Acute				
ADR _{pot}	5.35E-06	mg/kg/day	0.00	mg/kg/day

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 49 RELEASE ACTIVITY: Electrolux 20 dy

FACILITY NAME: FRIGIDAIRE HOME PRODUCTS

FACILITY LOCATION: GREENVILLE MI 48838

RECEIVING STREAM NAME: FLAT R

REACH NUMBER: 04050006024 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: MI0002135 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 516.61 7q10 FLOW (MLD): 117.84 EFFLUENT FLOW

(MLD):0.63

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 (%)
3.00	0	0	20.00	2.60E-02	0.00
788.00	0	0	20.00	2.60E-02	0.00
920.00	0	0	20.00	2.60E-02	0.00
1.44E+04	0	0	20.00	2.60E-02	0.00

Chemical ID: TCE

Assessor:

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ENVIRONMENTAL	RELEASES

Scenario#:50 Number of Release Sites: 1.

Release Activity: Electrolux 260 dy

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

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A
2.01E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:50 RELEASE ACTIVITY: Electrolux 260 dy

FACILITY NAME: FRIGIDAIRE HOME PRODUCTS

FACILITY LOCATION: GREENVILLE MI 48838

RECEIVING WATER NAME: FLAT R

REACH NUMBER: 04050006024 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: MI0002135 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.00201	2.01E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	311.87	184.07	117.84	96.68	NA
CONCENTRATION (µg/L)	6.44E-03	1.09E-02	1.71E-02	2.08E-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}	2.53E-08 mg/kg/day 0.00 mg/kg/day			mg/kg/day
LADC _{pot}	1.94E-06 mg/L 0.00 mg/kg			mg/kg
Acute				
ADR _{pot}	4.14E-07	mg/kg/day	0.00	mg/kg/day

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 50 RELEASE ACTIVITY: Electrolux 260 dy

FACILITY NAME: FRIGIDAIRE HOME PRODUCTS

FACILITY LOCATION: GREENVILLE MI 48838

RECEIVING STREAM NAME: FLAT R

REACH NUMBER: 04050006024 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: MI0002135 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 516.61 7q10 FLOW (MLD): 117.84 EFFLUENT FLOW

(MLD):0.63

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 (%)
3.00	0	0	260.00	2.01E-03	0.00
788.00	0	0	260.00	2.01E-03	0.00
920.00	0	0	260.00	2.01E-03	0.00
1.44E+04	0	0	260.00	2.01E-03	0.00

Chemical ID: TCE

Assessor:

ENVIRONMENTAL	DELEVEE
ENVIKONWENTAL	KELEASES

Scenario#:51 Number of Release Sites: 1.

Release Activity: Rex 20 dy

Release Description:	WATER	LANDFILL	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:
Per Site Release:

	20.00	0.00/0.00	N/A	N/A	
	2.50E-02	N/A/0.00	N/A	N/A	
•	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)	

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:51 RELEASE ACTIVITY: Rex 20 dy

FACILITY NAME: LANSDALE BORO

FACILITY LOCATION: LANSDALE PA 19446 RECEIVING WATER NAME: NESHAMINY R

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

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.	20.	0.025	2.50E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	216.46	60.30	37.12	30.70	NA
CONCENTRATION (µg/L)	0.12	0.41	0.67	0.81	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}	3.48E-08 mg/kg/day		0.00 mg/kg/day			
LADC _{pot}	2.68E-06 mg/L		0.00	mg/kg		
Acute						
ADR _{pot}	1.57E-05 mg/kg/day 0.00 mg/kg/day					

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 51 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 GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 919.00 7q10 FLOW (MLD): 37.12 EFFLUENT FLOW

(MLD):10.33

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 (%)			
3.00	0	0	20.00	2.50E-02	0.00			
788.00	0	0	20.00	2.50E-02	0.00			
920.00	0	0	20.00	2.50E-02	0.00			
1.44E+04	0	0	20.00	2.50E-02	0.00			

Chemical ID: TCE

Assessor:

Scenario#:52 Number of Release Sites: 1.

Release Activity: Rex 260 dy

Release Description:	WATER	LANDFILL	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:
Per Site Release:

260.00	0.00/0.00	N/A	N/A	
1.94E-03	N/A/0.00	N/A	N/A	
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)	

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:52 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: No DISCHARGE TYPE: Direct

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.	0.00194	1.94E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	216.46	60.30	37.12	30.70	NA
CONCENTRATION (µg/L)	8.96E-03	3.22E-02	5.23E-02	6.32E-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}	3.51E-08 mg/kg/day		0.00 mg/kg/day			
LADC _{pot}	2.70E-06 mg/L		0.00	mg/kg		
Acute						
ADR _{pot}	1.22E-06	1.22E-06 mg/kg/day 0.00 mg/kg/day				

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 52 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 ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 919.00 7q10 FLOW (MLD): 37.12 EFFLUENT FLOW

(MLD):10.33

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 (%)
3.00	0	0	260.00	1.94E-03	0.00
788.00	0	0	260.00	1.94E-03	0.00
920.00	0	0	260.00	1.94E-03	0.00
1.44E+04	0	0	260.00	1.94E-03	0.00

Chemical ID: TCE

Assessor:

Scenario#:53 Number of Release Sites: 1.

Release Activity: Carrier 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.46	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
2.30E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

CHEMICAL ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS				
SCENARIO #: 53	SCENARIO #: 53 RELEASE ACTIVITY: Carrier 20 dy			
FACILITY NAME: THOMPSON I	FACILITY NAME: THOMPSON ROAD SITE			
FACILITY LOCATION: SYRACU	FACILITY LOCATION: SYRACUSE NY 13221			
RECEIVING WATER NAME: ONONDAGA L				
REACH NUMBER: 04140201056 FACILITY ON REACH: No DISCHARGE TYPE: Direct				
NPDES PERMIT #: NY0001163 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.	8.09	0.023	2.30E-02	0.00

AQUATIC EXPOSURE ESTIMATES			
MIXING ZONE	WATER CONCENTRATION (ug/L)		
ACUTE SCENARIO	1.00	2.84	
CHRONIC SCENARIO	1.00	2.84	

FISH INGESTION EXPOSURE ESTIMATES					
			ASSUMI	PTIONS	
Exposure Units	Results	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:

Chemical ID: TCE

Assessor:

Scenario#:54 Number of Release Sites: 1.

Release Activity: Carrier 260 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	0.46	N/A	N/A	N/A
Total Releases.	0.40	11/13	IV/A	IV/A

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A
1.77E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

CHEMICAL ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS			
SCENARIO #: 54	SCENARIO #: 54 RELEASE ACTIVITY: Carrier 260 dy		
FACILITY NAME: THOMPSON ROAD SITE			
FACILITY LOCATION: SYRACUSE NY 13221			
RECEIVING WATER NAME: ONONDAGA L			
REACH NUMBER: 04140201056 FACILITY ON REACH: No DISCHARGE TYPE: Direct			
NPDES PERMIT #: NY0001163 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.	8.09	0.00177	1.77E-03	0.00

AQUATIC EXPOSURE ESTIMATES						
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)				
ACUTE SCENARIO	1.00	0.22				
CHRONIC SCENARIO	1.00	0.22				

FISH INGESTION EXPOSURE ESTIMATES								
ASSUMPTIONS								
Exposure Units	Results	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:

Chemical ID: TCE

Assessor:

Scenario#:55 Number of Release Sites: 1.

Release Activity: Cascade 20 dy

Release Description:	WATER	LANDFILL	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:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
1.50E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

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

SCENARIO #: 55

Number of Sites: 1

RELEASE ACTIVITY:Cascade

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.	0.015	1.50E-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	3.09E-02	7.27E-02	0.11	0.14
ALL	10	43.45	15.35	9.00	7.91	0.35	0.98	1.67	1.90

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							
$\mathrm{LADD}_{\mathrm{pot}}$	9.31E-09	1.04E-07	mg/kg/day	0.00	0.00	mg/kg/day		
LADC _{pot}	7.16E-07	8.00E-06	mg/L	0.00	0.00	mg/kg		
Acute								
ADR_{pot}	2.75E-06	3.70E-05	mg/kg/day	0.00	0.00	mg/kg/day		

SIC Code Comments:

Chemical ID: TCE

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 55 RELEASE ACTIVITY: Cascade 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			
3.00	1	3	20.00	1.50E-02	0.00	High			
788.00	0	0	20.00	1.50E-02	0.00	High			
920.00	0	0	20.00	1.50E-02	0.00	High			
1.44E+04	0	0	20.00	1.50E-02	0.00	High			

Chemical ID: TCE

Assessor:

Scenario#:56 Number of Release Sites: 1.

Release Activity: Cascade 260 dy

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

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A	
1.17E-03	N/A/0.00	N/A	N/A	
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)	

Chemical ID: TCE

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

SCENARIO #: 56

Number of Sites: 1

RELEASE ACTIVITY:Cascade

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.	0.00117	1.17E-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	2.41E-03	5.67E-03	8.82E-03	1.08E-02		
ALL	10	43.45	15.35	9.00	7.91	2.69E-02	7.62E-02	0.13	0.15		

DRINI	DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES							
Exposure Units	Drinking Water Results		Drinking Water Units	Fish Ingestion Results		Fish Ingestion Units		
	50%	10%		50%	10%			
	Cancer							
$LADD_{pot}$	9.44E-09	1.05E-07	mg/kg/day	0.00	0.00	mg/kg/day		
LADC _{pot}	7.26E-07	8.12E-06	mg/L	0.00	0.00	mg/kg		
Acute								
ADR _{pot}	2.15E-07	2.89E-06	mg/kg/day	0.00	0.00	mg/kg/day		

SIC Code Comments:

Chemical ID: TCE

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 56 RELEASI

RELEASE ACTIVITY: Cascade 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			
3.00	5	18	260.00	1.17E-03	0.00	High			
788.00	0	0	260.00	1.17E-03	0.00	High			
920.00	0	0	260.00	1.17E-03	0.00	High			
1.44E+04	0	0	260.00	1.17E-03	0.00	High			

Chemical ID: TCE

Assessor:

Scenario#:57 Number of Release Sites: 1.

Release Activity: USAF 20 dy

Release Description:	WATER	LANDFILL	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:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
1.50E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:57 RELEASE ACTIVITY: USAF 20 dy

FACILITY NAME: OSCODA TWP WWTP FACILITY LOCATION: OSCODA MI 48750 RECEIVING WATER NAME: AU SABLE R

REACH NUMBER: 04070007001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: MI0028282 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.015	1.50E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	3598.79	2185.26	1526.29	1229.98	NA	
CONCENTRATION (µg/L)	4.17E-03	6.86E-03	9.83E-03	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}	1.26E-09	mg/kg/day	0.00	mg/kg/day			
LADC _{pot}	9.66E-08	mg/L	0.00	mg/kg			
Acute							
ADR _{pot}	2.60E-07 mg/kg/day 0.00 mg/kg/day						

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 57 RELEASE ACTIVITY: USAF 20 dy

FACILITY NAME: OSCODA TWP WWTP FACILITY LOCATION: OSCODA MI 48750 RECEIVING STREAM NAME: AU SABLE R

REACH NUMBER: 04070007001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: MI0028282 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 4577.82 7q10 FLOW (MLD): 1526.29 EFFLUENT FLOW

(MLD):0.56

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 (%)		
3.00	0	0	20.00	1.50E-02	0.00		
788.00	0	0	20.00	1.50E-02	0.00		
920.00	0	0	20.00	1.50E-02	0.00		
1.44E+04	0	0	20.00	1.50E-02	0.00		

Chemical ID: TCE

Assessor:

ENVIRONMENTAL	DELEVEE
ENVIKONWENTAL	KELEASES

Scenario#:58 Number of Release Sites: 1.

Release Activity: USAF 260 dy

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

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A
1.15E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:58 RELEASE ACTIVITY: USAF 260 dy

FACILITY NAME: OSCODA TWP WWTP FACILITY LOCATION: OSCODA MI 48750 RECEIVING WATER NAME: AU SABLE R

REACH NUMBER: 04070007001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: MI0028282 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.00115	1.15E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT					
FLOW (MLD)	3598.79	2185.26	1526.29	1229.98	NA
CONCENTRATION (μg/L) 3.20E-04 5.26E-04 7.53E-04 9.35E-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}	1.25E-09	mg/kg/day	0.00 mg/kg/day			
LADC _{pot}	9.63E-08	mg/L	0.00	mg/kg		
Acute						
ADR _{pot}	1.99E-08	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 58 RELEASE ACTIVITY: USAF 260 dy

FACILITY NAME: OSCODA TWP WWTP FACILITY LOCATION: OSCODA MI 48750 RECEIVING STREAM NAME: AU SABLE R

REACH NUMBER: 04070007001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: MI0028282 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 4577.82 7q10 FLOW (MLD): 1526.29 EFFLUENT FLOW

(MLD):0.56

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 (%)	
3.00	0	0	260.00	1.15E-03	0.00	
788.00	0	0	260.00	1.15E-03	0.00	
920.00	0	0	260.00	1.15E-03	0.00	
1.44E+04	0	0	260.00	1.15E-03	0.00	

Chemical ID: TCE

ENVIRONMENTAL RELEASES

Assessor:

Scenario#:59 Number of Release Sites: 1.

Release Activity: AAR Mob 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.28	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:
 1.40E-02
 N/A/0.00
 N/A
 N/A

(kg/site/day) (kg/site/day) (kg/site/day) (kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:59 RELEASE ACTIVITY: AAR Mob 20 dy

FACILITY NAME: CADILLAC WWTP

FACILITY LOCATION: CADILLAC MI 49601

RECEIVING WATER NAME: CLAM R

REACH NUMBER: 04060102048 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: MI0020257 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.014	1.40E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT					
FLOW (MLD)	271.01	190.78	122.29	100.31	NA
CONCENTRATION (μg/L) 5.17E-02 7.34E-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}	1.56E-08	1.56E-08 mg/kg/day 0.00 mg/kg				
LADC _{pot}	1.20E-06	mg/L	0.00	mg/kg		
Acute						
ADR _{pot}	2.78E-06	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 59 RELEASE ACTIVITY: AAR Mob 20 dy

FACILITY NAME: CADILLAC WWTP

FACILITY LOCATION: CADILLAC MI 49601

RECEIVING STREAM NAME: CLAM R

REACH NUMBER: 04060102048 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: MI0020257 GAGING STATION ID: 04121300

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 06/01/66 - 09/29/90 NUMBER OF REACH: 1

OBSERVATIONS: 8888.00

50 %ile FLOW (MLD): 256.83 10 %ile FLOW (MLD): 158.99 EFFLUENT FLOW

(MLD):8.25

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 (%)
3.00	0	0	20.00	1.40E-02	0.00
788.00	0	0	20.00	1.40E-02	0.00
920.00	0	0	20.00	1.40E-02	0.00
1.44E+04	0	0	20.00	1.40E-02	0.00

Chemical ID: TCE

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:60 Number of Release Sites: 1.

Release Activity: AAR Mob 260 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	0.29	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:
 1.12E-03
 N/A/0.00
 N/A
 N/A

(kg/site/day) (kg/site/day) (kg/site/day) (kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:60 RELEASE ACTIVITY: AAR Mob 260 dy

FACILITY NAME: CADILLAC WWTP

FACILITY LOCATION: CADILLAC MI 49601

RECEIVING WATER NAME: CLAM R

REACH NUMBER: 04060102048 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: MI0020257 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.00112	1.12E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	271.01	190.78	122.29	100.31	NA
CONCENTRATION (µg/L)	4.13E-03	5.87E-03	9.16E-03	1.12E-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}	1.62E-08	1.62E-08 mg/kg/day 0.00		mg/kg/day	
LADC _{pot}	1.25E-06 mg/L		0.00	mg/kg	
Acute					
ADR _{pot}	2.22E-07	mg/kg/day	0.00	mg/kg/day	

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 60 RELEASE ACTIVITY: AAR Mob 260 dy

FACILITY NAME: CADILLAC WWTP

FACILITY LOCATION: CADILLAC MI 49601

RECEIVING STREAM NAME: CLAM R

REACH NUMBER: 04060102048 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: MI0020257 GAGING STATION ID: 04121300

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 06/01/66 - 09/29/90 NUMBER OF REACH: 1

OBSERVATIONS: 8888.00

50 %ile FLOW (MLD): 256.83 10 %ile FLOW (MLD): 158.99 EFFLUENT FLOW

(MLD):8.25

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 (%)
3.00	0	0	260.00	1.12E-03	0.00
788.00	0	0	260.00	1.12E-03	0.00
920.00	0	0	260.00	1.12E-03	0.00
1.44E+04	0	0	260.00	1.12E-03	0.00

Chemical ID: TCE

Assessor:

Scenario#:61 Number of Release Sites: 1.

Release Activity: Eaton 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	0.28	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
1.40E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

CHEMICAL ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS				
SCENARIO #: 61 RELEASE ACTIVITY: Eaton 20 dy				
FACILITY NAME: KEARNEY WWTF #1				
FACILITY LOCATION: KEARNE	FACILITY LOCATION: KEARNEY NE 68847			
RECEIVING WATER NAME: PLATTE R N CHANNEL				
REACH NUMBER: 10200101003 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct				
NPDES PERMIT #: NE0052647	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.	8.29	0.014	1.40E-02	0.00

AQUATIC EXPOSURE ESTIMATES					
MIXING ZONE DILUTION FACTOR WATER CONCENTRATION (u.					
ACUTE SCENARIO	1.00	1.69			
CHRONIC SCENARIO	1.00	1.69			

FISH INGESTION EXPOSURE ESTIMATES						
		ASSUMPTIONS				
Exposure Units	Results	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:

Chemical ID: TCE

Assessor:

Scenario#:62 Number of Release Sites: 1.

Release Activity: Eaton 260 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE	
Non-sludge/Sludge					
Total Releases:	0.28	N/A	N/A	N/A	
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)	

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A
1.07E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

CHEMICAL ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS						
SCENARIO #: 62	ELEASE ACTIVITY: Eaton 260 dy					
FACILITY NAME: KEARNEY W	WTF #1					
FACILITY LOCATION: KEARNE	Y NE 68847					
RECEIVING WATER NAME: PLA	RECEIVING WATER NAME: PLATTE R N CHANNEL					
REACH NUMBER: 10200101003 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct						
NPDES PERMIT #: NE0052647 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.	8.29	0.00107	1.07E-03	0.00

AQUATIC EXPOSURE ESTIMATES						
MIXING ZONE DILUTION FACTOR WATER CONCENTRATION (ug						
ACUTE SCENARIO	1.00	0.13				
CHRONIC SCENARIO	1.00	0.13				

FISH INGESTION EXPOSURE ESTIMATES						
		ASSUMPTIONS				
Exposure Units	Results	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:

Chemical ID: TCE-0%

Assessor:

Scenario#:9 Number of Release Sites: 1.

Release Activity: Lake 260 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:
Per Site Release:

260.00	0.00/0.00	N/A	N/A
5.00E-04	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:9 RELEASE ACTIVITY: Lake 260 dy

FACILITY NAME: UNIFORM TUBE INC

FACILITY LOCATION: COLLEGEVILLE PA 19426

RECEIVING WATER NAME: PERKIOMEN CR

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

NPDES PERMIT #: PA0042617 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.0005	5.00E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	281.27	75.79	47.03	38.83	NA	
CONCENTRATION (μg/L) 1.78E-03 6.60E-03 1.06E-02 1.29E-02 NA						

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES							
Exposure Units	Drinking Water Results Drinking Water Units Fish Ingestion Results Units Results Units						
Cancer							
LADD _{pot}	6.96E-09 mg/kg/day 0.00 mg/kg/day			mg/kg/day			
LADC _{pot}	5.36E-07 mg/L 0.00 mg/kg			mg/kg			
Acute							
ADR_{pot}	2.50E-07 mg/kg/day 0.00 mg/kg/day						

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 9 RELEASE ACTIVITY: Lake 260 dy

FACILITY NAME: UNIFORM TUBE INC

FACILITY LOCATION: COLLEGEVILLE PA 19426

RECEIVING STREAM NAME: PERKIOMEN CR

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

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

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 1213.02 7q10 FLOW (MLD): 47.03 EFFLUENT FLOW

(MLD):6.00E-02

RESULTS							
COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)		
3.00	0	0	260.00	5.00E-04	0.00		
788.00	0	0	260.00	5.00E-04	0.00		
920.00	0	0	260.00	5.00E-04	0.00		
1.44E+04	0	0	260.00	5.00E-04	0.00		

Chemical ID: TCE-0%

Assessor:

Scenario#:10 Number of Release Sites: 1.

Release Activity: Lake 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	0.14	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
7.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:10 RELEASE ACTIVITY: Lake 20 dy

FACILITY NAME: UNIFORM TUBE INC

FACILITY LOCATION: COLLEGEVILLE PA 19426

RECEIVING WATER NAME: PERKIOMEN CR

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

NPDES PERMIT #: PA0042617 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.007	7.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	281.27	75.79	47.03	38.83	NA
CONCENTRATION (µg/L)	2.49E-02	9.24E-02	0.15	0.18	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}	7.50E-09 mg/kg/day 0.00 mg/kg/day			mg/kg/day	
LADC _{pot}	5.77E-07 mg/L 0.00 mg/kg			mg/kg	
Acute					
ADR _{pot}	3.50E-06	mg/kg/day	0.00	mg/kg/day	

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 10 RELEASE ACTIVITY: Lake 20 dy

FACILITY NAME: UNIFORM TUBE INC

FACILITY LOCATION: COLLEGEVILLE PA 19426

RECEIVING STREAM NAME: PERKIOMEN CR

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

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

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 1213.02 7q10 FLOW (MLD): 47.03 EFFLUENT FLOW

(MLD):6.00E-02

RESULTS							
COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)		
3.00	0	0	20.00	7.00E-03	0.00		
788.00	0	0	20.00	7.00E-03	0.00		
920.00	0	0	20.00	7.00E-03	0.00		
1.44E+04	0	0	20.00	7.00E-03	0.00		

Assessor:

Chemical ID: TCE

ENVIRONMENTAL RELEASES

Scenario#:63 Number of Release Sites: 1.

Release Activity: Motor 20 dy

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

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
1.30E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:63 RELEASE ACTIVITY: Motor 20 dy

FACILITY NAME: MOTOR COMPONENTS LLC

FACILITY LOCATION: ELMIRA HEIGHTS NY 14903

RECEIVING WATER NAME: NEWTON CR

REACH NUMBER: 02050105007 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: NY0004081 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	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	67.64	26.10	15.60	12.98	NA
CONCENTRATION (µg/L)	0.19	0.50	0.83	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}	5.79E-08	mg/kg/day	0.00	mg/kg/day	
LADC _{pot}	4.46E-06	mg/L	0.00	mg/kg	
Acute					
ADR _{pot}	1.89E-05	mg/kg/day	0.00	mg/kg/day	

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 63 RELEASE ACTIVITY: Motor 20 dy

FACILITY NAME: MOTOR COMPONENTS LLC

FACILITY LOCATION: ELMIRA HEIGHTS NY 14903

RECEIVING STREAM NAME: NEWTON CR

REACH NUMBER: 02050105007 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NY0004081 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 216.14 7q10 FLOW (MLD): 15.60 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 (%)			
3.00	0	0	20.00	1.30E-02	0.00			
788.00	0	0	20.00	1.30E-02	0.00			
920.00	0	0	20.00	1.30E-02	0.00			
1.44E+04	0	0	20.00	1.30E-02	0.00			

Chemical ID: TCE

ENVIRONMENTAL RELEASES

Assessor:

Scenario#:64 Number of Release Sites: 1.

Release Activity: Motor 260 dy

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

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A
9.64E-04	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:64 RELEASE ACTIVITY: Motor 260 dy

FACILITY NAME: MOTOR COMPONENTS LLC

FACILITY LOCATION: ELMIRA HEIGHTS NY 14903

RECEIVING WATER NAME: NEWTON CR

REACH NUMBER: 02050105007 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: NY0004081 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.00096	9.64E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	67.64	26.10	15.60	12.98	NA	
CONCENTRATION (μg/L) 1.43E-02 3.69E-02 6.18E-02 7.43E-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}	5.58E-08 mg/kg/day 0.00 mg/kg/day			mg/kg/day			
LADC _{pot}	4.29E-06	4.29E-06 mg/L 0.00 mg/kg					
Acute							
ADR _{pot}	1.40E-06	mg/kg/day	0.00	mg/kg/day			

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 64 RELEASE ACTIVITY: Motor 260 dy

FACILITY NAME: MOTOR COMPONENTS LLC

FACILITY LOCATION: ELMIRA HEIGHTS NY 14903

RECEIVING STREAM NAME: NEWTON CR

REACH NUMBER: 02050105007 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NY0004081 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 216.14 7q10 FLOW (MLD): 15.60 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 (%)			
3.00	0	0	260.00	9.64E-04	0.00			
788.00	0	0	260.00	9.64E-04	0.00			
920.00	0	0	260.00	9.64E-04	0.00			
1.44E+04	0	0	260.00	9.64E-04	0.00			

Assessor:

Chemical ID: TCE

ENVIRONMENTAL	RELEASES
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Scenario#:65 Number of Release Sites: 1.

Release Activity: Salem 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	0.24	N/A	N/A	N/A

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
1.20E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

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

SCENARIO #: 65

Number of Sites: 1

RELEASE ACTIVITY:Salem 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.	0.012	1.20E-02	0.00	0.00

	AQUATIC EXPOSURE ESTIMATES - SURFACE WATER									
PLANT TYPE	% ILE FACILITY		STREAM FI	LOW (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	2.47E-02	5.82E-02	9.05E-02	0.11	
ALL	10	43.45	15.35	9.00	7.91	0.28	0.78	1.33	1.52	

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES									
Exposure Units	Drinking Water Results		Drinking Water Units	Fish Ingest	tion Results	Fish Ingestion Units			
	50%	10%		50%	10%				
Cancer									
$LADD_{pot}$	7.45E-09	8.32E-08	mg/kg/day	0.00	0.00	mg/kg/day			
LADC _{pot}	5.73E-07	6.40E-06	mg/L	0.00	0.00	mg/kg			
Acute									
ADR _{pot}	2.20E-06	2.96E-05	mg/kg/day	0.00	0.00	mg/kg/day			

SIC Code Comments:

Chemical ID: TCE

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 65 RELEASE ACTIVITY: Salem 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				
3.00	1	2	20.00	1.20E-02	0.00	High				
788.00	0	0	20.00	1.20E-02	0.00	High				
920.00	0	0	20.00	1.20E-02	0.00	High				
1.44E+04	0	0	20.00	1.20E-02	0.00	High				

Assessor:

Chemical ID: TCE

Scenario#:66 Number of Release Sites: 1.

Release Activity: Salem 260 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE		
	Non-sludge/Sludge					
Total Releases:	0.23	N/A	N/A	N/A		
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)		

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A
8.97E-04	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

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

SCENARIO #: 66

Number of Sites: 1

RELEASE ACTIVITY:Salem 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.	0.002	8.97E-04	0.00	0.00

	AQUATIC EXPOSURE ESTIMATES - SURFACE WATER									
PLANT TYPE	% ILE FACILITY		TREAM FI	LOW (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	1.85E-03	4.35E-03	6.76E-03	8.25E-03	
ALL	10	43.45	15.35	9.00	7.91	2.06E-02	5.84E-02	9.97E-02	0.11	

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES									
Exposure Units	Drinking Water Results		Drinking Water Units	Fish Ingest	ion Results	Fish Ingestion Units			
	50%	10%		50%	10%				
Cancer									
$\mathrm{LADD}_{\mathrm{pot}}$	7.24E-09	8.09E-08	mg/kg/day	0.00	0.00	mg/kg/day			
LADC _{pot}	5.57E-07	6.22E-06	mg/L	0.00	0.00	mg/kg			
Acute									
ADR _{pot}	1.65E-07	2.21E-06	mg/kg/day	0.00	0.00	mg/kg/day			

SIC Code Comments:

Chemical ID: TCE

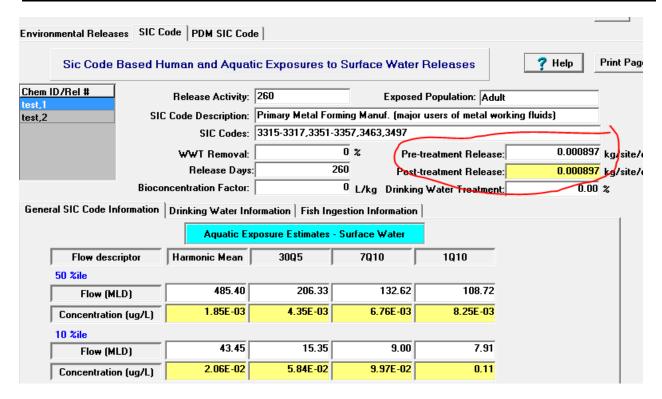
SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 66 RELEASE ACTIVITY: Salem 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				
3.00	5	17	260.00	8.97E-04	0.00	High				
788.00	0	0	260.00	8.97E-04	0.00	High				
920.00	0	0	260.00	8.97E-04	0.00	High				
1.44E+04	0	0	260.00	8.97E-04	0.00	High				



Chemical ID: TCE

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:67 Number of Release Sites: 1.

Release Activity: GE Greenville 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: Per Site Release:

20.00	0.00/0.00	N/A	N/A
1.00E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:67 RELEASE ACTIVITY: GE Greenville 20 dy

FACILITY NAME: GE/GAS TURBINE MFG OPERATION

FACILITY LOCATION: GREENVILLE SC 29602

RECEIVING WATER NAME: BRUSHY CR

REACH NUMBER: 03050108014 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: SC0003484 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.01	1.00E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PI				PLANT		
FLOW (MLD)	21.31	16.69	9.82	8.20	NA	
CONCENTRATION (µg/L)	0.47	0.60	1.02	1.22	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}	1.41E-07 mg/kg/day 0.00 mg/kg/			mg/kg/day		
LADC _{pot}	1.09E-05 mg/L 0.00 mg/kg			mg/kg		
Acute						
ADR _{pot}	2.27E-05	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 67 RELEASE ACTIVITY: GE Greenville 20 dy

FACILITY NAME: GE/GAS TURBINE MFG OPERATION

FACILITY LOCATION: GREENVILLE SC 29602

RECEIVING STREAM NAME: BRUSHY CR

REACH NUMBER: 03050108014 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: SC0003484 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 32.26 7q10 FLOW (MLD): 9.82 EFFLUENT FLOW

(MLD):0.81

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 (%)	
3.00	0	0	20.00	1.00E-02	0.00	
788.00	0	0	20.00	1.00E-02	0.00	
920.00	0	0	20.00	1.00E-02	0.00	
1.44E+04	0	0	20.00	1.00E-02	0.00	

Chemical ID: TCE Assessor:

ENVIRONMENTAL RELEASES

Scenario#:68 Number of Release Sites: 1.

Release Activity: GE Greenville 260 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	0.21	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:

260.00	0.00/0.00	N/A	N/A
8.06E-04	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:68 RELEASE ACTIVITY: GE Greenville 260 dy

FACILITY NAME: GE/GAS TURBINE MFG OPERATION

FACILITY LOCATION: GREENVILLE SC 29602

RECEIVING WATER NAME: BRUSHY CR

REACH NUMBER: 03050108014 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: SC0003484 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.00081	8.06E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLA					PLANT	
FLOW (MLD)	21.31	16.69	9.82	8.20	NA	
CONCENTRATION (µg/L)	3.78E-02	4.83E-02	8.21E-02	9.83E-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}	1.48E-07 mg/kg/day 0.00 mg/kg/da			mg/kg/day		
LADC _{pot}	1.14E-05	mg/L	0.00 mg/kg			
Acute						
ADR _{pot}	1.83E-06	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 68 RELEASE ACTIVITY: GE Greenville 260 dy

FACILITY NAME: GE/GAS TURBINE MFG OPERATION

FACILITY LOCATION: GREENVILLE SC 29602

RECEIVING STREAM NAME: BRUSHY CR

REACH NUMBER: 03050108014 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: SC0003484 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 32.26 7q10 FLOW (MLD): 9.82 EFFLUENT FLOW

(MLD):0.81

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 (%)	
3.00	0	0	260.00	8.06E-04	0.00	
788.00	0	0	260.00	8.06E-04	0.00	
920.00	0	0	260.00	8.06E-04	0.00	
1.44E+04	0	0	260.00	8.06E-04	0.00	

Chemical ID: TCE-2

Assessor:

Scenario#:1 Number of Release Sites: 1.

Release Activity: Parker 20 dy

Release Description:	WATER	LANDFILL	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:
Per Site Release:

	20.00	0.00/0.00	N/A	N/A
	1.00E-02	N/A/0.00	N/A	N/A
•	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-2

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

SCENARIO #: 1

Number of Sites: 1

RELEASE ACTIVITY:Parker 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 FI	LOW (MLD)	1	STREAM C	ONC. (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										
$\mathrm{LADD}_{\mathrm{pot}}$	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:

Chemical ID: TCE-2

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 1 RELEASE ACTIVITY: Parker 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								
3.00	1	2	20.00	1.00E-02	0.00	High								
788.00	0	0	20.00	1.00E-02	0.00	High								
920.00	0	0	20.00	1.00E-02	0.00	High								
1.44E+04	0	0	20.00	1.00E-02	0.00	High								

Chemical ID: TCE-2

Assessor:

Scenario#:2 Number of Release Sites: 1.

Release Activity: Parker 260 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:
Per Site Release:

260.00	0.00/0.00	N/A	N/A
7.47E-04	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-2

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

SCENARIO #: 2

Number of Sites: 1

RELEASE ACTIVITY:Parker 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.	0.00075	7.47E-04	0.00	0.00

	AQUATIC EXPOSURE ESTIMATES - SURFACE WATER											
PLANT TYPE	% ILE FACILITY		TREAM FI	LOW (MLD)	1	STREAM C	ONC. (µg/l)				
		Harmonic Mean	30Q5	7Q10	1Q10	Harmonic Mean	30Q5	7Q10	1Q10			
ALL	50	485.40	206.33	132.62	108.72	1.54E-03	3.62E-03	5.63E-03	6.87E-03			
ALL	10	43.45	15.35	9.00	7.91	1.72E-02	4.87E-02	8.30E-02	9.44E-02			

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES											
Exposure Units	Drinking Water Results		Drinking Water Units	Fish Ingest	ion Results	Fish Ingestion Units					
	50%	10%		50%	10%						
	Cancer										
$LADD_{pot}$	6.03E-09	6.74E-08	mg/kg/day	0.00	0.00	mg/kg/day					
LADC _{pot}	4.64E-07	5.18E-06	mg/L	0.00	0.00	mg/kg					
Acute											
ADR _{pot} 1.37E-07 1.84E-06 mg/kg/day 0.00 0.00 mg/kg/day											

SIC Code Comments:

Chemical ID: TCE-2

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 2 RELEASE ACTIVITY: Parker 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								
3.00	4	16	260.00	7.47E-04	0.00	High								
788.00	0	0	260.00	7.47E-04	0.00	High								
920.00	0	0	260.00	7.47E-04	0.00	High								
1.44E+04	0	0	260.00	7.47E-04	0.00	High								

Chemical ID: TCE-2

Assessor:

Scenario#:3 Number of Release Sites: 1.

Release Activity: Mahle 20 dy

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

Non-sludge/Sludge

Release Days/yr: Per Site Release:

20.00	0.00/0.00	N/A	N/A
1.00E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:3 RELEASE ACTIVITY: Mahle 20 dy

FACILITY NAME: DANA CORP-SANFORD ST FACILITY LOCATION: MUSKEGON MI 49443

RECEIVING WATER NAME: BLACK CR

REACH NUMBER: 04060101010 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: MI0004057 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.01	1.00E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	91.85	36.49	22.07	18.32	NA
CONCENTRATION (µg/L)	0.11	0.27	0.45	0.55	NA

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES						
Exposure Units Drinking Water Results Drinking Water Units Fish Ingestion Results Units Results Units						
Cancer						
LADD _{pot}	O _{pot} 3.28E-08 mg/kg/day 0.00 mg/kg/day					
LADC _{pot}	2.52E-06 mg/L 0.00 mg/kg					
Acute						
ADR _{pot}	1.04E-05	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 3 RELEASE ACTIVITY: Mahle 20 dy

FACILITY NAME: DANA CORP-SANFORD ST FACILITY LOCATION: MUSKEGON MI 49443

RECEIVING STREAM NAME: BLACK CR

REACH NUMBER: 04060101010 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: MI0004057 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 275.28 7q10 FLOW (MLD): 22.07 EFFLUENT FLOW

(MLD):1.67

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 (%)		
3.00	0	0	20.00	1.00E-02	0.00		
788.00	0	0	20.00	1.00E-02	0.00		
920.00	0	0	20.00	1.00E-02	0.00		
1.44E+04	0	0	20.00	1.00E-02	0.00		

Chemical ID: TCE-2

Assessor:

Scenario#:4 Number of Release Sites: 1.

Release Activity: Mahle 260 dy

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

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A
7.42E-04	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:4 RELEASE ACTIVITY: Mahle 260 dy

FACILITY NAME: DANA CORP-SANFORD ST FACILITY LOCATION: MUSKEGON MI 49443

RECEIVING WATER NAME: BLACK CR

REACH NUMBER: 04060101010 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: MI0004057 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.00074	7.42E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	91.85	36.49	22.07	18.32	NA	
CONCENTRATION (µg/L)	8.08E-03	2.03E-02	3.36E-02	4.05E-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}	3.16E-08 mg/kg/day		0.00 mg/kg/day	
LADC _{pot}	2.43E-06 mg/L		0.00	mg/kg
Acute				
ADR_{pot}	7.70E-07	mg/kg/day	0.00	mg/kg/day

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 4 RELEASE ACTIVITY: Mahle 260 dy

FACILITY NAME: DANA CORP-SANFORD ST FACILITY LOCATION: MUSKEGON MI 49443

RECEIVING STREAM NAME: BLACK CR

REACH NUMBER: 04060101010 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: MI0004057 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 275.28 7q10 FLOW (MLD): 22.07 EFFLUENT FLOW

(MLD):1.67

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 (%)	
3.00	0	0	260.00	7.42E-04	0.00	
788.00	0	0	260.00	7.42E-04	0.00	
920.00	0	0	260.00	7.42E-04	0.00	
1.44E+04	0	0	260.00	7.42E-04	0.00	

Chemical ID: TCE-2

Assessor:

Scenario#:5 Number of Release Sites: 1.

Release Activity: GE VA 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:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
1.00E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:5 RELEASE ACTIVITY: GE VA 20 dy

FACILITY NAME: GENICOM CORP.

FACILITY LOCATION: WAYNESBORO VA 22980

RECEIVING WATER NAME: SOUTH R

REACH NUMBER: 02070005027 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: VA0002402 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.01	1.00E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	303.69	163.03	103.93	85.34	NA	
CONCENTRATION (μg/L) 3.29E-02 6.13E-02 9.62E-02				0.12	NA	

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES						
Exposure Units	Drinking Water Results Units Fish Ingestion Results Units Results Units					
Cancer						
LADD _{pot}	9.92E-09 mg/kg/day 0.00 mg/kg/day					
LADC _{pot}	7.63E-07 mg/L 0.00 mg/kg					
Acute						
ADR _{pot}	2.32E-06	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 5 RELEASE ACTIVITY: GE VA 20 dy

FACILITY NAME: GENICOM CORP.

FACILITY LOCATION: WAYNESBORO VA 22980

RECEIVING STREAM NAME: SOUTH R

REACH NUMBER: 02070005027 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: VA0002402 GAGING STATION ID: 01626000

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/66 - 10/21/90 NUMBER OF REACH: 1

OBSERVATIONS: 9061.00

50 %ile FLOW (MLD): 220.14 10 %ile FLOW (MLD): 83.16 EFFLUENT FLOW

(MLD):2.46

	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 (%)			
3.00	0	0	20.00	1.00E-02	0.00			
788.00	0	0	20.00	1.00E-02	0.00			
920.00	0	0	20.00	1.00E-02	0.00			
1.44E+04	0	0	20.00	1.00E-02	0.00			

Chemical ID: TCE-2

Assessor:

Scenario#:6 Number of Release Sites: 1.

Release Activity: GE VA 260 dy

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

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A
7.33E-04	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:6 RELEASE ACTIVITY: GE VA 260 dy

FACILITY NAME: GENICOM CORP.

FACILITY LOCATION: WAYNESBORO VA 22980

RECEIVING WATER NAME: SOUTH R

REACH NUMBER: 02070005027 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: VA0002402 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.00073	7.33E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	303.69	163.03	103.93	85.34	NA	
CONCENTRATION (μg/L) 2.41E-03 4.50E-03 7.05E-03 8.59E-03 NA						

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES								
Exposure Units	Drinking Water Results Drinking Water Units Fish Ingestion Results Units Results Units							
Cancer								
LADD _{pot}	9.46E-09	mg/kg/day	0.00	mg/kg/day				
LADC _{pot}	7.27E-07 mg/L 0.00 mg/kg							
Acute								
ADR _{pot}	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$							

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 6 RELEASE ACTIVITY: GE VA 260 dy

FACILITY NAME: GENICOM CORP.

FACILITY LOCATION: WAYNESBORO VA 22980

RECEIVING STREAM NAME: SOUTH R

REACH NUMBER: 02070005027 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: VA0002402 GAGING STATION ID: 01626000

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/66 - 10/21/90 NUMBER OF REACH: 1

OBSERVATIONS: 9061.00

50 %ile FLOW (MLD): 220.14 10 %ile FLOW (MLD): 83.16 EFFLUENT FLOW

(MLD):2.46

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 (%)		
3.00	0	0	260.00	7.33E-04	0.00		
788.00	0	0	260.00	7.33E-04	0.00		
920.00	0	0	260.00	7.33E-04	0.00		
1.44E+04	0	0	260.00	7.33E-04	0.00		

Chemical ID: TCE-0%

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:11 Number of Release Sites: 1.

Release Activity: Globe 260 dy

Release Description:	WATER	WATER LANDFILL		FUGITIVE
	Non-sludge/Sludge			
Total Releases:	0.45	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A	
1.73E-03	N/A/0.00	N/A	N/A	
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)	

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:11 RELEASE ACTIVITY: Globe 260 dy

FACILITY NAME: WICHITA CITY OF STP FACILITY LOCATION: WICHITA KS 67202 RECEIVING WATER NAME: ARKANSAS R

REACH NUMBER: 11030013003 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: KS0043036 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.00173	1.73E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	989.91	310.83	202.70	165.67	NA	
CONCENTRATION (μg/L) 1.75E-03 5.57E-03 8.53E-03 1.04E-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}	6.85E-09 mg/kg/day 0.00 mg/kg/day					
LADC _{pot}	5.27E-07	mg/L	0.00	mg/kg		
Acute						
ADR_{pot}	2.11E-07 mg/kg/day 0.00 mg/kg/day					

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 11 RELEASE ACTIVITY: Globe 260 dy

FACILITY NAME: WICHITA CITY OF STP FACILITY LOCATION: WICHITA KS 67202 RECEIVING STREAM NAME: ARKANSAS R

REACH NUMBER: 11030013003 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: KS0043036 GAGING STATION ID: 07144550

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 10/01/68 - 09/29/89 NUMBER OF REACH: 1

OBSERVATIONS: 7670.00

50 %ile FLOW (MLD): 1259.68 10 %ile FLOW (MLD): 472.07 EFFLUENT FLOW

(MLD):144.69

RESULTS							
COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)		
3.00	0	0	260.00	1.73E-03	0.00		
788.00	0	0	260.00	1.73E-03	0.00		
920.00	0	0	260.00	1.73E-03	0.00		
1.44E+04	0	0	260.00	1.73E-03	0.00		

Chemical ID: TCE-0%

Assessor:

Scenario#:12 Number of Release Sites: 1.

Release Activity: Globe 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	0.46	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)
		Non-sludge/Sludge		
D.1 D. /	20.00		NT/ A	27/4

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
2.30E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:12 RELEASE ACTIVITY: Globe 20 dy

FACILITY NAME: WICHITA CITY OF STP FACILITY LOCATION: WICHITA KS 67202 RECEIVING WATER NAME: ARKANSAS R

REACH NUMBER: 11030013003 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: KS0043036 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.023	2.30E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 Pl					PLANT	
FLOW (MLD)	989.91	310.83	202.70	165.67	NA	
CONCENTRATION (µg/L)	2.32E-02	7.40E-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}	7.00E-09	mg/kg/day	0.00 mg/kg/day				
LADC _{pot}	5.39E-07	mg/L	0.00	mg/kg			
Acute							
ADR _{pot}	2.80E-06	mg/kg/day	0.00	mg/kg/day			

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 12 RELEASE ACTIVITY: Globe 20 dy

FACILITY NAME: WICHITA CITY OF STP FACILITY LOCATION: WICHITA KS 67202 RECEIVING STREAM NAME: ARKANSAS R

REACH NUMBER: 11030013003 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: KS0043036 GAGING STATION ID: 07144550

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 10/01/68 - 09/29/89 NUMBER OF REACH: 1

OBSERVATIONS: 7670.00

50 %ile FLOW (MLD): 1259.68 10 %ile FLOW (MLD): 472.07 EFFLUENT FLOW

(MLD):144.69

RESULTS							
COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)		
3.00	0	0	20.00	2.30E-02	0.00		
788.00	0	0	20.00	2.30E-02	0.00		
920.00	0	0	20.00	2.30E-02	0.00		
1.44E+04	0	0	20.00	2.30E-02	0.00		

Chemical ID: TCE-2

Assessor:

ENVIRONMENTAL RELEASES						
Scenario#:9		Number of Release Site	s: 1.			
Release Activity:	Gayston 20 dy					
Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE		
Total Releases:	0.16	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:	8.00E-03	N/A/0.00	N/A	N/A		
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)		

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:9 RELEASE ACTIVITY: Gayston 20 dy

FACILITY NAME: DAYTON CITY OF

FACILITY LOCATION: DAYTON OH 45418

RECEIVING WATER NAME: GREAT MIAMI R

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

NPDES PERMIT #: OH0024881 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.008	8.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PI					PLANT	
FLOW (MLD)	2284.23	789.03	531.69	431.64	NA	
CONCENTRATION (µg/L)	3.50E-03	1.01E-02	1.50E-02	1.85E-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}	1.06E-09	mg/kg/day	0.00 mg/kg/day				
LADC _{pot}	8.12E-08 mg/L 0.00 mg			mg/kg			
Acute							
ADR _{pot}	3.84E-07	mg/kg/day	0.00	mg/kg/day			

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 9 RELEASE ACTIVITY: Gayston 20 dy

FACILITY NAME: DAYTON CITY OF

FACILITY LOCATION: DAYTON OH 45418

RECEIVING STREAM NAME: GREAT MIAMI R

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

NPDES PERMIT NUMBER: OH0024881 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

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

(MLD):272.52

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 (%)		
3.00	0	0	20.00	8.00E-03	0.00		
788.00	0	0	20.00	8.00E-03	0.00		
920.00	0	0	20.00	8.00E-03	0.00		
1.44E+04	0	0	20.00	8.00E-03	0.00		

Chemical ID: TCE-2

Assessor:

Scenario#:10 Number of Release Sites: 1.

Release Activity: Gayston 260 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	0.17	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A	
6.43E-04	N/A/0.00	N/A	N/A	
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)	

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:10 RELEASE ACTIVITY: Gayston 260 dy

FACILITY NAME: DAYTON CITY OF

FACILITY LOCATION: DAYTON OH 45418

RECEIVING WATER NAME: GREAT MIAMI R

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

NPDES PERMIT #: OH0024881 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.00064	6.43E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	2284.23	789.03	531.69	431.64	NA
CONCENTRATION (µg/L)	2.81E-04	8.15E-04	1.21E-03	1.49E-03	NA

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES						
Exposure Units	Drinking Water Posure Units Drinking Water Posure Units Drinking Water U					
Cancer						
LADD _{pot}	1.10E-09 mg/kg/day 0.00 mg/kg/day			mg/kg/day		
LADC _{pot}	8.48E-08	mg/L	0.00	mg/kg		
Acute						
ADR _{pot}	3.09E-08 mg/kg/day 0.00 mg/kg/day					

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 10 RELEASE ACTIVITY: Gayston 260 dy

FACILITY NAME: DAYTON CITY OF

FACILITY LOCATION: DAYTON OH 45418

RECEIVING STREAM NAME: GREAT MIAMI R

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

NPDES PERMIT NUMBER: OH0024881 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

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

(MLD):272.52

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 (%)		
3.00	0	0	260.00	6.43E-04	0.00		
788.00	0	0	260.00	6.43E-04	0.00		
920.00	0	0	260.00	6.43E-04	0.00		
1.44E+04	0	0	260.00	6.43E-04	0.00		

Chemical ID: TCE-2

Assessor:

Scenario#:11 Number of Release Sites: 1.

Release Activity: Styrolution 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	0.16	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr: Per Site Release:

20.00	0.00/0.00	N/A	N/A
8.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:11 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: Yes DISCHARGE TYPE: Direct

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.	0.008	8.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	7537.30	4032.40	2877.81	2308.84	NA	
CONCENTRATION (µg/L)	1.06E-03	1.98E-03	2.78E-03	3.46E-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}	3.20E-10	3.20E-10 mg/kg/day		mg/kg/day			
LADC _{pot}	2.46E-08	2.46E-08 mg/L		mg/kg			
Acute							
ADR _{pot}	7.51E-08	mg/kg/day					

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 11 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 GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: 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 (%)		
3.00	0	0	20.00	8.00E-03	0.00		
788.00	0	0	20.00	8.00E-03	0.00		
920.00	0	0	20.00	8.00E-03	0.00		
1.44E+04	0	0	20.00	8.00E-03	0.00		

Chemical ID: TCE-2

Assessor:

Scenario#:12 Number of Release Sites: 1.

Release Activity: Styrolution 260 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	es: 0.17 N/.		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:
 6.37E-04
 N/A/0.00
 N/A
 N/A

(kg/site/day) (kg/site/day) (kg/site/day) (kg/site/day)

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:12 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: Yes DISCHARGE TYPE: Direct

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.	0.00064	6.37E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	7537.30	4032.40	2877.81	2308.84	NA	
CONCENTRATION (µg/L)	8.45E-05	1.58E-04	2.21E-04	2.76E-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}	3.31E-10 mg/kg/day 0.00 mg/kg/day					
LADC _{pot}	2.55E-08	mg/L	0.00	mg/kg		
Acute						
ADR _{pot}	5.98E-09 mg/kg/day 0.00 mg/kg/day					

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 12 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 GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: 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 (%)		
3.00	0	0	260.00	6.37E-04	0.00		
788.00	0	0	260.00	6.37E-04	0.00		
920.00	0	0	260.00	6.37E-04	0.00		
1.44E+04	0	0	260.00	6.37E-04	0.00		

Chemical ID: TCE-2

Assessor:

Scenario#:13 Number of Release Sites: 1.

Release Activity: Remington 20 dy

Release Description:	WATER	ATER LANDFILL		FUGITIVE
	Non-sludge/Sludge			
Total Releases:	Total Releases: 0.16		N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
8.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:13 RELEASE ACTIVITY: Remington 20 dy

FACILITY NAME: REMINGTON ARMS CO INC

FACILITY LOCATION: ILION NY 13357

RECEIVING WATER NAME: MOHAWK R

REACH NUMBER: 02020004079 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: NY0005282 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.008	8.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	2103.87	1123.21	766.34	620.55	NA	
CONCENTRATION (µg/L)	3.80E-03	7.12E-03	1.04E-02	1.29E-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}	1.15E-09	mg/kg/day	0.00	mg/kg/day		
LADC _{pot}	8.82E-08 mg/L 0.00 mg/kg					
Acute						
ADR _{pot} $2.70\text{E-}07 \text{ mg/kg/day}$ 0.00 mg/kg/day						

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 13 RELEASE ACTIVITY: Remington 20 dy

FACILITY NAME: REMINGTON ARMS CO INC

FACILITY LOCATION: ILION NY 13357 RECEIVING STREAM NAME: MOHAWK R

REACH NUMBER: 02020004079 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NY0005282 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 3288.20 7q10 FLOW (MLD): 766.34 EFFLUENT FLOW

(MLD):1.52

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 (%)
3.00	0	0	20.00	8.00E-03	0.00
788.00	0	0	20.00	8.00E-03	0.00
920.00	0	0	20.00	8.00E-03	0.00
1.44E+04	0	0	20.00	8.00E-03	0.00

Chemical ID: TCE-2

Assessor:

ENTER ON THE PERSON	DEL EL CEC
ENVIRONMENTAL	RELEASES

Scenario#:14 Number of Release Sites: 1.

Release Activity: Remington 260 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	0.16	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A	
6.12E-04	6.12E-04 N/A/0.00		N/A	
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)	

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:14 RELEASE ACTIVITY: Remington 260 dy

FACILITY NAME: REMINGTON ARMS CO INC

FACILITY LOCATION: ILION NY 13357

RECEIVING WATER NAME: MOHAWK R

REACH NUMBER: 02020004079 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: NY0005282 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.00061	6.12E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT					PLANT	
FLOW (MLD)	2103.87	1123.21	766.34	620.55	NA	
CONCENTRATION (µg/L)	2.91E-04	5.45E-04	7.99E-04	9.86E-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}	1.14E-09	mg/kg/day	0.00	mg/kg/day		
LADC _{pot}	8.77E-08 mg/L 0.00 mg/kg			mg/kg		
Acute						
ADR _{pot}	2.06E-08	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 14 RELEASE ACTIVITY: Remington 260 dy

FACILITY NAME: REMINGTON ARMS CO INC

FACILITY LOCATION: ILION NY 13357 RECEIVING STREAM NAME: MOHAWK R

REACH NUMBER: 02020004079 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NY0005282 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 3288.20 7q10 FLOW (MLD): 766.34 EFFLUENT FLOW

(MLD):1.52

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 (%)	
3.00	0	0	260.00	6.12E-04	0.00	
788.00	0	0	260.00	6.12E-04	0.00	
920.00	0	0	260.00	6.12E-04	0.00	
1.44E+04	0	0	260.00	6.12E-04	0.00	

Chemical ID: TCE-2

Assessor:

Scenario#:17 Number of Release Sites: 1.

Release Activity: United 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	0.12	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr: Per Site Release:

20.00	0.00/0.00	N/A	N/A
6.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:17 RELEASE ACTIVITY: United 20 dy

FACILITY NAME: UNITED TECHNOLOGIES PRATT &

FACILITY LOCATION: EAST HARTFORD CT 06108

RECEIVING WATER NAME: CONNECTICUT R

REACH NUMBER: 01080205024 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: CT0001376 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.006	6.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	2.20E+04	7984.60	5837.07	4659.90	NA	
CONCENTRATION (μg/L) 2.73E-04 7.51E-04 1.03E-03 1.29E-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}	9 _{pot} 8.22E-11 mg/kg/day 0.00 mg/kg/day					
LADC _{pot}	6.33E-09 mg/L 0.00 mg/kg					
Acute						
ADR _{pot} 2.85E-08 mg/kg/day 0.00 mg/kg/day						

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 17 RELEASE ACTIVITY: United 20 dy

FACILITY NAME: UNITED TECHNOLOGIES PRATT &

FACILITY LOCATION: EAST HARTFORD CT 06108

RECEIVING STREAM NAME: CONNECTICUT R

REACH NUMBER: 01080205024 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: CT0001376 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 4.39E+04 7q10 FLOW (MLD): 5837.07 EFFLUENT FLOW

(MLD):219.14

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 (%)	
3.00	0	0	20.00	6.00E-03	0.00	
788.00	0	0	20.00	6.00E-03	0.00	
920.00	0	0	20.00	6.00E-03	0.00	
1.44E+04	0	0	20.00	6.00E-03	0.00	

Chemical ID: TCE-2

Assessor:

Scenario#:18 Number of Release Sites: 1.

Release Activity: United 260 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	0.12	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.	00	0.00/0.00	N/A	N/A	
4.80E	-04	N/A/0.00	N/A	N/A	
(kg/site	/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)	

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:18 RELEASE ACTIVITY: United 260 dy

FACILITY NAME: UNITED TECHNOLOGIES PRATT &

FACILITY LOCATION: EAST HARTFORD CT 06108

RECEIVING WATER NAME: CONNECTICUT R

REACH NUMBER: 01080205024 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: CT0001376 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.00048	4.80E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER							
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT							
FLOW (MLD)	2.20E+04	7984.60	5837.07	4659.90	NA		
CONCENTRATION (μg/L) 2.18E-05 6.01E-05 8.22E-05 1.03E-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}	8.55E-11 mg/kg/day 0.00 mg/kg/day					
LADC _{pot}	6.58E-09 mg/L 0.00 mg/kg			mg/kg		
Acute						
ADR _{pot}	2.28E-09	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 18 RELEASE ACTIVITY: United 260 dy

FACILITY NAME: UNITED TECHNOLOGIES PRATT &

FACILITY LOCATION: EAST HARTFORD CT 06108

RECEIVING STREAM NAME: CONNECTICUT R

REACH NUMBER: 01080205024 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: CT0001376 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 4.39E+04 7q10 FLOW (MLD): 5837.07 EFFLUENT FLOW

(MLD):219.14

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 (%)	
3.00	0	0	260.00	4.80E-04	0.00	
788.00	0	0	260.00	4.80E-04	0.00	
920.00	0	0	260.00	4.80E-04	0.00	
1.44E+04	0	0	260.00	4.80E-04	0.00	

Chemical ID: TCE-2

Assessor:

Scenario#:19 Number of Release Sites: 1.

Release Activity: ATK 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	0.12	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
6.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:19 RELEASE ACTIVITY: ATK 20 dy

FACILITY NAME: ATK TACTICAL SYSTEMS CO. LLC

FACILITY LOCATION: ROCKET CENTER WV 26726

RECEIVING WATER NAME: POTOMAC R N BR

REACH NUMBER: 02070002018 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: WV0020371 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.006	6.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT					PLANT	
FLOW (MLD)	747.42	248.73	160.93	131.75	NA	
CONCENTRATION (µg/L)	8.03E-03	2.41E-02	3.73E-02	4.55E-02	NA	

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES						
Exposure Units	Drinking Water Results	Drinking Water Units	Fish Ingestion Results	Fish Ingestion Units		
Cancer						
LADD _{pot}	2.42E-09 mg/kg/day 0.00 mg/kg/day					
LADC _{pot}	1.86E-07 mg/L 0.00 mg/kg			mg/kg		
Acute						
ADR _{pot}	9.14E-07	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 19 RELEASE ACTIVITY: ATK 20 dy

FACILITY NAME: ATK TACTICAL SYSTEMS CO. LLC FACILITY LOCATION: ROCKET CENTER WV 26726

RECEIVING STREAM NAME: POTOMAC R N BR

REACH NUMBER: 02070002018 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: WV0020371 GAGING STATION ID: 01600000

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/66 - 05/21/89 NUMBER OF REACH: 1

OBSERVATIONS: 7406.00

(MLD):0.18

	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 (%)			
3.00	0	0	20.00	6.00E-03	0.00			
788.00	0	0	20.00	6.00E-03	0.00			
920.00	0	0	20.00	6.00E-03	0.00			
1.44E+04	0	0	20.00	6.00E-03	0.00			

Chemical ID: TCE-2

Assessor:

Scenario#:20 Number of Release Sites: 1.

Release Activity: ATK 260 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE	
		Non-sludge/Sludge			
Total Releases:	0.12	N/A	N/A	N/A	
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)	

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A
4.70E-04	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:20 RELEASE ACTIVITY: ATK 260 dy

FACILITY NAME: ATK TACTICAL SYSTEMS CO. LLC

FACILITY LOCATION: ROCKET CENTER WV 26726

RECEIVING WATER NAME: POTOMAC R N BR

REACH NUMBER: 02070002018 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: WV0020371 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.00047	4.70E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD) 747.42 248.73 160.93 131.75 NA						
CONCENTRATION (μg/L) 6.29E-04 1.89E-03 2.92E-03 3.57E-03 NA						

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES							
Exposure Units	Drinking Water Results	Drinking Water Units	Fish Ingestion Results	Fish Ingestion Units			
Cancer							
LADD _{pot}	2.46E-09 mg/kg/day 0.00 mg/kg/day						
LADC _{pot}	1.90E-07 mg/L 0.00 mg/kg						
Acute							
ADR _{pot}	7.16E-08	7.16E-08 mg/kg/day 0.00 mg/kg/day					

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 20 RELEASE ACTIVITY: ATK 260 dy

FACILITY NAME: ATK TACTICAL SYSTEMS CO. LLC FACILITY LOCATION: ROCKET CENTER WV 26726

RECEIVING STREAM NAME: POTOMAC R N BR

REACH NUMBER: 02070002018 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: WV0020371 GAGING STATION ID: 01600000

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/66 - 05/21/89 NUMBER OF REACH: 1

OBSERVATIONS: 7406.00

(MLD):0.18

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 (%)	
3.00	0	0	260.00	4.70E-04	0.00	
788.00	0	0	260.00	4.70E-04	0.00	
920.00	0	0	260.00	4.70E-04	0.00	
1.44E+04	0	0	260.00	4.70E-04	0.00	

Chemical ID: TCE-2

Assessor:

Scenario#:25 Number of Release Sites: 1.

Release Activity: Sperry 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	8.00E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr: Per Site Release:

20.00	0.00/0.00	N/A	N/A
4.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:25 RELEASE ACTIVITY: Sperry 20 dy

FACILITY NAME: SPERRY RUBBER AND PLASTICS CO.

FACILITY LOCATION: BROOKVILLE IN 47012

RECEIVING WATER NAME: WHITEWATER R E FK

REACH NUMBER: 05080003006 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: IN0001473 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.004	4.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD) 280.34 92.23 57.63 47.52 NA						
CONCENTRATION (μg/L) 1.43E-02 4.34E-02 6.94E-02 8.42E-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}	4.30E-09	mg/kg/day	0.00	mg/kg/day		
LADC _{pot}	3.31E-07 mg/L 0.00 mg/kg					
Acute						
ADR _{pot}	1.64E-06	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 25 RELEASE ACTIVITY: Sperry 20 dy

FACILITY NAME: SPERRY RUBBER AND PLASTICS CO.

FACILITY LOCATION: BROOKVILLE IN 47012

RECEIVING STREAM NAME: WHITEWATER R E FK

REACH NUMBER: 05080003006 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: IN0001473 GAGING STATION ID: 03276000

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/66 - 01/30/91 NUMBER OF REACH: 1

OBSERVATIONS: 9146.00

50 %ile FLOW (MLD): 489.20 10 %ile FLOW (MLD): 102.73 EFFLUENT FLOW

(MLD):0.25

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 (%)		
3.00	0	0	20.00	4.00E-03	0.00		
788.00	0	0	20.00	4.00E-03	0.00		
920.00	0	0	20.00	4.00E-03	0.00		
1.44E+04	0	0	20.00	4.00E-03	0.00		

Chemical ID: TCE-2

Assessor:

Scenario#:26 Number of Release Sites: 1.

Release Activity: Sperry 260 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	8.53E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A
3.28E-04	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:26 RELEASE ACTIVITY: Sperry 260 dy

FACILITY NAME: SPERRY RUBBER AND PLASTICS CO.

FACILITY LOCATION: BROOKVILLE IN 47012

RECEIVING WATER NAME: WHITEWATER R E FK

REACH NUMBER: 05080003006 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: IN0001473 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.00033	3.28E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER							
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT							
FLOW (MLD)	280.34	92.23	57.63	47.52	NA		
CONCENTRATION (µg/L)	CONCENTRATION (μg/L) 1.17E-03 3.56E-03 5.69E-03 6.90E-03 NA						

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES							
Exposure Units	Drinking Water Results Drinking Water Units Fish Ingestion Results Units Units						
Cancer							
LADD _{pot}	4.58E-09	4.58E-09 mg/kg/day 0.00 mg/kg					
LADC _{pot}	3.53E-07 mg/L		0.00	mg/kg			
Acute							
ADR _{pot}	1.35E-07	1.35E-07 mg/kg/day 0.00 mg/kg/day					

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 26 RELEASE ACTIVITY: Sperry 260 dy

FACILITY NAME: SPERRY RUBBER AND PLASTICS CO.

FACILITY LOCATION: BROOKVILLE IN 47012

RECEIVING STREAM NAME: WHITEWATER R E FK

REACH NUMBER: 05080003006 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: IN0001473 GAGING STATION ID: 03276000

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/66 - 01/30/91 NUMBER OF REACH: 1

OBSERVATIONS: 9146.00

50 %ile FLOW (MLD): 489.20 10 %ile FLOW (MLD): 102.73 EFFLUENT FLOW

(MLD):0.25

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 (%)		
3.00	0	0	260.00	3.28E-04	0.00		
788.00	0	0	260.00	3.28E-04	0.00		
920.00	0	0	260.00	3.28E-04	0.00		
1.44E+04	0	0	260.00	3.28E-04	0.00		

Chemical ID: TCE-2

Assessor:

Scenario#:27

Number of Release Sites: 1.

Release Activity:

Owt 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	8.00E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
4.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:27 RELEASE ACTIVITY: Owt 20 dy

FACILITY NAME: OWT INDUSTRIES INC FACILITY LOCATION: PICKENS SC 29671

RECEIVING WATER NAME: TWELVEMILE CR

REACH NUMBER: 03060101029 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: SC0026492 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.004	4.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	382.94	228.18	147.19	120.57	NA	
CONCENTRATION (μg/L) 1.04E-02 1.75E-02 2.72E-02 3.32E-02 N						

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}	3.15E-09 mg/kg/day 0.00 mg/kg/day			mg/kg/day		
LADC _{pot}	2.42E-07 mg/L 0.00 mg/kg			mg/kg		
Acute						
ADR _{pot}	6.64E-07	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 27 RELEASE ACTIVITY: Owt 20 dy

FACILITY NAME: OWT INDUSTRIES INC FACILITY LOCATION: PICKENS SC 29671

RECEIVING STREAM NAME: TWELVEMILE CR

REACH NUMBER: 03060101029 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: SC0026492 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 615.07 7q10 FLOW (MLD): 147.19 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 (%)		
3.00	0	0	20.00	4.00E-03	0.00		
788.00	0	0	20.00	4.00E-03	0.00		
920.00	0	0	20.00	4.00E-03	0.00		
1.44E+04	0	0	20.00	4.00E-03	0.00		

Chemical ID: TCE-2

Assessor:

Scenario#:28 Number of Release Sites: 1.

Release Activity: Owt 260 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	8.16E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A
3.14E-04	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:28 RELEASE ACTIVITY: Owt 260 dy

FACILITY NAME: OWT INDUSTRIES INC FACILITY LOCATION: PICKENS SC 29671

RECEIVING WATER NAME: TWELVEMILE CR

REACH NUMBER: 03060101029 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: SC0026492 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.00031	3.14E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	382.94	228.18	147.19	120.57	NA	
CONCENTRATION (µg/L)	8.20E-04	1.38E-03	2.13E-03	2.60E-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}	3.21E-09 mg/kg/day 0.00 mg/kg/day					
LADC _{pot}	2.47E-07 mg/L 0.00 mg/kg			mg/kg		
Acute						
ADR _{pot} 5.21E-08 mg/kg/day 0.00 mg/kg/day						

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 28 RELEASE ACTIVITY: Owt 260 dy

FACILITY NAME: OWT INDUSTRIES INC FACILITY LOCATION: PICKENS SC 29671

RECEIVING STREAM NAME: TWELVEMILE CR

REACH NUMBER: 03060101029 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: SC0026492 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 615.07 7q10 FLOW (MLD): 147.19 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 (%)			
3.00	0	0	260.00	3.14E-04	0.00			
788.00	0	0	260.00	3.14E-04	0.00			
920.00	0	0	260.00	3.14E-04	0.00			
1.44E+04	0	0	260.00	3.14E-04	0.00			

Chemical ID: TCE-2

Assessor:

Scenario#:31 Number of Release Sites: 1.

Release Activity: Boler 20 dy

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

20.00	0.00/0.00	N/A	N/A
3.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:31 RELEASE ACTIVITY: Boler 20 dy

FACILITY NAME: HILLSDALE WWTP

FACILITY LOCATION: HILLSDALE MI 49242

RECEIVING WATER NAME: ST JOSEPH R

REACH NUMBER: 04050001043 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: MI0022136 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.003	3.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	58.41	22.18	13.18	10.98	NA
CONCENTRATION (µg/L)	5.14E-02	0.14	0.23	0.27	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}	1.55E-08	mg/kg/day	0.00	mg/kg/day	
LADC _{pot}	1.19E-06 mg/L 0.00 mg/kg				
Acute					
ADR _{pot}	5.12E-06	mg/kg/day	0.00	mg/kg/day	

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 31 RELEASE ACTIVITY: Boler 20 dy

FACILITY NAME: HILLSDALE WWTP

FACILITY LOCATION: HILLSDALE MI 49242 RECEIVING STREAM NAME: ST JOSEPH R

REACH NUMBER: 04050001043 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: MI0022136 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 192.91 7q10 FLOW (MLD): 13.18 EFFLUENT FLOW

(MLD):5.79

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 (%)	
3.00	0	0	20.00	3.00E-03	0.00	
788.00	0	0	20.00	3.00E-03	0.00	
920.00	0	0	20.00	3.00E-03	0.00	
1.44E+04	0	0	20.00	3.00E-03	0.00	

Chemical ID: TCE-2

Assessor:

ENVIRONMENTAL	DELEVEES
ENVIKONMENTAL	KELEASES

Scenario#:32 Number of Release Sites: 1.

Release Activity: Boler 260 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE	
	Non-sludge/Sludge				
Total Releases:	6.99E-02	N/A	N/A	N/A	

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A
2.69E-04	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:32 RELEASE ACTIVITY: Boler 260 dy

FACILITY NAME: HILLSDALE WWTP

FACILITY LOCATION: HILLSDALE MI 49242

RECEIVING WATER NAME: ST JOSEPH R

REACH NUMBER: 04050001043 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: MI0022136 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.00027	2.69E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	58.41	22.18	13.18	10.98	NA	
CONCENTRATION (µg/L)	4.61E-03	1.21E-02	2.04E-02	2.45E-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}	1.80E-08	mg/kg/day	0.00	mg/kg/day	
LADC _{pot}	1.39E-06 mg/L 0.00 mg/kg				
Acute					
ADR _{pot}	4.59E-07	mg/kg/day	0.00	mg/kg/day	

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 32 RELEASE ACTIVITY: Boler 260 dy

FACILITY NAME: HILLSDALE WWTP

FACILITY LOCATION: HILLSDALE MI 49242 RECEIVING STREAM NAME: ST JOSEPH R

REACH NUMBER: 04050001043 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: MI0022136 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 192.91 7q10 FLOW (MLD): 13.18 EFFLUENT FLOW

(MLD):5.79

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 (%)	
3.00	0	0	260.00	2.69E-04	0.00	
788.00	0	0	260.00	2.69E-04	0.00	
920.00	0	0	260.00	2.69E-04	0.00	
1.44E+04	0	0	260.00	2.69E-04	0.00	

Chemical ID: TCE-2

Assessor:

Scenario#:33 Number of Release Sites: 1.

Release Activity: McCanna 20 dy

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

20.00	0.00/0.00	N/A	N/A
3.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:33 RELEASE ACTIVITY: McCanna 20 dy

FACILITY NAME: CARPENTERSVILLE STP

FACILITY LOCATION: CARPENTERSVILLE IL 60110

RECEIVING WATER NAME: FOX R

REACH NUMBER: 07120006001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: IL0027944 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.003	3.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	1029.38	445.34	294.11	239.76	NA	
CONCENTRATION (μg/L) 2.91E-03 6.74E-03 1.02E-02 1.25E-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}	8.78E-10	mg/kg/day	0.00	mg/kg/day		
LADC _{pot}	6.76E-08 mg/L 0.00 mg/kg					
Acute						
ADR _{pot}	2.55E-07	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 33 RELEASE ACTIVITY: McCanna 20 dy

FACILITY NAME: CARPENTERSVILLE STP

FACILITY LOCATION: CARPENTERSVILLE IL 60110

RECEIVING STREAM NAME: FOX R

REACH NUMBER: 07120006001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: IL0027944 GAGING STATION ID: 05550000

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/66 - 09/29/88 NUMBER OF REACH: 1

OBSERVATIONS: 8140.00

50 %ile FLOW (MLD): 1973.91 10 %ile FLOW (MLD): 733.79 EFFLUENT FLOW

(MLD):10.97

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 (%)		
3.00	0	0	20.00	3.00E-03	0.00		
788.00	0	0	20.00	3.00E-03	0.00		
920.00	0	0	20.00	3.00E-03	0.00		
1.44E+04	0	0	20.00	3.00E-03	0.00		

Chemical ID: TCE-2

Assessor:

Scenario#:34 Number of Release Sites: 1.

Release Activity: McCanna 260 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	6.97E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A
2.68E-04	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:34 RELEASE ACTIVITY: McCanna 260 dy

FACILITY NAME: CARPENTERSVILLE STP

FACILITY LOCATION: CARPENTERSVILLE IL 60110

RECEIVING WATER NAME: FOX R

REACH NUMBER: 07120006001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: IL0027944 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.00027	2.68E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER							
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT							
FLOW (MLD)	1029.38	445.34	294.11	239.76	NA		
CONCENTRATION (μg/L) 2.60E-04 6.02E-04 9.11E-04 1.12E-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}	1.02E-09 mg/kg/day 0.00 mg/kg/day					
LADC _{pot}	7.85E-08	mg/L	0.00 mg/kg			
Acute						
ADR _{pot}	2.28E-08	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 34 RELEASE ACTIVITY: McCanna 260 dy

FACILITY NAME: CARPENTERSVILLE STP

FACILITY LOCATION: CARPENTERSVILLE IL 60110

RECEIVING STREAM NAME: FOX R

REACH NUMBER: 07120006001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: IL0027944 GAGING STATION ID: 05550000

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/66 - 09/29/88 NUMBER OF REACH: 1

OBSERVATIONS: 8140.00

(MLD):10.97

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 (%)		
3.00	0	0	260.00	2.68E-04	0.00		
788.00	0	0	260.00	2.68E-04	0.00		
920.00	0	0	260.00	2.68E-04	0.00		
1.44E+04	0	0	260.00	2.68E-04	0.00		

Chemical ID: TCE-2

Assessor:

Scenario#:35 Number of Release Sites: 1.

Release Activity: Cutler 20 dy

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

20.00	0.00/0.00	N/A	N/A
3.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:35 RELEASE ACTIVITY: Cutler 20 dy

FACILITY NAME: MOTOR COMPONENTS LLC

FACILITY LOCATION: ELMIRA HEIGHTS NY 14903

RECEIVING WATER NAME: NEWTON CR

REACH NUMBER: 02050105007 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: NY0004081 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.003	3.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	67.64	26.10	15.60	12.98	NA
CONCENTRATION (µg/L)	4.43E-02	0.11	0.19	0.23	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}	1.34E-08	mg/kg/day	0.00 mg/kg/day		
LADC _{pot}	1.03E-06	1.03E-06 mg/L 0.0			
Acute					
ADR _{pot}	4.35E-06	mg/kg/day	0.00	mg/kg/day	

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 35 RELEASE ACTIVITY: Cutler 20 dy

FACILITY NAME: MOTOR COMPONENTS LLC

FACILITY LOCATION: ELMIRA HEIGHTS NY 14903

RECEIVING STREAM NAME: NEWTON CR

REACH NUMBER: 02050105007 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NY0004081 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 216.14 7q10 FLOW (MLD): 15.60 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 (%)	
3.00	0	0	20.00	3.00E-03	0.00	
788.00	0	0	20.00	3.00E-03	0.00	
920.00	0	0	20.00	3.00E-03	0.00	
1.44E+04	0	0	20.00	3.00E-03	0.00	

Chemical ID: TCE-2

Assessor:

ENVIRONMENTAL	DELEVEE
ENVIKONWENTAL	KELEASES

Scenario#:36 Number of Release Sites: 1.

Release Activity: Cutler 260 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	6.19E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr: Per Site Release:

260.00	0.00/0.00	N/A	N/A
2.38E-04	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:36 RELEASE ACTIVITY: Cutler 260 dy

FACILITY NAME: MOTOR COMPONENTS LLC

FACILITY LOCATION: ELMIRA HEIGHTS NY 14903

RECEIVING WATER NAME: NEWTON CR

REACH NUMBER: 02050105007 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: NY0004081 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.00024	2.38E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	67.64	26.10	15.60	12.98	NA
CONCENTRATION (µg/L)	3.52E-03	9.12E-03	1.53E-02	1.83E-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}	1.38E-08	1.38E-08 mg/kg/day			
LADC _{pot}	1.06E-06 mg/L 0.00 mg/kg			mg/kg	
Acute					
ADR _{pot}	3.45E-07	mg/kg/day	0.00	mg/kg/day	

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 36 RELEASE ACTIVITY: Cutler 260 dy

FACILITY NAME: MOTOR COMPONENTS LLC

FACILITY LOCATION: ELMIRA HEIGHTS NY 14903

RECEIVING STREAM NAME: NEWTON CR

REACH NUMBER: 02050105007 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NY0004081 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 216.14 7q10 FLOW (MLD): 15.60 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 (%)				
3.00	0	0	260.00	2.38E-04	0.00				
788.00	0	0	260.00	2.38E-04	0.00				
920.00	0	0	260.00	2.38E-04	0.00				
1.44E+04	0	0	260.00	2.38E-04	0.00				

Chemical ID: TCE-0%

Assessor:

Scenario#:7 Number of Release Sites: 1.

Release Activity: USAF NE 260 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	4.13E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A
1.59E-04	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0%

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

SCENARIO #: 7

Number of Sites: 1

RELEASE ACTIVITY:USAF NE

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.	0.00016	1.59E-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	3.28E-04	7.71E-04	1.20E-03	1.46E-03	
ALL	10	43.45	15.35	9.00	7.91	3.66E-03	1.04E-02	1.77E-02	2.01E-02	

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES							
Exposure Units	Drinking Water Results		Drinking Water Units	Fish Ingestion Results		Fish Ingestion Units	
	50%	10%		50%	10%		
Cancer							
$LADD_{pot}$	1.28E-09	1.43E-08	mg/kg/day	0.00	0.00	mg/kg/day	
LADC _{pot}	9.87E-08	1.10E-06	mg/L	0.00	0.00	mg/kg	
Acute							
ADR _{pot}	2.92E-08	3.92E-07	mg/kg/day	0.00	0.00	mg/kg/day	

SIC Code Comments:

Chemical ID: TCE-0%

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 7 RELEASE ACTIVITY: USAF NE 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		
3.00	1	5	260.00	1.59E-04	0.00	High		
788.00	0	0	260.00	1.59E-04	0.00	High		
920.00	0	0	260.00	1.59E-04	0.00	High		
1.44E+04	0	0	260.00	1.59E-04	0.00	High		

Chemical ID: TCE-0%

Assessor:

Scenario#:8 Number of Release Sites: 1.

Release Activity: USAF NE 20 dy

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

20.00	0.00/0.00	N/A	N/A	
2.00E-03	N/A/0.00	N/A	N/A	
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)	

Chemical ID: TCE-0%

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

SCENARIO #: 8 Number of Sites: 1 RELEASE ACTIVITY:USAF NE

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.	0.002	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	485.40	206.33	132.62	108.72	4.12E-03	9.69E-03	1.51E-02	1.84E-02
ALL	10	43.45	15.35	9.00	7.91	4.60E-02	0.13	0.22	0.25

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES								
Exposure Units	Drinking Water Results		Drinking Water Results		Drinking Water Units	Fish Ingest	ion Results	Fish Ingestion Units
	50%	10%		50%	10%			
	Cancer							
$LADD_{pot}$	1.24E-09	1.39E-08	mg/kg/day	0.00	0.00	mg/kg/day		
LADC _{pot}	9.55E-08	1.07E-06	mg/L	0.00	0.00	mg/kg		
	Acute							
ADR _{pot}	3.67E-07	4.93E-06	mg/kg/day	0.00	0.00	mg/kg/day		

SIC Code Comments:

Chemical ID: TCE-0%

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 8 RELEASE ACTIVITY: USAF NE 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			
3.00	0	2	20.00	2.00E-03	0.00	High			
788.00	0	0	20.00	2.00E-03	0.00	High			
920.00	0	0	20.00	2.00E-03	0.00	High			
1.44E+04	0	0	20.00	2.00E-03	0.00	High			

Chemical ID: TCE-2

Assessor:

Scenario#:39 Number of Release Sites: 1.

Release Activity: Troxel 20 dy

Release Description: WATER		LANDFILL	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: Per Site Release:

20.00	0.00/0.00	N/A	N/A
2.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:39 RELEASE ACTIVITY: Troxel 20 dy

FACILITY NAME: TROXEL COMPANY

FACILITY LOCATION: MOSCOW TN 38057

RECEIVING WATER NAME: WOLF R

REACH NUMBER: 08010210009 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: TN0000451 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.002	2.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER							
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT		
FLOW (MLD)	528.09	278.30	180.78	147.88	NA		
CONCENTRATION (µg/L)	3.79E-03	7.19E-03	1.11E-02	1.35E-02	NA		

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES							
Exposure Units	Drinking Water Results	Drinking Water Units	Fish Ingestion Results	Fish Ingestion Units			
Cancer							
LADD _{pot}	1.14E-09	mg/kg/day	0.00 mg/kg/day				
LADC _{pot}	8.78E-08	mg/L	0.00	mg/kg			
Acute							
ADR _{pot}	2.72E-07	mg/kg/day	0.00	mg/kg/day			

Surface Water Comments:

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 39 RELEASE ACTIVITY: Troxel 20 dy

FACILITY NAME: TROXEL COMPANY

FACILITY LOCATION: MOSCOW TN 38057

RECEIVING STREAM NAME: WOLF R

REACH NUMBER: 08010210009 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: TN0000451 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 954.64 7q10 FLOW (MLD): 180.78 EFFLUENT FLOW

(MLD):1.33

	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 (%)			
3.00	0	0	20.00	2.00E-03	0.00			
788.00	0	0	20.00	2.00E-03	0.00			
920.00	0	0	20.00	2.00E-03	0.00			
1.44E+04	0	0	20.00	2.00E-03	0.00			

Chemical ID: TCE-2

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:40 Number of Release Sites: 1.

Release Activity: Troxel 260 dy

Release Description: WATER		LANDFILL	STACK	FUGITIVE
Total Releases:	3.48E-02	N/A	N/A	N/A
	01.02 02	1,712	1 1/11	1 1/1 1

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A
1.34E-04	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:40 RELEASE ACTIVITY: Troxel 260 dy

FACILITY NAME: TROXEL COMPANY

FACILITY LOCATION: MOSCOW TN 38057

RECEIVING WATER NAME: WOLF R

REACH NUMBER: 08010210009 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: TN0000451 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.00013	1.34E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER								
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT			
FLOW (MLD)	528.09	278.30	180.78	147.88	NA			
CONCENTRATION (µg/L)	2.54E-04	4.81E-04	7.41E-04	9.06E-04	NA			

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES							
Exposure Units	Drinking Water Results	Fish Ingestion Units					
Cancer							
LADD _{pot}	9.94E-10	mg/kg/day	0.00 mg/kg/day				
LADC _{pot}	7.65E-08 mg/L		0.00	mg/kg			
Acute							
ADR _{pot}	1.82E-08	mg/kg/day	0.00	mg/kg/day			

Surface Water Comments:

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 40 RELEASE ACTIVITY: Troxel 260 dy

FACILITY NAME: TROXEL COMPANY

FACILITY LOCATION: MOSCOW TN 38057

RECEIVING STREAM NAME: WOLF R

REACH NUMBER: 08010210009 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: TN0000451 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 954.64 7q10 FLOW (MLD): 180.78 EFFLUENT FLOW

(MLD):1.33

	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 (%)					
3.00	0	0	260.00	1.34E-04	0.00					
788.00	0	0	260.00	1.34E-04	0.00					
920.00	0	0	260.00	1.34E-04	0.00					
1.44E+04	0	0	260.00	1.34E-04	0.00					

Chemical ID: TCE-2

Assessor:

Scenario#:43 Number of Release Sites: 1.

Release Activity: Austin 20 dy

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

Non-sludge/Sludge

Release Days/yr: Per Site Release:

20.00	0.00/0.00	N/A	N/A
1.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-2

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

SCENARIO #: 43

Number of Sites: 1

RELEASE ACTIVITY: Austin 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							
$LADD_{pot}$	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:

Chemical ID: TCE-2

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 43 RELEASE ACTIVITY: Austin 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			
3.00	0	1	20.00	1.00E-03	0.00	High			
788.00	0	0	20.00	1.00E-03	0.00	High			
920.00	0	0	20.00	1.00E-03	0.00	High			
1.44E+04	0	0	20.00	1.00E-03	0.00	High			

Chemical ID: TCE-2

Assessor:

Scenario#:44 Number of Release Sites: 1.

Release Activity: Austin 260 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE	
	Non-sludge/Sludge				
Total Releases:	2.96E-02	N/A	N/A	N/A	
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)	

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

	260.00	0.00/0.00	N/A	N/A
Ī	1.14E-04	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-2

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

SCENARIO #: 44

Number of Sites: 1

RELEASE ACTIVITY: Austin 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.	0.00011	1.14E-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	2.35E-04	5.53E-04	8.60E-04	1.05E-03	
ALL	10	43.45	15.35	9.00	7.91	2.62E-03	7.43E-03	1.27E-02	1.44E-02	

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES							
Exposure Units	Drinking Water Results		Drinking Water Units	Fish Ingestion Results		Fish Ingestion Units	
	50%	10%		50%	10%		
Cancer							
$LADD_{pot}$	9.20E-10	1.03E-08	mg/kg/day	0.00	0.00	mg/kg/day	
LADC _{pot}	7.08E-08	7.91E-07	mg/L	0.00	0.00	mg/kg	
Acute							
ADR _{pot}	2.09E-08	2.81E-07	mg/kg/day	0.00	0.00	mg/kg/day	

SIC Code Comments:

Chemical ID: TCE-2

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 44 RELEASE ACTIVITY: Austin 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				
3.00	1	3	260.00	1.14E-04	0.00	High				
788.00	0	0	260.00	1.14E-04	0.00	High				
920.00	0	0	260.00	1.14E-04	0.00	High				
1.44E+04	0	0	260.00	1.14E-04	0.00	High				

Chemical ID: TCE-2

Assessor:

Scenario#:45 Number of Release Sites: 1.

Release Activity: LS Starrett 20 dy

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

20.00	0.00/0.00	N/A	N/A
1.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:45 RELEASE ACTIVITY: LS Starrett 20 dy

FACILITY NAME: L.S. STARRETT COMPANY

FACILITY LOCATION: ATHOL MA 01331 RECEIVING WATER NAME: MILLERS R

REACH NUMBER: 01080202009 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: MA0001350 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.001	1.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER							
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT		
FLOW (MLD)	300.45	106.36	66.79	55.02	NA		
CONCENTRATION (µg/L)	3.33E-03	9.40E-03	1.50E-02	1.82E-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-09 mg/kg/day 0.00 mg/kg/day				
LADC _{pot}	7.72E-08 mg/L 0.00 mg/kg				
Acute					
ADR _{pot}	3.56E-07 mg/kg/day 0.00 mg/kg/day				

Surface Water Comments:

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 45 RELEASE ACTIVITY: LS Starrett 20 dy

FACILITY NAME: L.S. STARRETT COMPANY

FACILITY LOCATION: ATHOL MA 01331 RECEIVING STREAM NAME: MILLERS R

REACH NUMBER: 01080202009 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: MA0001350 GAGING STATION ID: 01164000

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/66 - 10/30/90 NUMBER OF REACH: 1

OBSERVATIONS: 9063.00

(MLD):0.14

	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 (%)		
3.00	0	0	20.00	1.00E-03	0.00		
788.00	0	0	20.00	1.00E-03	0.00		
920.00	0	0	20.00	1.00E-03	0.00		
1.44E+04	0	0	20.00	1.00E-03	0.00		

Chemical ID: TCE-2

Assessor:

Scenario#:46 Number of Release Sites: 1.

Release Activity: LS Starrett 260 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	2.65E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A
1.02E-04	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:46 RELEASE ACTIVITY: LS Starrett 260 dy

FACILITY NAME: L.S. STARRETT COMPANY

FACILITY LOCATION: ATHOL MA 01331 RECEIVING WATER NAME: MILLERS R

REACH NUMBER: 01080202009 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: MA0001350 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	260.	0.0001	1.02E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	300.45	106.36	66.79	55.02	NA
CONCENTRATION (µg/L)	3.39E-04	9.59E-04	1.53E-03	1.85E-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}	1.33E-09 mg/kg/day 0.00 mg/kg/day					
LADC _{pot}	1.02E-07 mg/L 0.00 mg/kg					
Acute						
ADR_{pot}	3.63E-08 mg/kg/day 0.00 mg/kg/day					

Surface Water Comments:

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 46 RELEASE ACTIVITY: LS Starrett 260 dy

FACILITY NAME: L.S. STARRETT COMPANY

FACILITY LOCATION: ATHOL MA 01331 RECEIVING STREAM NAME: MILLERS R

REACH NUMBER: 01080202009 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: MA0001350 GAGING STATION ID: 01164000

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/66 - 10/30/90 NUMBER OF REACH: 1

OBSERVATIONS: 9063.00

(MLD):0.14

	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 (%)	
3.00	0	0	260.00	1.02E-04	0.00	
788.00	0	0	260.00	1.02E-04	0.00	
920.00	0	0	260.00	1.02E-04	0.00	
1.44E+04	0	0	260.00	1.02E-04	0.00	

Chemical ID: TCE-2

Assessor:

Scenario#:49 Number of Release Sites: 1.

Release Activity: Avx 20 dy

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

20.00	0.00/0.00	N/A	N/A
1.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-2

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

SCENARIO #: 49

Number of Sites: 1

RELEASE ACTIVITY: Avx 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 C	ONC. (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 Ingest	ion Results	Fish Ingestion Units		
	50%	10%		50%	10%			
		C	Cancer					
$LADD_{pot}$	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:

Chemical ID: TCE-2

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 49

RELEASE ACTIVITY: Avx 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					
3.00	0	1	20.00	1.00E-03	0.00	High					
788.00	0	0	20.00	1.00E-03	0.00	High					
920.00	0	0	20.00	1.00E-03	0.00	High					
1.44E+04	0	0	20.00	1.00E-03	0.00	High					

Chemical ID: TCE-2

Assessor:

Scenario#:50

Number of Release Sites: 1.

Release Activity: Avx 260 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	2.30E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

260.00	0.00/0.00	N/A	N/A
8.83E-05	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-2

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

SCENARIO #: 50

Number of Sites: 1

RELEASE ACTIVITY: Avx 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.	0.00009	8.83E-05	0.00	0.00

	AQUATIC EXPOSURE ESTIMATES - SURFACE WATER										
PLANT TYPE	% ILE FACILITY	` /				STREAM C	ONC. (µg/l)				
		Harmonic Mean	30Q5	7Q10	1Q10	Harmonic Mean 30Q5 7Q10 1Q10					
ALL	50	485.40	206.33	132.62	108.72	1.82E-04	4.28E-04	6.66E-04	8.12E-04		
ALL	10	43.45	15.35	9.00	7.91	2.03E-03	5.75E-03	9.81E-03	1.12E-02		

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES									
Exposure Units	Drinking Water Results		Drinking Water Units	Fish Ingest	ion Results	Fish Ingestion Units			
	50%	10%		50%	10%				
		C	Cancer						
$\mathrm{LADD}_{\mathrm{pot}}$	7.13E-10	7.96E-09	mg/kg/day	0.00	0.00	mg/kg/day			
LADC _{pot}	5.48E-08	6.12E-07	mg/L	0.00	0.00	mg/kg			
Acute									
ADR _{pot}	1.62E-08	2.18E-07	mg/kg/day	0.00	0.00	mg/kg/day			

SIC Code Comments:

Chemical ID: TCE-2

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 50 RELEASE ACTIVITY: Avx 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					
3.00	0	2	260.00	8.80E-05	0.00	High					
788.00	0	0	260.00	8.80E-05	0.00	High					
920.00	0	0	260.00	8.80E-05	0.00	High					
1.44E+04	0	0	260.00	8.80E-05	0.00	High					

SPOT CLEANING AND CARPET CLEANING

Chemical ID: TCE-2

Assessor:

ENVIRONMENTAL RELEASES									
Scenario#:47	Number of Release Sites: 1.								
Release Activity:	Boise 20 dy								
Release Description:	WATER	LANDFILL	STACK	FUGITIVE					
		Non-sludge/Sludge							
Total Releases:	2.00E-02	N/A	N/A	N/A					
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)					
		Non-sludge/Sludge							

Per Site Release:

Release Days/yr:

20.00	0.00/0.00	N/A	N/A
1.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:47 RELEASE ACTIVITY: Boise 20 dy

FACILITY NAME: BOISE CITY OF

FACILITY LOCATION: BOISE ID 83714
RECEIVING WATER NAME: BOISE R

REACH NUMBER: 17050114026 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: ID0023981 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.001	1.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10 1Q10		PLANT	
FLOW (MLD)	OW (MLD) 390.93		20.62	20.62	NA	
CONCENTRATION (µg/L) 2.56E-03		2.93E-02	4.85E-02	4.85E-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}	7.71E-10 mg/kg/day		0.00 mg/kg/day			
LADC _{pot}	5.93E-08 mg/L		0.00	mg/kg		
Acute						
ADR _{pot}	1.11E-06	mg/kg/day	0.00	mg/kg/day		

Surface Water Comments:

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 47 RELEASE ACTIVITY: Boise 20 dy

FACILITY NAME: BOISE CITY OF

FACILITY LOCATION: BOISE ID 83714
RECEIVING STREAM NAME: BOISE R

REACH NUMBER: 17050114026 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: ID0023981 GAGING STATION ID: 13205500

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/66 - 10/30/82 NUMBER OF REACH: 3

OBSERVATIONS: 6148.00

(MLD):20.62

RESULTS						
COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	· ·		Waste Water Treatment (%)	
3.00	0	0	20.00	1.00E-03	0.00	
788.00	0	0	20.00	1.00E-03	0.00	
920.00	0	0	20.00	1.00E-03	0.00	
1.44E+04	0	0	20.00	1.00E-03	0.00	

Chemical ID: TCE-2

Assessor:

EN	VIRONMENTAL RELEASES

Scenario#:48 Number of Release Sites: 1.

Release Activity: Boise 300 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE		
	Non-sludge/Sludge					
Total Releases:	2.40E-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:
 8.00E-05
 N/A/0.00
 N/A
 N/A

 (kg/site/day)
 (kg/site/day)
 (kg/site/day)
 (kg/site/day)

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:48 RELEASE ACTIVITY: Boise 300 dy

FACILITY NAME: BOISE CITY OF

FACILITY LOCATION: BOISE ID 83714 RECEIVING WATER NAME: BOISE R

REACH NUMBER: 17050114026 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: ID0023981 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	300.	0.00008	8.00E-05	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER							
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT		
FLOW (MLD)	390.93	34.18	20.62	20.62	NA		
CONCENTRATION (µg/L)	2.05E-04	2.34E-03	3.88E-03	3.88E-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}	9.25E-10	mg/kg/day	0.00	mg/kg/day			
LADC _{pot}	7.12E-08	mg/L	0.00	mg/kg			
Acute							
ADR _{pot}	8.87E-08	8.87E-08 mg/kg/day 0.00 mg/kg/day					

Surface Water Comments:

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 48 RELEASE ACTIVITY: Boise 300 dy

FACILITY NAME: BOISE CITY OF

FACILITY LOCATION: BOISE ID 83714 RECEIVING STREAM NAME: BOISE R

REACH NUMBER: 17050114026 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: ID0023981 GAGING STATION ID: 13205500

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/66 - 10/30/82 NUMBER OF REACH: 3

OBSERVATIONS: 6148.00

50 %ile FLOW (MLD): 1885.85 10 %ile FLOW (MLD): 278.84 EFFLUENT FLOW

(MLD):20.62

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 (%)		
3.00	0	0	300.00	8.00E-05	0.00		
788.00	0	0	300.00	8.00E-05	0.00		
920.00	0	0	300.00	8.00E-05	0.00		
1.44E+04	0	0	300.00	8.00E-05	0.00		

REPACKAGING

Chemical ID: TCE-81

Assessor:

Scenario#:19 Number of Release Sites: 1.

Release Activity: Hubbard 250 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE		
	Non-sludge/Sludge					
Total Releases:	277.50	N/A	N/A	N/A		

Non-sludge/Sludge

 Release Days/yr:
 250.00
 0.00/0.00
 N/A
 N/A

 Per Site Release:
 1.11
 N/A/0.00
 N/A
 N/A

(kg/site/day) (kg/site/day) (kg/site/day) (kg/site/day)

Chemical ID: TCE-81

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

SCENARIO #: 19 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)
81.00	250.	1.11	0.21	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	0.73	1.70	2.70	3.19
ALL	10	39.60	13.29	7.76	7.57	5.33	15.87	27.18	27.86

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							
$\mathrm{LADD}_{\mathrm{pot}}$	2.76E-06	2.01E-05	mg/kg/day	0.00	0.00	mg/kg/day	
LADC _{pot}	2.12E-04	1.54E-03	mg/L	0.00	0.00	mg/kg	
Acute							
ADR_{pot}	6.45E-05	6.01E-04	mg/kg/day	0.00	0.00	mg/kg/day	

SIC Code Comments:

Chemical ID: TCE-81

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 19 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			
3.00	53	194	250.00	1.11	81.00	High			
788.00	0	0	250.00	1.11	81.00	High			
920.00	0	0	250.00	1.11	81.00	High			
1.44E+04	0	0	250.00	1.11	81.00	High			

Chemical ID: TCE-81

Assessor:

Scenario#:20 Number of Release Sites: 1.

Release Activity: Hubbard 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
Total Releases:	277.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
13.85	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-81

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

SCENARIO #: 20

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)
81.00	20.	13.85	2.63	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	9.14	21.25	33.66	39.84	
ALL	10	39.60	13.29	7.76	7.57	66.45	198.01	339.11	347.62	

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							
$\mathrm{LADD}_{\mathrm{pot}}$	2.75E-06	2.00E-05	mg/kg/day	0.00	0.00	mg/kg/day	
LADC _{pot}	2.12E-04	1.54E-03	mg/L	0.00	0.00	mg/kg	
Acute							
ADR_{pot}	8.05E-04	7.50E-03	mg/kg/day	0.00	0.00	mg/kg/day	

SIC Code Comments:

Chemical ID: TCE-81

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 20 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		
3.00	5	20	20.00	13.85	81.00	High		
788.00	0	1	20.00	13.85	81.00	High		
920.00	0	1	20.00	13.85	81.00	High		
1.44E+04	0	0	20.00	13.85	81.00	High		

Chemical ID: TCE-0

Assessor:

Scenario#:11

Number of Release Sites: 1.

Release Activity:

Oiltanking 250 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE	
	Non-sludge/Sludge				
Total Releases:	0.75	N/A	N/A	N/A	
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)	

Non-sludge/Sludge

Release Days/yr: Per Site Release:

250.00	0.00/0.00	N/A	N/A
3.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:11 RELEASE ACTIVITY: Oiltanking 250 dy

FACILITY NAME: S.I. ENTERPRISES LLC

FACILITY LOCATION: HOUSTON TX 77015

RECEIVING WATER NAME: CARPENTERS BAYOU

REACH NUMBER: 12040104010 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: TX0065943 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	0.003	3.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER							
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT		
FLOW (MLD)	9.41	0.87	0.46	0.39	NA		
CONCENTRATION (µg/L)	0.32	3.46	6.52	7.65	NA		

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES						
Exposure Units	Drinking Water Results	Drinking Water Units	Fish Ingestion Results	Fish Ingestion Units		
Cancer						
LADD _{pot}	1.20E-06 mg/kg/day		0.00 mg/kg/day			
LADC _{pot}	9.24E-05 mg/L		0.00	mg/kg		
Acute						
ADR _{pot}	1.31E-04	mg/kg/day	0.00	mg/kg/day		

Surface Water Comments:

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 11 RELEASE ACTIVITY: Oiltanking 250 dy

FACILITY NAME: S.I. ENTERPRISES LLC FACILITY LOCATION: HOUSTON TX 77015

RECEIVING STREAM NAME: CARPENTERS BAYOU

REACH NUMBER: 12040104010 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: TX0065943 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 204.08 7q10 FLOW (MLD): 0.46 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 (%)		
3.00	1	2	250.00	3.00E-03	0.00		
788.00	0	0	250.00	3.00E-03	0.00		
920.00	0	0	250.00	3.00E-03	0.00		
1.44E+04	0	0	250.00	3.00E-03	0.00		

Chemical ID: TCE-0

Assessor:

Scenario#:12 Number of Release Sites: 1.

Release Activity: Oiltanking 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:
Per Site Release:

20.00	0.00/0.00	N/A	N/A	
4.10E-02	N/A/0.00	N/A	N/A	
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)	

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:12 RELEASE ACTIVITY: Oiltanking 20 dy

FACILITY NAME: S.I. ENTERPRISES LLC

FACILITY LOCATION: HOUSTON TX 77015

RECEIVING WATER NAME: CARPENTERS BAYOU

REACH NUMBER: 12040104010 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: TX0065943 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.041	4.10E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	9.41	0.87	0.46	0.39	NA	
CONCENTRATION (µg/L)	4.36	47.26	89.13	104.50	NA	

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES						
Exposure Units	Drinking Water Results Drinking Water Units Fish Ingestion Results Units Results Units					
Cancer						
LADD _{pot}	1.31E-06 mg/kg/day 0.00 mg/kg/day			mg/kg/day		
LADC _{pot}	1.01E-04	mg/L	0.00	mg/kg		
Acute						
ADR _{pot}	1.79E-03 mg/kg/day 0.00 mg/kg/day					

Surface Water Comments:

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 12 RELEASE ACTIVITY: Oiltanking 20 dy

FACILITY NAME: S.I. ENTERPRISES LLC FACILITY LOCATION: HOUSTON TX 77015

RECEIVING STREAM NAME: CARPENTERS BAYOU

REACH NUMBER: 12040104010 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: TX0065943 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 204.08 7q10 FLOW (MLD): 0.46 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 (%)			
3.00	1	4	20.00	4.10E-02	0.00			
788.00	0	0	20.00	4.10E-02	0.00			
920.00	0	0	20.00	4.10E-02	0.00			
1.44E+04	0	0	20.00	4.10E-02	0.00			

Chemical ID: TCE

Assessor:

ENVIRONMENTAL	RELEASES
	KLLLADLD

Scenario#:29

Number of Release Sites: 1.

Release Activity:

St. Gab 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	1.38	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr: Per Site Release:

20.00	0.00/0.00	N/A	N/A
6.90E-02	N/A/0.00	N/A	N/A
(kg/sita/day)	(kg/site/day)	(kg/sita/day)	(ka/cito/day)

(kg/site/day) (kg/site/day)

(kg/site/day)

(kg/site/day)

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:29 RELEASE ACTIVITY: St. Gab 20 dy

FACILITY NAME: SYNGENTA CROP PROTECTIONS INC

FACILITY LOCATION: ST. GABRIEL LA 70776

RECEIVING WATER NAME: MISSISSIPPI R

REACH NUMBER: 08070100007 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: LA0005487 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.069	6.90E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	8.12E+05	2.98E+05	2.47E+05	1.92E+05	NA	
CONCENTRATION (µg/L)	8.50E-05	2.32E-04	2.79E-04	3.59E-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}	2.56E-11 mg/kg/day 0.00 mg/kg/day				
LADC _{pot}	1.97E-09 mg/L 0.00 mg/kg			mg/kg	
Acute					
ADR_{pot}	8.78E-09 mg/kg/day 0.00 mg/kg/day				

Surface Water Comments:

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 29 RELEASE ACTIVITY: St. Gab 20 dy

FACILITY NAME: SYNGENTA CROP PROTECTIONS INC

FACILITY LOCATION: ST. GABRIEL LA 70776 RECEIVING STREAM NAME: MISSISSIPPI R

REACH NUMBER: 08070100007 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: LA0005487 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 1.14E+06 7q10 FLOW (MLD): 2.47E+05 EFFLUENT FLOW

(MLD):19.07

	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 (%)	
3.00	0	0	20.00	6.90E-02	0.00	
788.00	0	0	20.00	6.90E-02	0.00	
920.00	0	0	20.00	6.90E-02	0.00	
1.44E+04	0	0	20.00	6.90E-02	0.00	

Chemical ID: TCE

Assessor:

ENVIRONMENTAL	DELEVEE
ENVIKONWENTAL	KELEASES

Scenario#:30 Number of Release Sites: 1.

Release Activity: St. Gab 250 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	1.38	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)
		Non-sludge/Sludge		

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

250.00	0.00/0.00	N/A	N/A
5.50E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:30 RELEASE ACTIVITY: St. Gab 250 dy

FACILITY NAME: SYNGENTA CROP PROTECTIONS INC

FACILITY LOCATION: ST. GABRIEL LA 70776

RECEIVING WATER NAME: MISSISSIPPI R

REACH NUMBER: 08070100007 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: LA0005487 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	0.0055	5.50E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	8.12E+05	2.98E+05	2.47E+05	1.92E+05	NA	
CONCENTRATION (µg/L)	6.77E-06	1.85E-05	2.23E-05	2.86E-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}	2.55E-11 mg/kg/day 0.00 mg/kg/day				
LADC _{pot}	1.96E-09 mg/L 0.00 mg/kg			mg/kg	
Acute					
ADR _{pot}	7.00E-10 mg/kg/day 0.00 mg/kg/day				

Surface Water Comments:

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 30 RELEASE ACTIVITY: St. Gab 250 dy

FACILITY NAME: SYNGENTA CROP PROTECTIONS INC

FACILITY LOCATION: ST. GABRIEL LA 70776 RECEIVING STREAM NAME: MISSISSIPPI R

REACH NUMBER: 08070100007 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: LA0005487 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 1.14E+06 7q10 FLOW (MLD): 2.47E+05 EFFLUENT FLOW

(MLD):19.07

	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 (%)	
3.00	0	0	250.00	5.50E-03	0.00	
788.00	0	0	250.00	5.50E-03	0.00	
920.00	0	0	250.00	5.50E-03	0.00	
1.44E+04	0	0	250.00	5.50E-03	0.00	

Chemical ID: TCE

Assessor:

Scenario#:35 Number of Release Sites: 1.

Release Activity: Vopak 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE	
	Non-sludge/Sludge				
Total Releases:	1.16	N/A	N/A	N/A	
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)	

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
5.80E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:35 RELEASE ACTIVITY: Vopak 20 dy

FACILITY NAME: JEFFERSON PARISH-BRIDGE CITY

FACILITY LOCATION: BRIDGE CITY LA 70094

RECEIVING WATER NAME: MISSISSIPPI R

REACH NUMBER: 08090100004 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: LA0042064 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.058	5.80E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	8.13E+05	2.98E+05	2.47E+05	1.92E+05	NA	
CONCENTRATION (µg/L)	7.14E-05	1.95E-04	2.35E-04	3.02E-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}	2.15E-11 mg/kg/day 0.00 mg/kg/day					
LADC _{pot}	1.65E-09	mg/L	0.00	mg/kg		
Acute						
ADR _{pot}	7.38E-09 mg/kg/day 0.00 mg/kg/day					

Surface Water Comments:

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 35 RELEASE ACTIVITY: Vopak 20 dy

FACILITY NAME: JEFFERSON PARISH-BRIDGE CITY

FACILITY LOCATION: BRIDGE CITY LA 70094

RECEIVING STREAM NAME: MISSISSIPPI R

REACH NUMBER: 08090100004 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: LA0042064 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 1.14E+06 7q10 FLOW (MLD): 2.47E+05 EFFLUENT FLOW

(MLD):6.26

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 (%)		
3.00	0	0	20.00	5.80E-02	0.00		
788.00	0	0	20.00	5.80E-02	0.00		
920.00	0	0	20.00	5.80E-02	0.00		
1.44E+04	0	0	20.00	5.80E-02	0.00		

Chemical ID: TCE

Assessor:

Scenario#:36 Number of Release Sites: 1.

Release Activity: Vopak 250 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	1.17	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

250.00	0.00/0.00	N/A	N/A
4.68E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:36 RELEASE ACTIVITY: Vopak 250 dy

FACILITY NAME: JEFFERSON PARISH-BRIDGE CITY

FACILITY LOCATION: BRIDGE CITY LA 70094

RECEIVING WATER NAME: MISSISSIPPI R

REACH NUMBER: 08090100004 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: LA0042064 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	0.00468	4.68E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	8.13E+05	2.98E+05	2.47E+05	1.92E+05	NA	
CONCENTRATION (µg/L)	5.76E-06	1.57E-05	1.89E-05	2.44E-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}	2.17E-11 mg/kg/day 0.00 mg/kg/day							
LADC _{pot}	1.67E-09	1.67E-09 mg/L 0.00 mg/kg						
Acute								
ADR _{pot}	5.96E-10	mg/kg/day	5.96E-10 mg/kg/day 0.00 mg/kg/day					

Surface Water Comments:

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 36 RELEASE ACTIVITY: Vopak 250 dy

FACILITY NAME: JEFFERSON PARISH-BRIDGE CITY

FACILITY LOCATION: BRIDGE CITY LA 70094

RECEIVING STREAM NAME: MISSISSIPPI R

REACH NUMBER: 08090100004 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: LA0042064 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 1.14E+06 7q10 FLOW (MLD): 2.47E+05 EFFLUENT FLOW

(MLD):6.26

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 (%)		
3.00	0	0	250.00	4.68E-03	0.00		
788.00	0	0	250.00	4.68E-03	0.00		
920.00	0	0	250.00	4.68E-03	0.00		
1.44E+04	0	0	250.00	4.68E-03	0.00		

PROCESS SOLVENT RECYCLING

Chemical ID: TCE-0%

Assessor:

Scenario#:13 Number of Release Sites: 1.

Release Activity: CWNY 250 dy

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

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

250.00	0.00/0.00	N/A	N/A
4.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS					
SCENARIO #: 13 RELEASE ACTIVITY: CWNY 250 dy					
FACILITY NAME: ISP ENVIRON	MENTAL SERVICES INC				
FACILITY LOCATION: LINDEN	NJ 07036				
RECEIVING WATER NAME: NE	RECEIVING WATER NAME: NEWARK BAY				
REACH NUMBER: 02030104002 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct					
NPDES PERMIT #: NJ0000019 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.	0.34	0.004	4.00E-03	0.00

AQUATIC EXPOSURE ESTIMATES					
MIXING ZONE DILUTION FACTOR WATER CONCENTRATION (u					
ACUTE SCENARIO	1.00	11.76			
CHRONIC SCENARIO	10.00	1.18			

FISH INGESTION EXPOSURE ESTIMATES					
ASSUMPTIONS					
Exposure Units	Results	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:

Chemical ID: TCE-0

Assessor:

ENVIRONMENTAL RELEASES								
Scenario#:14		Number of Release Sites: 1.						
Release Activity:	CWNY 20 dy	CWNY 20 dy						
Release Description:	WATER LANDFILL STACK FUGITIVE Non-sludge/Sludge							
Total Releases:	0.94	0.94 N/A N/		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)				

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS					
SCENARIO #: 14 RELEASE ACTIVITY: CWNY 20 dy					
FACILITY NAME: ISP ENVIRON	MENTAL SERVICES INC				
FACILITY LOCATION: LINDEN	NJ 07036				
RECEIVING WATER NAME: NE	RECEIVING WATER NAME: NEWARK BAY				
REACH NUMBER: 02030104002 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct					
NPDES PERMIT #: NJ0000019 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.	0.34	0.047	4.70E-02	0.00

AQUATIC EXPOSURE ESTIMATES					
MIXING ZONE DILUTION FACTOR WATER CONCENTRATION (ug					
ACUTE SCENARIO	1.00	138.24			
CHRONIC SCENARIO	10.00	13.82			

FISH INGESTION EXPOSURE ESTIMATES					
		ASSUMPTIONS			
Exposure Units	Results	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:

Chemical ID: TCE-81

Assessor:

Scenario#:12 Number of Release Sites: 1.

Release Activity: Veolia 250 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	6025.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

250.00	0.00/0.00	N/A	N/A
24.10	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-81

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS					
SCENARIO #: 12 RELEASE ACTIVITY: Veolia 250 dy					
FACILITY NAME: MIDDLESEX CNTY UA					
FACILITY LOCATION: SAYRE	FACILITY LOCATION: SAYREVILLE NJ 08872				
RECEIVING WATER NAME: RARITAN BAY					
REACH NUMBER: 02030104005 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct					
NPDES PERMIT #: NJ0020141	EXPOSED POPULATION: Adult				

WWT REMOVAL (%)	RELEASE DAYS	PLANT FLOW (MLD)	PRETREAT RELEASE (kg/site/day)	POST-TREAT RELEASE (kg/site/day)	BCF (L/kg)
81.	250.	321.00	24.1	4.58	0.00

AQUATIC EXPOSURE ESTIMATES				
MIXING ZONE DILUTION FACTOR WATER CONCENTRATION (
ACUTE SCENARIO	5.00	2.85		
CHRONIC SCENARIO	10.00	1.43		

FISH INGESTION EXPOSURE ESTIMATES					
ASSUMPTIONS					
Exposure Units	Results	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:

Chemical ID: TCE-81

Assessor:

Scenario#:13 Number of Release Sites: 1.

Release Activity: Veolia 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	6035.60	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
301.78	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-81

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS					
SCENARIO #: 13 RELEASE ACTIVITY: Veolia 20 dy					
FACILITY NAME: MIDDLESEX CNTY UA					
FACILITY LOCATION: SAYREV	FACILITY LOCATION: SAYREVILLE NJ 08872				
RECEIVING WATER NAME: RARITAN BAY					
REACH NUMBER: 02030104005 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct					
NPDES PERMIT #: NJ0020141	EXPOSED POPULATION: Adult				

WWT REMOVAL (%)	RELEASE DAYS	PLANT FLOW (MLD)	PRETREAT RELEASE (kg/site/day)	POST-TREAT RELEASE (kg/site/day)	BCF (L/kg)
81.	20.	321.00	301.78	57.34	0.00

AQUATIC EXPOSURE ESTIMATES				
MIXING ZONE DILUTION FACTOR WATER CONCENTRATION (
ACUTE SCENARIO	5.00	35.72		
CHRONIC SCENARIO	10.00	17.86		

FISH INGESTION EXPOSURE ESTIMATES					
	Results	ASSUMPTIONS			
Exposure Units		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:

Chemical ID: TCE-81

Assessor:

Scenario#:14 Number of Release Sites: 1.

Release Activity: Clean TX 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:
Per Site Release:

250.00	0.00/0.00	N/A	N/A
0.35	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-81

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

SCENARIO #: 14

Number of Sites: 1

RELEASE ACTIVITY:Clean TX

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)
81.00	250.	0.35	6.65E-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	0.23	0.54	0.85	1.01	
ALL	10	39.60	13.29	7.76	7.57	1.68	5.00	8.57	8.78	

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES									
Exposure Units	Exposure Units Drinking Water Results 50% 10%		Drinking Water Units	s Fish Ingestion Results		Fish Ingestion Units			
				50%	10%				
Cancer									
$LADD_{pot}$	8.70E-07	6.33E-06	mg/kg/day	0.00	0.00	mg/kg/day			
LADC _{pot}	6.69E-05	4.87E-04	mg/L	0.00	0.00	mg/kg			
Acute									
ADR _{pot}	2.03E-05	1.90E-04	mg/kg/day	0.00	0.00	mg/kg/day			

Chemical ID: TCE-81

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 14 RELEASE ACTIVITY: Clean TX 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				
3.00	30	110	250.00	0.35	81.00	High				
788.00	0	0	250.00	0.35	81.00	High				
920.00	0	0	250.00	0.35	81.00	High				
1.44E+04	0	0	250.00	0.35	81.00	High				

Chemical ID: TCE-81

Assessor:

Scenario#:15 Number of Release Sites: 1.

Release Activity: Clean TX 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE		
	Non-sludge/Sludge					
Total Releases:	87.20	N/A	N/A	N/A		
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)		

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
4.36	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-81

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

SCENARIO #: 15

Number of Sites: 1

RELEASE ACTIVITY:Clean TX

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)
81.00	20.	4.36	0.83	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	2.88	6.69	10.60	12.54	
ALL	10	39.60	13.29	7.76	7.57	20.92	62.33	106.75	109.43	

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							
$\mathrm{LADD}_{\mathrm{pot}}$	8.67E-07	6.30E-06	mg/kg/day	0.00	0.00	mg/kg/day	
LADC _{pot}	6.67E-05	4.85E-04	mg/L	0.00	0.00	mg/kg	
Acute							
ADR _{pot}	2.53E-04	2.36E-03	mg/kg/day	0.00	0.00	mg/kg/day	

Chemical ID: TCE-81

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 15 RELEASE ACTIVITY: Clean TX 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		
3.00	5	19	20.00	4.36	81.00	High		
788.00	0	0	20.00	4.36	81.00	High		
920.00	0	0	20.00	4.36	81.00	High		
1.44E+04	0	0	20.00	4.36	81.00	High		

Chemical ID: TCE-81

Assessor:

Scenario#:16 Number of Release Sites: 1.

Release Activity: Clean AR 250 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE		
Non-sludge/Sludge						
Total Releases:	10.00	N/A	N/A	N/A		
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)		

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

250.00	0.00/0.00	N/A	N/A
4.00E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-81

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

SCENARIO #: 16 Number of Sites: 1 REI

RELEASE ACTIVITY:Clean AR

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)
81.00	250.	0.04	7.60E-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	2.64E-02	6.14E-02	9.72E-02	0.12
ALL	10	39.60	13.29	7.76	7.57	0.19	0.57	0.98	1.00

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							
$\mathrm{LADD}_{\mathrm{pot}}$	9.94E-08	7.23E-07	mg/kg/day	0.00	0.00	mg/kg/day	
LADC _{pot}	7.65E-06	5.56E-05	mg/L	0.00	0.00	mg/kg	
Acute							
ADR_{pot}	2.32E-06	2.17E-05	mg/kg/day	0.00	0.00	mg/kg/day	

Chemical ID: TCE-81

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 16 RELEASE ACTIVITY: Clean AR 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		
3.00	2	6	250.00	4.00E-02	81.00	High		
788.00	0	0	250.00	4.00E-02	81.00	High		
920.00	0	0	250.00	4.00E-02	81.00	High		
1.44E+04	0	0	250.00	4.00E-02	81.00	High		

Chemical ID: TCE-81

Assessor:

ENVIRONMENTAL	DELEVEE
ENVIKONMENTAL	KELEASES

Scenario#:17 Number of Release Sites: 1.

Release Activity: Clean 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	9.20	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)
		Non-aladaa/Gladaa		

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
0.46	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-81

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

SCENARIO #: 17

Number of Sites: 1

RELEASE ACTIVITY:Clean 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)
81.00	20.	0.46	8.74E-02	0.00	0.00

		AQU	ATIC EXPO	SURE EST	IMATES - S	SURFACE V	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	0.30	0.71	1.12	1.32
ALL	10	39.60	13.29	7.76	7.57	2.21	6.58	11.26	11.55

DRINI	KING WATER	R AND FISH I	NGESTION I	EXPOSURE ES	TIMATES	
Exposure Units	Drinking Water Results		Drinking Water Units	s Fish Ingestion Results		Fish Ingestion Units
	50%	10%		50%	10%	
		C	Cancer			
$LADD_{pot}$	9.15E-08	6.65E-07	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	7.04E-06	5.12E-05	mg/L	0.00	0.00	mg/kg
			Acute			
ADR _{pot}	2.67E-05	2.49E-04	mg/kg/day	0.00	0.00	mg/kg/day

Chemical ID: TCE-81

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 17 RELEASE ACTIVITY: Clean 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
3.00	3	11	20.00	0.46	81.00	High
788.00	0	0	20.00	0.46	81.00	High
920.00	0	0	20.00	0.46	81.00	High
1.44E+04	0	0	20.00	0.46	81.00	High

ADHESIVES

Chemical ID: TCE 81%

Assessor:

Scenario#:1 Number of Release Sites: 1.

Release Activity: Able 250 dy

Release Description:	WATER	LANDFILL STACK		FUGITIVE
		Non-sludge/Sludge		
Total Releases:	74.50	N/A	N/A	N/A

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

250.00	0.00/0.00	N/A	N/A
0.30	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE 81%

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

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

dy

SIC-CODE DESCRIPTION: Adhesives and Sealants Manufacture

SIC-CODE (S): 2891 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
81.00	250.	0.298	5.66E-02	0.00	0.00

		AQU	ATIC EXPO	SURE EST	IMATES - S	SURFACE V	WATER		
PLANT TYPE	% ILE FACILITY		STREAM FLOW (MLD)				STREAM CONC. (μg/l)		
		Harmonic Mean	30Q5	7Q10	1Q10	Harmonic Mean	30Q5	7Q10	1Q10
ALL	50	226.89	125.13	79.03	65.02	0.25	0.45	0.72	0.87
ALL	10	66.08	13.33	7.78	6.51	0.86	4.25	7.28	8.70

DRINI	KING WATER	R AND FISH I	NGESTION I	EXPOSURE ES	TIMATES	
Exposure Units	Drinking Water Results		g Water Results Drinking Water Units Fish Ingestion Results		ion Results	Fish Ingestion Units
	50%	10%		50%	10%	
Cancer						
$LADD_{pot}$	9.40E-07	3.23E-06	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	7.23E-05	2.48E-04	mg/L	0.00	0.00	mg/kg
			Acute			
ADR _{pot}	1.71E-05	1.61E-04	mg/kg/day	0.00	0.00	mg/kg/day

Chemical ID: TCE 81%

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 1 RELEASE ACTIVITY: Able 250 dy

SIC CODE DESCRIPTION: Adhesives and Sealants Manufacture

ASSOCIATED SIC CODES: 2891

		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
3.00	2	8	250.00	0.30	81.00	High
788.00	0	0	250.00	0.30	81.00	High
920.00	0	0	250.00	0.30	81.00	High
1.44E+04	0	0	250.00	0.30	81.00	High

Assessor:

Chemical ID: TCE

ENVIRONMENTAL RELEASES

Scenario#:1 Number of Release Sites: 1.

Release Activity: Garlock 250 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	8.25E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

250.00	0.00/0.00	N/A	N/A
3.30E-04	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:1 RELEASE ACTIVITY: Garlock 250 dy

FACILITY NAME: GARLOCK INC

FACILITY LOCATION: PALMYRA NY 145229350

RECEIVING WATER NAME: RED CR

REACH NUMBER: 04140201015 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: NY0000078 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	0.00033	3.30E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	131.21	74.37	46.12	38.09	NA	
CONCENTRATION (μg/L)	2.52E-03	4.44E-03	7.16E-03	8.66E-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}	9.47E-09 mg/kg/day 0.00 mg/kg/day			mg/kg/day		
LADC _{pot}	7.29E-07 mg/L 0.00 mg/kg			mg/kg		
Acute						
ADR _{pot}	1.68E-07	mg/kg/day	0.00	mg/kg/day		

Surface Water Comments:

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 1 RELEASE ACTIVITY: Garlock 250 dy

FACILITY NAME: GARLOCK INC

FACILITY LOCATION: PALMYRA NY 145229350

RECEIVING STREAM NAME: RED CR

REACH NUMBER: 04140201015 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NY0000078 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 247.55 7q10 FLOW (MLD): 46.12 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 (%)		
3.00	0	0	250.00	3.30E-04	0.00		
788.00	0	0	250.00	3.30E-04	0.00		
920.00	0	0	250.00	3.30E-04	0.00		
1.44E+04	0	0	250.00	3.30E-04	0.00		

Chemical ID: TCE

Assessor:

Scenario#:2 Number of Release Sites: 1.

Release Activity: Garlock 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	8.20E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A	
4.10E-03	N/A/0.00	N/A	N/A	
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)	

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:2 RELEASE ACTIVITY: Garlock 20 dy

FACILITY NAME: GARLOCK INC

FACILITY LOCATION: PALMYRA NY 145229350

RECEIVING WATER NAME: RED CR

REACH NUMBER: 04140201015 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: NY0000078 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.0041	4.10E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	131.21	74.37	46.12	38.09	NA	
CONCENTRATION (µg/L)	3.12E-02	5.51E-02	8.89E-02	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}	9.42E-09 mg/kg/day 0.00 mg/kg/da			mg/kg/day		
LADC _{pot}	7.24E-07	mg/L	0.00	mg/kg		
Acute						
ADR _{pot}	2.09E-06	mg/kg/day	0.00	mg/kg/day		

Surface Water Comments:

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 2 RELEASE ACTIVITY: Garlock 20 dy

FACILITY NAME: GARLOCK INC

FACILITY LOCATION: PALMYRA NY 145229350

RECEIVING STREAM NAME: RED CR

REACH NUMBER: 04140201015 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NY0000078 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 247.55 7q10 FLOW (MLD): 46.12 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 (%)		
3.00	0	0	20.00	4.10E-03	0.00		
788.00	0	0	20.00	4.10E-03	0.00		
920.00	0	0	20.00	4.10E-03	0.00		
1.44E+04	0	0	20.00	4.10E-03	0.00		

Chemical ID: TCE

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:3 Number of Release Sites: 1.

1.30E-02

Release Activity: 0.013 kg/site/dy 250 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	3.25	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

(kg/site/day) (kg/site/day) (kg/site/day) (kg/site/day)

N/A/0.00

N/A

N/A

Remarks:

Per Site Release:

Chemical ID: TCE

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

SCENARIO #: 3 Number of Sites: 1 RELEASE ACTIVITY:0.013

kg/site/dy 250 dy

SIC-CODE DESCRIPTION: Adhesives and Sealants Manufacture

SIC-CODE (S): 2891 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	250.	0.013	1.30E-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	226.89	226.89 125.13 79.03 65.02				0.10	0.16	0.20
ALL	10	66.08	13.33	7.78	6.51	0.20	0.98	1.67	2.00

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES						
Exposure Units	Drinking Water Results		Drinking Water Units	9		Fish Ingestion Units
	50%	10%		50%	10%	
Cancer						
$\mathrm{LADD}_{\mathrm{pot}}$	2.16E-07	7.41E-07	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	1.66E-05	5.70E-05	mg/L	0.00	0.00	mg/kg
Acute						
ADR _{pot}	3.93E-06	3.69E-05	mg/kg/day	0.00	0.00	mg/kg/day

Chemical ID: TCE

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 3 RELEASE ACTIVITY: 0.013 kg/site/dy 250 dy

SIC CODE DESCRIPTION: Adhesives and Sealants Manufacture

ASSOCIATED SIC CODES: 2891

	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			
3.00	0	0	250.00	1.30E-02	0.00	High			
788.00	0	0	250.00	1.30E-02	0.00	High			
920.00	0	0	250.00	1.30E-02	0.00	High			
1.44E+04	0	0	250.00	1.30E-02	0.00	High			

Chemical ID: TCE

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:4 Number of Release Sites: 1.

Release Activity: 0.16 kg/site/dy 20 dy

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

 20.00
 0.00/0.00
 N/A
 N/A

 0.16
 N/A/0.00
 N/A
 N/A

(kg/site/day) (kg/site/day) (kg/site/day) (kg/site/day)

Chemical ID: TCE

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

SCENARIO #: 4 Number of Sites: 1 RELEASE ACTIVITY:0.16

kg/site/dy 20 dy

SIC-CODE DESCRIPTION: Adhesives and Sealants Manufacture

SIC-CODE (S): 2891 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.00	20.	0.16	0.16	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	226.89	226.89 125.13 79.03 65.02				1.28	2.02	2.46
ALL	10	66.08	13.33	7.78	6.51	2.42	12.00	20.57	24.58

DRINI	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						
$\mathrm{LADD}_{\mathrm{pot}}$	2.13E-07	7.30E-07	mg/kg/day	0.00	0.00	mg/kg/day	
LADC _{pot}	1.63E-05	5.61E-05	mg/L	0.00	0.00	mg/kg	
Acute							
ADR_{pot}	4.84E-05	4.55E-04	mg/kg/day	0.00	0.00	mg/kg/day	

Chemical ID: TCE

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 4 RELEASE ACTIVITY: 0.16 kg/site/dy 20 dy

SIC CODE DESCRIPTION: Adhesives and Sealants Manufacture

ASSOCIATED SIC CODES: 2891

	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			
3.00	1	3	20.00	0.16	0.00	High			
788.00	0	0	20.00	0.16	0.00	High			
920.00	0	0	20.00	0.16	0.00	High			
1.44E+04	0	0	20.00	0.16	0.00	High			

Chemical ID: TCE 81%

Assessor:

ENVIRONMENTAL	DELEVEE
PINVIRUNIMENTAL	RELEASES

Scenario#:2 Number of Release Sites: 1.

1.30E-02

(kg/site/day)

Release Activity: 0.013 kg/site/dy 250 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE			
	Non-sludge/Sludge						
Total Releases:	3.25	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			

N/A/0.00

(kg/site/day)

N/A

(kg/site/day)

N/A

(kg/site/day)

Per Site Release:

Chemical ID: TCE 81%

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

SCENARIO #: 2 Number of Sites: 1 RELEASE ACTIVITY:0.013

kg/site/dy 250 dy

SIC-CODE DESCRIPTION: Adhesives and Sealants Manufacture

SIC-CODE (S): 2891 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
81.00	250.	0.013	2.47E-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	226.89	125.13	79.03	65.02	1.09E-02	1.97E-02	3.13E-02	3.80E-02	
ALL	10	66.08	13.33	7.78	6.51	3.74E-02	0.19	0.32	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							
$LADD_{pot}$	4.10E-08	1.41E-07	mg/kg/day	0.00	0.00	mg/kg/day		
LADC _{pot}	3.15E-06	1.08E-05	mg/L	0.00	0.00	mg/kg		
Acute								
ADR _{pot}	7.48E-07	7.02E-06	mg/kg/day	0.00	0.00	mg/kg/day		

Chemical ID: TCE 81%

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 2 RELEASE ACTIVITY: 0.013 kg/site/dy 250 dy

SIC CODE DESCRIPTION: Adhesives and Sealants Manufacture

ASSOCIATED SIC CODES: 2891

	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			
3.00	0	0	250.00	1.30E-02	81.00	High			
788.00	0	0	250.00	1.30E-02	81.00	High			
920.00	0	0	250.00	1.30E-02	81.00	High			
1.44E+04	0	0	250.00	1.30E-02	81.00	High			

Chemical ID: TCE

Assessor:

Scenario#:5 Number of Release Sites: 1.

Release Activity: Delphi 250 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	Total Releases: 3.25		N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

250.00	0.00/0.00	N/A	N/A
1.30E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:5 RELEASE ACTIVITY: Delphi 250 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: No DISCHARGE TYPE: Direct

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.	250.	0.013	1.30E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER							
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT		
FLOW (MLD)	41.37	20.01	11.85	11.85	NA		
CONCENTRATION (µg/L)	0.31	0.65	1.10	1.10	NA		

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES							
Exposure Units	Drinking Water Results						
Cancer							
LADD _{pot}	1.18E-06	1.18E-06 mg/kg/day		mg/kg/day			
LADC _{pot}	9.11E-05	mg/L	0.00	mg/kg			
Acute							
ADR _{pot}	2.46E-05	mg/kg/day	0.00	mg/kg/day			

Surface Water Comments:

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 5 RELEASE ACTIVITY: Delphi 250 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 GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: 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 (%)		
3.00	0	2	250.00	1.30E-02	0.00		
788.00	0	0	250.00	1.30E-02	0.00		
920.00	0	0	250.00	1.30E-02	0.00		
1.44E+04	0	0	250.00	1.30E-02	0.00		

Chemical ID: TCE

Assessor:

Scenario#:6 Number of Release Sites: 1.

Release Activity: Delphi 20 dy

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

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A	
0.16	N/A/0.00	N/A	N/A	
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)	

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:6 RELEASE ACTIVITY: Delphi 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: No DISCHARGE TYPE: Direct

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.	0.16	0.16	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT
FLOW (MLD)	41.37	20.01	11.85	11.85	NA
CONCENTRATION (µg/L)	3.87	7.99	13.50	13.50	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}	1.17E-06 mg/kg/day		0.00 mg/kg/day			
LADC _{pot}	8.97E-05	97E-05 mg/L 0.00 mg/L		mg/kg		
Acute						
ADR _{pot}	3.03E-04	mg/kg/day	0.00	mg/kg/day		

Surface Water Comments:

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 6 RELEASE ACTIVITY: Delphi 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 GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: 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 (%)	
3.00	3	11	20.00	0.16	0.00	
788.00	0	0	20.00	0.16	0.00	
920.00	0	0	20.00	0.16	0.00	
1.44E+04	0	0	20.00	0.16	0.00	

Chemical ID: TCE

Assessor:

Scenario#:7 Number of Release Sites: 1.

Release Activity: Olin 250 dy

Release Description:	WATER	WATER LANDFILL		FUGITIVE
		Non-sludge/Sludge		
Total Releases:	3.25	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

250.00	0.00/0.00	N/A	N/A
1.30E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:7 RELEASE ACTIVITY: Olin 250 dy

FACILITY NAME: OLIN BRASS AND WINCHESTER INC

FACILITY LOCATION: EAST ALTON IL 62024

RECEIVING WATER NAME: WOOD R

REACH NUMBER: 07110009002 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: IL0000230 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	0.013	1.30E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	155.60	112.72	70.93	58.40	NA	
CONCENTRATION (μg/L) 8.35E-02 0.12 0.18 0.22 NA					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}	3.15E-07	mg/kg/day	0.00	mg/kg/day		
LADC _{pot}	2.42E-05 mg/L 0.00 mg/kg					
Acute						
ADR _{pot}	4.37E-06	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 7 RELEASE ACTIVITY: Olin 250 dy

FACILITY NAME: OLIN BRASS AND WINCHESTER INC

FACILITY LOCATION: EAST ALTON IL 62024

RECEIVING STREAM NAME: WOOD R

REACH NUMBER: 07110009002 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: IL0000230 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 214.79 7q10 FLOW (MLD): 70.93 EFFLUENT FLOW

(MLD):39.54

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 (%)	
3.00	0	0	250.00	1.30E-02	0.00	
788.00	0	0	250.00	1.30E-02	0.00	
920.00	0	0	250.00	1.30E-02	0.00	
1.44E+04	0	0	250.00	1.30E-02	0.00	

Chemical ID: TCE

Assessor:

ENVIRONMENTAL	RELEASES
LIVINOIMILIVIAL	KLLLADLD

Scenario#:8 Number of Release Sites: 1.

Release Activity: Olin 20 dy

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

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
0.16	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:8 RELEASE ACTIVITY: Olin 20 dy

FACILITY NAME: OLIN BRASS AND WINCHESTER INC

FACILITY LOCATION: EAST ALTON IL 62024

RECEIVING WATER NAME: WOOD R

REACH NUMBER: 07110009002 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: IL0000230 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.16	0.16	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	155.60	112.72	70.93	58.40	NA	
CONCENTRATION (μg/L) 1.03 1.42 2.26 2.74 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}	3.10E-07 mg/kg/day 0.00 mg/kg/day					
LADC _{pot}	2.38E-05	mg/L	0.00	mg/kg		
Acute						
ADR _{pot}	5.38E-05	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 8 RELEASE ACTIVITY: Olin 20 dy

FACILITY NAME: OLIN BRASS AND WINCHESTER INC

FACILITY LOCATION: EAST ALTON IL 62024

RECEIVING STREAM NAME: WOOD R

REACH NUMBER: 07110009002 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: IL0000230 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 214.79 7q10 FLOW (MLD): 70.93 EFFLUENT FLOW

(MLD):39.54

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 (%)		
3.00	2	7	20.00	0.16	0.00		
788.00	0	0	20.00	0.16	0.00		
920.00	0	0	20.00	0.16	0.00		
1.44E+04	0	0	20.00	0.16	0.00		

Chemical ID: TCE

Assessor:

Scenario#:9 Number of Release Sites: 1.

Release Activity: AeroCA 250 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	3.25	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

250.00	0.00/0.00	N/A	N/A
1.30E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:9 RELEASE ACTIVITY: AeroCA 250 dy

FACILITY NAME: AEROJET GENERAL CORPORATION

FACILITY LOCATION: RANCHO CORDOVA CA 95743

RECEIVING WATER NAME: SACRAMENTO R

REACH NUMBER: 18020109005 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: CA0004111 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	0.013	1.30E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	4.41E+04	2.10E+04	1.59E+04	1.26E+04	NA	
CONCENTRATION (μg/L) 2.95E-04 6.19E-04 8.18E-04 1.03E-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}	1.11E-09	mg/kg/day	0.00	mg/kg/day		
LADC _{pot}	8.55E-08 mg/L		0.00	mg/kg		
Acute						
ADR _{pot}	2.34E-08	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 9 RELEASE ACTIVITY: AeroCA 250 dy

FACILITY NAME: AEROJET GENERAL CORPORATION FACILITY LOCATION: RANCHO CORDOVA CA 95743

RECEIVING STREAM NAME: SACRAMENTO R

REACH NUMBER: 18020109005 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: CA0004111 GAGING STATION ID: 11447500

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/66 - 09/29/79 NUMBER OF REACH: 1

OBSERVATIONS: 5021.00

(MLD):26.94

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 (%)		
3.00	0	0	250.00	1.30E-02	0.00		
788.00	0	0	250.00	1.30E-02	0.00		
920.00	0	0	250.00	1.30E-02	0.00		
1.44E+04	0	0	250.00	1.30E-02	0.00		

Chemical ID: TCE

Assessor:

Scenario#:10 Number of Release Sites: 1.

Release Activity: AeroCA 20 dy

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

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
0.16	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:10 RELEASE ACTIVITY: AeroCA 20 dy

FACILITY NAME: AEROJET GENERAL CORPORATION

FACILITY LOCATION: RANCHO CORDOVA CA 95743

RECEIVING WATER NAME: SACRAMENTO R

REACH NUMBER: 18020109005 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: CA0004111 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.16	0.16	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	4.41E+04	2.10E+04	1.59E+04	1.26E+04	NA	
CONCENTRATION (µg/L)	3.63E-03	7.62E-03	1.01E-02	1.27E-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}	1.09E-09	mg/kg/day	0.00	mg/kg/day		
LADC _{pot}	8.42E-08 mg/L 0.00 mg/kg			mg/kg		
Acute						
ADR _{pot}	2.89E-07	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 10 RELEASE ACTIVITY: AeroCA 20 dy

FACILITY NAME: AEROJET GENERAL CORPORATION FACILITY LOCATION: RANCHO CORDOVA CA 95743

RECEIVING STREAM NAME: SACRAMENTO R

REACH NUMBER: 18020109005 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: CA0004111 GAGING STATION ID: 11447500

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/66 - 09/29/79 NUMBER OF REACH: 1

OBSERVATIONS: 5021.00

(MLD):26.94

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 (%)	
3.00	0	0	20.00	0.16	0.00	
788.00	0	0	20.00	0.16	0.00	
920.00	0	0	20.00	0.16	0.00	
1.44E+04	0	0	20.00	0.16	0.00	

Assessor:

Chemical ID: TCE

ENVIRONMENTAL RELEASES	
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Scenario#:11 Number of Release Sites: 1.

Release Activity: Amphenol 250 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	3.25	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:
 1.30E-02
 N/A/0.00
 N/A
 N/A

(kg/site/day) (kg/site/day) (kg/site/day) (kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:11 RELEASE ACTIVITY: Amphenol 250 dy

FACILITY NAME: AEROSPACE OPERATIONS

FACILITY LOCATION: SIDNEY NY 13838

RECEIVING WATER NAME: SUSQUEHANNA R

REACH NUMBER: 02050101009 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: NY0003824 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	0.013	1.30E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	1134.35	315.59	205.91	168.28	NA	
CONCENTRATION (µg/L)	1.15E-02	4.12E-02	6.31E-02	7.73E-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}	4.32E-08	mg/kg/day	0.00 mg/kg/day			
LADC _{pot}	3.32E-06	mg/L	0.00	mg/kg		
Acute						
ADR _{pot}	1.56E-06	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 11 RELEASE ACTIVITY: Amphenol 250 dy

FACILITY NAME: AEROSPACE OPERATIONS

FACILITY LOCATION: SIDNEY NY 13838

RECEIVING STREAM NAME: SUSQUEHANNA R

REACH NUMBER: 02050101009 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NY0003824 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 4129.08 7q10 FLOW (MLD): 205.91 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 (%)	
3.00	0	0	250.00	1.30E-02	0.00	
788.00	0	0	250.00	1.30E-02	0.00	
920.00	0	0	250.00	1.30E-02	0.00	
1.44E+04	0	0	250.00	1.30E-02	0.00	

Assessor:

Chemical ID: TCE

ENVIRONMENTAL RELEASES

Scenario#:12 Number of Release Sites: 1.

Release Activity: Amphenol 20 dy

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

Per Site Release: 0.16

 20.00
 0.00/0.00
 N/A
 N/A

 0.16
 N/A/0.00
 N/A
 N/A

 (kg/site/day)
 (kg/site/day)
 (kg/site/day)
 (kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:12 RELEASE ACTIVITY: Amphenol 20 dy

FACILITY NAME: AEROSPACE OPERATIONS

FACILITY LOCATION: SIDNEY NY 13838

RECEIVING WATER NAME: SUSQUEHANNA R

REACH NUMBER: 02050101009 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: NY0003824 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.16	0.16	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER							
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT							
FLOW (MLD) 1134.35 315.59 205.91 168.28 NA					NA		
CONCENTRATION (μg/L) 0.14 0.51 0.78 0.95 NA							

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES						
Exposure Units	Drinking Water Results					
Cancer						
LADD _{pot}	4.25E-08	mg/kg/day	0.00	mg/kg/day		
LADC _{pot}	3.27E-06 mg/L 0.00 mg/kg					
Acute						
ADR _{pot}	1.92E-05	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 12 RELEASE ACTIVITY: Amphenol 20 dy

FACILITY NAME: AEROSPACE OPERATIONS

FACILITY LOCATION: SIDNEY NY 13838

RECEIVING STREAM NAME: SUSQUEHANNA R

REACH NUMBER: 02050101009 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NY0003824 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 4129.08 7q10 FLOW (MLD): 205.91 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 (%)	
3.00	0	0	20.00	0.16	0.00	
788.00	0	0	20.00	0.16	0.00	
920.00	0	0	20.00	0.16	0.00	
1.44E+04	0	0	20.00	0.16	0.00	

Assessor:

Chemical ID: TCE

ENVIRONMENTAL RELEASES

Scenario#:13 Number of Release Sites: 1.

Release Activity: Raytheon 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	3.25	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

250.00	0.00/0.00	N/A	N/A
1.30E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

CHEMICAL ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS					
SCENARIO #: 13 RELEASE ACTIVITY: Raytheon 250 dy					
FACILITY NAME: RAYTHEON SYSTEMS COMPANY N&MIS					
FACILITY LOCATION: PORTSM	4OUTH RI 02871				
RECEIVING WATER NAME: RI	RECEIVING WATER NAME: RHODE ISLAND				
REACH NUMBER: 01090004002 FACILITY ON REACH: No DISCHARGE TYPE: Direct					
NPDES PERMIT #: RI0000281 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.	1.00E-02	0.013	1.30E-02	0.00

AQUATIC EXPOSURE ESTIMATES					
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)			
ACUTE SCENARIO	120.00	10.83			
CHRONIC SCENARIO	120.00	10.83			

FISH INGESTION EXPOSURE ESTIMATES						
		ASSUMPTIONS				
Exposure Units	Results	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					

Lakes Comments:

Chemical ID: TCE

Assessor:

Scenario#:14 Number of Release Sites: 1.

Release Activity: Raytheon 20 dy

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

Non-sludge/Sludge

Release Days/yr: Per Site Release:

20.00	0.00/0.00	N/A	N/A
0.16	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

CHEMICAL ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS				
SCENARIO #: 14 RELEASE ACTIVITY: Raytheon 20 dy				
FACILITY NAME: RAYTHEON SYSTEMS COMPANY N&MIS				
FACILITY LOCATION: PORTSM	OUTH RI 02871			
RECEIVING WATER NAME: RH	ODE ISLAND			
REACH NUMBER: 01090004002 FACILITY ON REACH: No DISCHARGE TYPE: Direct				
NPDES PERMIT #: RI0000281 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	0.16	0.16	0.00

AQUATIC EXPOSURE ESTIMATES				
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)		
ACUTE SCENARIO	120.00	133.33		
CHRONIC SCENARIO	120.00	133.33		

FISH INGESTION EXPOSURE ESTIMATES					
		ASSUMPTIONS			
Exposure Units	Results	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:

INDUSTRIAL PROCESSING AID

Chemical ID: TCE-0%

Assessor:

Scenario#:1 Number of Release Sites: 1.

Release Activity: Occ 300 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE	
	Non-sludge/Sludge				
Total Releases:	5.70	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:
 1.90E-02
 N/A/0.00
 N/A
 N/A

 (kg/site/day)
 (kg/site/day)
 (kg/site/day)
 (kg/site/day)

CHEMICAL ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS					
SCENARIO #: 1 RELEASE ACTIVITY: Occ 300 dy					
FACILITY NAME: OCCIDENTA	FACILITY NAME: OCCIDENTAL CHEMICAL CORP				
FACILITY LOCATION: NIAGAR	A FALLS NY 14302				
RECEIVING WATER NAME: NL	AGARA 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	0.019	1.90E-02	0.00

AQUATIC EXPOSURE ESTIMATES				
MIXING ZONE DILUTION FACTOR WATER CONCENTRATION (ug				
ACUTE SCENARIO	1.00	0.14		
CHRONIC SCENARIO	1.00	0.14		

FISH INGESTION EXPOSURE ESTIMATES					
A				ASSUMPTIONS	
Exposure Units	Results	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:

Chemical ID: TCE-0 Assessor:

	ENVIRONMENTAL RELEASES	
Scenario#:16	Number of Release Sites: 1.	

Release Activity: Occidental 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	5.80	5.80 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)

CHEMICAL ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS					
SCENARIO #: 16 RELEASE ACTIVITY: Occidental 20 dy					
FACILITY NAME: OCCIDENTA	FACILITY NAME: OCCIDENTAL CHEMICAL CORP				
FACILITY LOCATION: NIAGAI	RA FALLS NY 14302				
RECEIVING WATER NAME: NI	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	0.29	0.29	0.00

AQUATIC EXPOSURE ESTIMATES				
MIXING ZONE DILUTION FACTOR WATER CONCENTRATION (ug/l				
ACUTE SCENARIO	1.00	2.20		
CHRONIC SCENARIO	1.00	2.20		

FISH INGESTION EXPOSURE ESTIMATES						
	ASSUMPTIONS					
Exposure Units	Results	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)	ADR _{pot} (mg/kg/day) 0.00 NA 1 day 80.00 279.00					

Lakes Comments:

Chemical ID: TCE-0%

Assessor:

Scenario#:2

Number of Release Sites: 1.

Release Activity:

Stepan 300 dy

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

Non-sludge/Sludge

Release Days/yr:

Per Site Release:

300.0	0 0	.00/0.00	N/A	N/A
1.00E-	03 N	J/A/0.00	N/A	N/A
<i>a</i>	1)	/ * / * / * / * / * / * / * / * / * / *	() ()	1

(kg/site/day)

(kg/site/day)

(kg/site/day)

(kg/site/day)

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:2 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: No DISCHARGE TYPE: Direct

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.	0.001	1.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT					
FLOW (MLD)	6250.28	3366.14	2387.10	1917.66	NA
CONCENTRATION (μg/L) 1.60E-04 2.97E-04 4.19E-04 5.21E-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}	7.23E-10 mg/kg/day 0.00 mg/kg/day					
LADC _{pot}	5.56E-08 mg/L 0.00 mg/kg			mg/kg		
Acute						
ADR _{pot}	1.13E-08 mg/kg/day 0.00 mg/kg/day					

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 2 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: IL0002453 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A NUMBER OF 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 (%)				
3.00	0	0	300.00	1.00E-03	0.00				
788.00	0	0	300.00	1.00E-03	0.00				
920.00	0	0	300.00	1.00E-03	0.00				
1.44E+04	0	0	300.00	1.00E-03	0.00				

Chemical ID: TCE-0

Assessor:

Scenario#:18 Number of Release Sites: 1.

Release Activity: Stepan 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	0.16	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:
 8.00E-03
 N/A/0.00
 N/A
 N/A

 (kg/site/day)
 (kg/site/day)
 (kg/site/day)
 (kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:18 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: No DISCHARGE TYPE: Direct

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.	0.008	8.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER								
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT								
FLOW (MLD)	6250.28	3366.14	2387.10	1917.66	NA			
CONCENTRATION (µg/L)	1.28E-03	2.38E-03	3.35E-03	4.17E-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}	3.86E-10	mg/kg/day	0.00 mg/kg/day				
LADC _{pot}	2.97E-08 mg/L		0.00	mg/kg			
Acute							
ADR _{pot}	9.00E-08	0.00	mg/kg/day				

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 18 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: IL0002453 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A NUMBER OF 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 (%)				
3.00	0	0	20.00	8.00E-03	0.00				
788.00	0	0	20.00	8.00E-03	0.00				
920.00	0	0	20.00	8.00E-03	0.00				
1.44E+04	0	0	20.00	8.00E-03	0.00				

Chemical ID: TCE-81

Assessor:

Scenario#:1 Number of Release Sites: 1.

Release Activity: Entek 300 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
Total Releases:	114.00	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:
 0.38
 N/A/0.00
 N/A
 N/A

(kg/site/day) (kg/site/day) (kg/site/day) (kg/site/day)

Chemical ID: TCE-81

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

SCENARIO #: 1

Number of Sites: 1

RELEASE ACTIVITY: Entek 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)
81.00	300.	0.38	7.22E-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	0.25	0.58	0.92	1.09	
ALL	10	39.60	13.29	7.76	7.57	1.82	5.43	9.30	9.54	

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								
LADD _{pot}	1.13E-06	8.24E-06	mg/kg/day	0.00	0.00	mg/kg/day		
LADC _{pot}	8.72E-05	6.34E-04	mg/L	0.00	0.00	mg/kg		
Acute								
ADR_{pot}	2.21E-05	2.06E-04	mg/kg/day	0.00	0.00	mg/kg/day		

SIC Code Comments:

Chemical ID: TCE-81

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 1 RELEASE ACTIVITY: Entek 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 (μg/L) Percent of Year COC Days CO Exceeded		Release days/year	Loading (kg/site/day)	Waste Water Treatment (%)	High/Avg Analysis				
3.00	38	140	300.00	0.38	81.00	High				
788.00	0	0	300.00	0.38	81.00	High				
920.00	0	0	300.00	0.38	81.00	High				
1.44E+04	0	0	300.00	0.38	81.00	High				

Chemical ID: TCE-81

Assessor:

Scenario#:2 Number of Release Sites: 1.

Release Activity: Entek 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE		
	Non-sludge/Sludge					
Total Releases:	113.00	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:
 5.65
 N/A/0.00
 N/A
 N/A

 (kg/site/day)
 (kg/site/day)
 (kg/site/day)
 (kg/site/day)

Chemical ID: TCE-81

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

SCENARIO #: 2

Number of Sites: 1

RELEASE ACTIVITY:Entek 20

dv

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)
81.00	20.	5.65	1.07	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	3.73	8.67	13.73	16.25	
ALL	10	39.60	13.29	7.76	7.57	27.11	80.78	138.34	141.81	

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES									
Exposure Units	Drinking Water Results		Drinking Water Units	Fish Ingestion Results		Fish Ingestion Units			
	50%	10%		50%	10%				
	Cancer								
LADD _{pot}	1.12E-06	8.17E-06	mg/kg/day	0.00	0.00	mg/kg/day			
LADC _{pot}	8.64E-05	6.28E-04	mg/L	0.00	0.00	mg/kg			
Acute									
ADR_{pot}	3.28E-04	3.06E-03	mg/kg/day	0.00	0.00	mg/kg/day			

SIC Code Comments:

Chemical ID: TCE-81

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 2 RELEASE ACTIVITY: Entek 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				
3.00	5	20	20.00	5.65	81.00	High				
788.00	0	0	20.00	5.65	81.00	High				
920.00	0	0	20.00	5.65	81.00	High				
1.44E+04	0	0	20.00	5.65	81.00	High				

Chemical ID: TCE-81

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:3 Number of Release Sites: 1.

Release Activity: NECP 300 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE			
	Non-sludge/Sludge						
Total Releases:	2.40	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:
 8.00E-03
 N/A/0.00
 N/A
 N/A

(kg/site/day) (kg/site/day) (kg/site/day) (kg/site/day)

Chemical ID: TCE-81

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:3 RELEASE ACTIVITY: NECP 300 dy

FACILITY NAME: FOSTORIA CITY OF

FACILITY LOCATION: FOSTORIA OH 44830

RECEIVING WATER NAME: PORTAGE R E BR

REACH NUMBER: 04100010009 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: OH0052744 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
81.	300.	0.008	1.52E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER							
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT		
FLOW (MLD)	45.23	16.72	9.84	9.84	NA		
CONCENTRATION (µg/L)	3.36E-02	9.09E-02	0.15	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}	1.52E-07	mg/kg/day	0.00 mg/kg/day					
LADC _{pot}	1.17E-05	mg/L	0.00	mg/kg				
Acute								
ADR _{pot}	3.44E-06	mg/kg/day	0.00	mg/kg/day				

Chemical ID: TCE-81

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 3 RELEASE ACTIVITY: NECP 300 dy

FACILITY NAME: FOSTORIA CITY OF

FACILITY LOCATION: FOSTORIA OH 44830

RECEIVING STREAM NAME: PORTAGE R E BR

REACH NUMBER: 04100010009 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: OH0052744 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A NUMBER OF REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 158.00 7q10 FLOW (MLD): 9.84 EFFLUENT FLOW

(MLD):9.84

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 (%)		
3.00	0	0	300.00	8.00E-03	81.00		
788.00	0	0	300.00	8.00E-03	81.00		
920.00	0	0	300.00	8.00E-03	81.00		
1.44E+04	0	0	300.00	8.00E-03	81.00		

Chemical ID: TCE-81

Assessor:

Scenario#:4 Number of Release Sites: 1.

Release Activity: NECP 20 dy

Release Description:	WATER	WATER LANDFILL		FUGITIVE
	Non-sludge/Sludge			
Total Releases:	Total Releases: 2.40		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:
 0.12
 N/A/0.00
 N/A
 N/A

 (kg/site/day)
 (kg/site/day)
 (kg/site/day)
 (kg/site/day)

Chemical ID: TCE-81

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:4 RELEASE ACTIVITY: NECP 20 dy

FACILITY NAME: FOSTORIA CITY OF

FACILITY LOCATION: FOSTORIA OH 44830

RECEIVING WATER NAME: PORTAGE R E BR

REACH NUMBER: 04100010009 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: OH0052744 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
81.	20.	0.12	2.28E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	45.23	16.72	9.84	9.84	NA	
CONCENTRATION (µg/L)	0.50	1.36	2.32	2.32	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}	1.52E-07	1.52E-07 mg/kg/day 0.00 mg/kg/day				
LADC _{pot}	1.17E-05	mg/L	0.00 mg/kg			
Acute						
ADR _{pot}	5.16E-05	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE-81

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 4 RELEASE ACTIVITY: NECP 20 dy

FACILITY NAME: FOSTORIA CITY OF

FACILITY LOCATION: FOSTORIA OH 44830

RECEIVING STREAM NAME: PORTAGE R E BR

REACH NUMBER: 04100010009 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: OH0052744 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A NUMBER OF REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 158.00 7q10 FLOW (MLD): 9.84 EFFLUENT FLOW

(MLD):9.84

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 (%)		
3.00	0	1	20.00	0.12	81.00		
788.00	0	0	20.00	0.12	81.00		
920.00	0	0	20.00	0.12	81.00		
1.44E+04	0	0	20.00	0.12	81.00		

Chemical ID: TCE-81

Assessor:

Scenario#:5 Number of Release Sites: 1.

Release Activity: PPG 300 dy

Release Description:	WATER	WATER LANDFILL		FUGITIVE
	Non-sludge/Sludge			
Total Releases:	Total Releases: 1.50		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:
 5.00E-03
 N/A/0.00
 N/A
 N/A

 (kg/site/day)
 (kg/site/day)
 (kg/site/day)
 (kg/site/day)

Chemical ID: TCE-81

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:5 RELEASE ACTIVITY: PPG 300 dy

FACILITY NAME: BARBERTON CITY OF

FACILITY LOCATION: BARBERTON OH 44203 RECEIVING WATER NAME: TUSCARAWAS R

REACH NUMBER: 05040001030 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: OH0024007 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
81.	300.	0.005	9.50E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	198.65	107.44	67.49	55.59	NA	
CONCENTRATION (µg/L)	4.78E-03	8.84E-03	1.41E-02	1.71E-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}	2.16E-08 mg/kg/day 0.00 mg/kg/day					
LADC _{pot}	1.66E-06 mg/L 0.00 mg/kg			mg/kg		
Acute						
ADR _{pot}	3.35E-07 mg/kg/day 0.00 mg/kg/day					

Chemical ID: TCE-81

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 5 RELEASE ACTIVITY: PPG 300 dy

FACILITY NAME: BARBERTON CITY OF

FACILITY LOCATION: BARBERTON OH 44203 RECEIVING STREAM NAME: TUSCARAWAS R

REACH NUMBER: 05040001030 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: OH0024007 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A NUMBER OF REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 381.49 7q10 FLOW (MLD): 67.49 EFFLUENT FLOW

(MLD):22.18

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 (%)		
3.00	0	0	300.00	5.00E-03	81.00		
788.00	0	0	300.00	5.00E-03	81.00		
920.00	0	0	300.00	5.00E-03	81.00		
1.44E+04	0	0	300.00	5.00E-03	81.00		

Chemical ID: TCE-81

Assessor:

Scenario#:6 Number of Release Sites: 1.

Release Activity: PPG 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	1.40	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:	7.00E-02	N/A/0.00	N/A	N/A
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-81

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:6 RELEASE ACTIVITY: PPG 20 dy

FACILITY NAME: BARBERTON CITY OF

FACILITY LOCATION: BARBERTON OH 44203 RECEIVING WATER NAME: TUSCARAWAS R

REACH NUMBER: 05040001030 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: OH0024007 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
81.	20.	0.07	1.33E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	198.65	107.44	67.49	55.59	NA	
CONCENTRATION (µg/L)	6.70E-02	0.12	0.20	0.24	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}	2.02E-08	2.02E-08 mg/kg/day				
LADC _{pot}	1.55E-06	mg/L	0.00	mg/kg		
Acute						
ADR _{pot}	4.69E-06 mg/kg/day 0.00 mg/kg/day					

Chemical ID: TCE-81

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 6 RELEASE ACTIVITY: PPG 20 dy

FACILITY NAME: BARBERTON CITY OF

FACILITY LOCATION: BARBERTON OH 44203 RECEIVING STREAM NAME: TUSCARAWAS R

REACH NUMBER: 05040001030 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: OH0024007 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A NUMBER OF REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 381.49 7q10 FLOW (MLD): 67.49 EFFLUENT FLOW

(MLD):22.18

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 (%)		
3.00	0	0	20.00	7.00E-02	81.00		
788.00	0	0	20.00	7.00E-02	81.00		
920.00	0	0	20.00	7.00E-02	81.00		
1.44E+04	0	0	20.00	7.00E-02	81.00		

Chemical ID: TCE

Assessor:

ENVIRONMENTAL RELEASES							
Scenario#:19	Number of Release Sites: 1.						
Release Activity:	Daramic 20 dy	Daramic 20 dy					
Release Description:	WATER	LANDFILL	STACK	FUGITIVE			
	Non-sludge/Sludge						
Total Releases:	2.28	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			

N/A/0.00

(kg/site/day)

N/A

(kg/site/day)

N/A

(kg/site/day)

Remarks:

Per Site Release:

0.11

(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:19 RELEASE ACTIVITY: Daramic 20 dy

FACILITY NAME: CORYDON MUNICIPAL STP

FACILITY LOCATION: CORYDON IN 47112

RECEIVING WATER NAME: INDIAN CR

REACH NUMBER: 05140104019 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: IN0020893 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.114	0.11	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	1397.39	582.78	388.54	316.12	NA	
CONCENTRATION (µg/L)	8.16E-02	0.20	0.29	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}	2.46E-08 mg/kg/day		0.00 mg/kg/day			
LADC _{pot}	1.89E-06 mg/L		0.00	mg/kg		
Acute						
ADR _{pot}	7.41E-06 mg/kg/day 0.00 I			mg/kg/day		

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 19 RELEASE ACTIVITY: Daramic 20 dy

FACILITY NAME: CORYDON MUNICIPAL STP FACILITY LOCATION: CORYDON IN 47112

RECEIVING STREAM NAME: INDIAN CR

REACH NUMBER: 05140104019 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: IN0020893 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A NUMBER OF REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 3058.60 7q10 FLOW (MLD): 388.54 EFFLUENT FLOW

(MLD):2.42

RESULTS								
COC (µg/L)	Percent of Year COC Exceeded			Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)			
3.00	0	0	20.00	0.11	0.00			
788.00	0	0	20.00	0.11	0.00			
920.00	0	0	20.00	0.11	0.00			
1.44E+04	0	0	20.00	0.11	0.00			

Chemical ID: TCE-0%

Assessor:

Scenario#:3 Number of Release Sites: 1.

Release Activity: Daramic 300 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	2.40	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:
 8.00E-03
 N/A/0.00
 N/A
 N/A

 (kg/site/day)
 (kg/site/day)
 (kg/site/day)
 (kg/site/day)

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:3 RELEASE ACTIVITY: Daramic 300 dy

FACILITY NAME: CORYDON MUNICIPAL STP

FACILITY LOCATION: CORYDON IN 47112

RECEIVING WATER NAME: INDIAN CR

REACH NUMBER: 05140104019 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: IN0020893 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	300.	0.008	8.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER								
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT			
FLOW (MLD)	1397.39	582.78	388.54	316.12	NA			
CONCENTRATION (µg/L)	5.72E-03	1.37E-02	2.06E-02	2.53E-02	NA			

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES							
Exposure Units	Drinking Water Results						
Cancer							
LADD _{pot}	2.59E-08 mg/kg/day 0.00 mg/kg/da			mg/kg/day			
LADC _{pot}	1.99E-06	mg/L	0.00 mg/kg				
Acute							
ADR _{pot}	R_{pot} 5.20E-07 mg/kg/day 0.00 mg/kg/day						

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 3 RELEASE ACTIVITY: Daramic 300 dy

FACILITY NAME: CORYDON MUNICIPAL STP FACILITY LOCATION: CORYDON IN 47112

RECEIVING STREAM NAME: INDIAN CR

REACH NUMBER: 05140104019 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: IN0020893 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A NUMBER OF REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 3058.60 7q10 FLOW (MLD): 388.54 EFFLUENT FLOW

(MLD):2.42

	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 (%)				
3.00	0	0	300.00	8.00E-03	0.00				
788.00	0	0	300.00	8.00E-03	0.00				
920.00	0	0	300.00	8.00E-03	0.00				
1.44E+04	0	0	300.00	8.00E-03	0.00				

COMMERCIAL PRINTING

Chemical ID: TCE

Assessor:

Scenario#:1 Number of Release Sites: 1.

Release Activity: Printing 250 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	5.00E-02	N/A	N/A	N/A
		- "	- "	

Non-sludge/Sludge

Release Days/yr: 250.0

Per Site Release: 2.00E-

250.00	0.00/0.00	N/A	N/A
2.00E-04	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

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

SCENARIO #: 1 Number of Sites: 1 RELEASE ACTIVITY: Printing

250 dy

SIC-CODE DESCRIPTION: Printing

SIC-CODE (S): 271-277 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	5204.76	2263.90	1583.16	1275.49	3.84E-05	8.83E-05	1.26E-04	1.57E-04
ALL	10	302.17	109.05	68.58	56.47	6.62E-04	1.83E-03	2.92E-03	3.54E-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							
$LADD_{pot}$	1.45E-10	2.49E-09	mg/kg/day	0.00	0.00	mg/kg/day	
LADC _{pot}	1.11E-08	1.92E-07	mg/L	0.00	0.00	mg/kg	
Acute							
ADR _{pot}	3.35E-09	6.95E-08	mg/kg/day	0.00	0.00	mg/kg/day	

SIC Code Comments:

Chemical ID: TCE

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 1 RELEASE ACTIVITY: Printing 250 dy

SIC CODE DESCRIPTION: Printing
ASSOCIATED SIC CODES: 271-277

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	
3.00	0	0	250.00	2.00E-04	0.00	High	
788.00	0	0	250.00	2.00E-04	0.00	High	
920.00	0	0	250.00	2.00E-04	0.00	High	
1.44E+04	0	0	250.00	2.00E-04	0.00	High	

Chemical ID: TCE

Assessor:

Scenario#:2 Number of Release Sites: 1.

Release Activity: Printing 20 dy

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

20.00	0.00/0.00	N/A	N/A
2.50E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

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

SCENARIO #: 2 Number of Sites: 1 RELEASE ACTIVITY:Printing 20

dy

SIC-CODE DESCRIPTION: Printing

SIC-CODE (S): 271-277 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	5204.76	2263.90	1583.16	1275.49	4.80E-04	1.10E-03	1.58E-03	1.96E-03
ALL	10	302.17	109.05	68.58	56.47	8.27E-03	2.29E-02	3.65E-02	4.43E-02

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES							
Exposure Units	Drinking Water Results		Drinking Water Units	Fish Ingestion Results		Fish Ingestion Units	
	50%	10%		50%	10%		
		(Cancer				
$LADD_{pot}$	1.45E-10	2.49E-09	mg/kg/day	0.00	0.00	mg/kg/day	
LADC _{pot}	1.11E-08	1.92E-07	mg/L	0.00	0.00	mg/kg	
Acute							
ADR _{pot}	4.18E-08	8.68E-07	mg/kg/day	0.00	0.00	mg/kg/day	

SIC Code Comments:

Chemical ID: TCE

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 2 RELEASE ACTIVITY: Printing 20 dy

SIC CODE DESCRIPTION: Printing
ASSOCIATED SIC CODES: 271-277

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	
3.00	0	0	20.00	2.50E-03	0.00	High	
788.00	0	0	20.00	2.50E-03	0.00	High	
920.00	0	0	20.00	2.50E-03	0.00	High	
1.44E+04	0	0	20.00	2.50E-03	0.00	High	

OTHER INDUSTRIAL USES

Chemical ID: TCE-0

Assessor:

ENVIRONMENTAL	DELEVEE
ENVIKONWENTAL	KELEASES

Scenario#:19 Number of Release Sites: 1.

Release Activity: Eli 250 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	387.50	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

250.00	0.00/0.00	N/A	N/A
1.55	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:19 RELEASE ACTIVITY: Eli 250 dy

FACILITY NAME: ELI LILLY KENTUCKY AVE. PLANT

FACILITY LOCATION: INDIANAPOLIS IN 46237

RECEIVING WATER NAME: WHITE R

REACH NUMBER: 05120201005 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: IN0003310 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	1.55	1.55	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	948.40	264.68	171.63	140.44	NA	
CONCENTRATION (μg/L) 1.63 5.86 9.03 11.04 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}	6.16E-06 mg/kg/day 0.00 mg/kg/da			mg/kg/day		
LADC _{pot}	4.74E-04 mg/L		0.00	mg/kg		
Acute						
ADR _{pot}	2.22E-04 mg/kg/day 0.00 mg/kg/day					

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 19 RELEASE ACTIVITY: Eli 250 dy

FACILITY NAME: ELI LILLY KENTUCKY AVE. PLANT

FACILITY LOCATION: INDIANAPOLIS IN 46237

RECEIVING STREAM NAME: WHITE R

REACH NUMBER: 05120201005 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: IN0003310 GAGING STATION ID: 03353000

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/66 - 01/02/91 NUMBER OF REACH: 1

OBSERVATIONS: 9134.00

50 %ile FLOW (MLD): 1790.46 10 %ile FLOW (MLD): 403.59 EFFLUENT FLOW

(MLD):11.78

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 (%)		
3.00	10	35	250.00	1.55	0.00		
788.00	0	0	250.00	1.55	0.00		
920.00	0	0	250.00	1.55	0.00		
1.44E+04	0	0	250.00	1.55	0.00		

Chemical ID: TCE-0

Assessor:

Scenario#:20 Number of Release Sites: 1.

Release Activity: Eli 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	388.20	388.20 N/A		N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
19.41	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:20 RELEASE ACTIVITY: Eli 20 dy

FACILITY NAME: ELI LILLY KENTUCKY AVE. PLANT

FACILITY LOCATION: INDIANAPOLIS IN 46237

RECEIVING WATER NAME: WHITE R

REACH NUMBER: 05120201005 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: IN0003310 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	19.41	19.41	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	948.40	264.68	171.63	140.44	NA	
CONCENTRATION (µg/L)	20.47	73.33	113.09	138.21	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}	6.17E-06 mg/kg/day 0.00 mg/kg/day			mg/kg/day		
LADC _{pot}	4.74E-04 mg/L		0.00	mg/kg		
Acute						
ADR _{pot}	2.78E-03 mg/kg/day 0.00 mg/kg/day					

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 20 RELEASE ACTIVITY: Eli 20 dy

FACILITY NAME: ELI LILLY KENTUCKY AVE. PLANT

FACILITY LOCATION: INDIANAPOLIS IN 46237

RECEIVING STREAM NAME: WHITE R

REACH NUMBER: 05120201005 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: IN0003310 GAGING STATION ID: 03353000

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/66 - 01/02/91 NUMBER OF REACH: 1

OBSERVATIONS: 9134.00

(MLD):11.78

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 (%)		
3.00	5	17	20.00	19.41	0.00		
788.00	0	0	20.00	19.41	0.00		
920.00	0	0	20.00	19.41	0.00		
1.44E+04	0	0	20.00	19.41	0.00		

Chemical ID: TCE-0

Assessor:

Scenario#:21 Number of Release Sites: 1.

Release Activity: Oxy 250 dy

Release Description:	WATER LANDFILL		STACK	FUGITIVE
Total Releases:	37.50	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)
		Non-sludge/Sludge		

Release Days/yr: 250.00 N/AN/A 0.00/0.00Per Site Release: 0.15 N/A/0.00N/AN/A

(kg/site/day) (kg/site/day) (kg/site/day) (kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:21 RELEASE ACTIVITY: Oxy 250 dy

FACILITY NAME: OXY VINYLS LP

FACILITY LOCATION: DEER PARK TX 77536

RECEIVING WATER NAME: BUFFALO BAYOU

REACH NUMBER: 12040104015 FACILITY ON REACH: No DISCHARGE TYPE: Direct

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.	0.15	0.15	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	1170.86	467.49	309.27	309.27	NA	
CONCENTRATION (µg/L)	0.13	0.32	0.49	0.49	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}	4.83E-07 mg/kg/day 0.00 mg/kg/day					
LADC _{pot}	3.71E-05 mg/L 0.00 mg/kg					
Acute						
ADR _{pot} 1.22E-05 mg/kg/day 0.00 mg/kg/day						

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 21 RELEASE ACTIVITY: Oxy 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 GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: 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 (%)			
3.00	0	1	250.00	0.15	0.00			
788.00	0	0	250.00	0.15	0.00			
920.00	0	0	250.00	0.15	0.00			
1.44E+04	0	0	250.00	0.15	0.00			

Chemical ID: TCE-0

Assessor:

Scenario#:22 Number of Release Sites: 1.

Release Activity: Oxy 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE	
		Non-sludge/Sludge			
Total Releases:	37.00	N/A	N/A	N/A	
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)	

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
1.85	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:22 RELEASE ACTIVITY: Oxy 20 dy

FACILITY NAME: OXY VINYLS LP

FACILITY LOCATION: DEER PARK TX 77536

RECEIVING WATER NAME: BUFFALO BAYOU

REACH NUMBER: 12040104015 FACILITY ON REACH: No DISCHARGE TYPE: Direct

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.	20.	1.85	1.85	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	1170.86	467.49	309.27	309.27	NA	
CONCENTRATION (µg/L)	1.58	3.96	5.98	5.98	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}	4.76E-07 mg/kg/day 0.00 mg/kg/day					
LADC _{pot}	3.66E-05	3.66E-05 mg/L		mg/kg		
Acute						
ADR_{pot}	1.50E-04 mg/kg/day 0.00 mg/kg/day					

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 22 RELEASE ACTIVITY: Oxy 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 GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: 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 (%)	
3.00	3	9	20.00	1.85	0.00	
788.00	0	0	20.00	1.85	0.00	
920.00	0	0	20.00	1.85	0.00	
1.44E+04	0	0	20.00	1.85	0.00	

Chemical ID: TCE-0

Assessor:

Scenario#:23 Number of Release Sites: 1.

Release Activity: WA Penn 250 dy

Release Description:	WATER	LANDFILL STACK		FUGITIVE	
	Non-sludge/Sludge				
Total Releases:	8.00	N/A	N/A	N/A	
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)	

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

250.00	0.00/0.00	N/A	N/A
3.20E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:23 RELEASE ACTIVITY: WA Penn 250 dy

FACILITY NAME: MIDWAY STP

FACILITY LOCATION: MIDWAY KY 28410 RECEIVING WATER NAME: S ELKHORN CR

REACH NUMBER: 05100205064 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: KY0028410 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	0.032	3.20E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR Harmonic Mean 30Q5				1Q10	PLANT
FLOW (MLD)	25.61	7.43	4.25	3.57	NA
CONCENTRATION (µg/L)	1.25	4.31	7.53	8.97	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}	4.71E-06 mg/kg/day 0.00 mg/kg/day					
LADC _{pot}	3.62E-04	mg/L	t/L 0.00 mg/kg			
Acute						
ADR _{pot} 1.63E-04 mg/kg/day 0.00 mg/kg/day						

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 23 RELEASE ACTIVITY: WA Penn 250 dy

FACILITY NAME: MIDWAY STP

FACILITY LOCATION: MIDWAY KY 28410

RECEIVING STREAM NAME: S ELKHORN CR

REACH NUMBER: 05100205064 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: KY0028410 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 126.48 7q10 FLOW (MLD): 4.25 EFFLUENT FLOW

(MLD):0.75

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 (%)	
3.00	6	22	250.00	3.20E-02	0.00	
788.00	0	0	250.00	3.20E-02	0.00	
920.00	0	0	250.00	3.20E-02	0.00	
1.44E+04	0	0	250.00	3.20E-02	0.00	

Chemical ID: TCE-0

Assessor:

Scenario#:24 Number of Release Sites: 1.

Release Activity: WA Penn 20 dy

Release Description:	WATER	WATER LANDFILL		FUGITIVE
	Non-sludge/Sludge			
Total Releases:	8.00	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
0.40	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:24 RELEASE ACTIVITY: WA Penn 20 dy

FACILITY NAME: MIDWAY STP

FACILITY LOCATION: MIDWAY KY 28410 RECEIVING WATER NAME: S ELKHORN CR

REACH NUMBER: 05100205064 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: KY0028410 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.4	0.40	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	7.43	4.25	3.57	NA		
CONCENTRATION (μg/L) 15.62 53.82 94.12 112.08 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}	4.71E-06 mg/kg/day 0.00 mg/kg/day			mg/kg/day		
LADC _{pot}	3.62E-04	mg/L	0.00	mg/kg		
Acute						
ADR _{pot}	2.04E-03	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 24 RELEASE ACTIVITY: WA Penn 20 dy

FACILITY NAME: MIDWAY STP

FACILITY LOCATION: MIDWAY KY 28410

RECEIVING STREAM NAME: S ELKHORN CR

REACH NUMBER: 05100205064 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: KY0028410 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 126.48 7q10 FLOW (MLD): 4.25 EFFLUENT FLOW

(MLD):0.75

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 (%)		
3.00	4	13	20.00	0.40	0.00		
788.00	0	0	20.00	0.40	0.00		
920.00	0	0	20.00	0.40	0.00		
1.44E+04	0	0	20.00	0.40	0.00		

Chemical ID: TCE-0%

Assessor:

Scenario#:16 Number of Release Sites: 1.

Release Activity: Solvay 350 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	8.40	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

350.00	0.00/0.00	N/A	N/A
2.40E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:16 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: Yes DISCHARGE TYPE: Direct

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.	0.024	2.40E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	110.16	9.37	5.40	4.53	NA	
CONCENTRATION (μg/L) 0.22 2.56 4.44 5.30 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}	1.15E-06 mg/kg/day 0.00 mg/kg/day			mg/kg/day		
LADC _{pot}	8.84E-05	mg/L	0.00	mg/kg		
Acute						
ADR _{pot}	9.70E-05	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 16 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 GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: 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 (%)		
3.00	1	3	350.00	2.40E-02	0.00		
788.00	0	0	350.00	2.40E-02	0.00		
920.00	0	0	350.00	2.40E-02	0.00		
1.44E+04	0	0	350.00	2.40E-02	0.00		

Chemical ID: TCE-0%

Assessor:

ENVIRONMENTAL RELEASES	S
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Scenario#:17

Number of Release Sites: 1.

Release Activity:

Solvay 20 dy

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

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A	
0.41	N/A/0.00	N/A	N/A	
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)	

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:17 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: Yes DISCHARGE TYPE: Direct

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 30Q5 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	1.12E-06 mg/kg/day		mg/kg/day			
LADC _{pot}	8.63E-05	8.63E-05 mg/L		mg/kg			
Acute							
ADR _{pot} 1.66E-03 mg/kg/day 0.00 mg/kg/day							

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 17 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 GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: 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 (%)		
3.00	1	5	20.00	0.41	0.00		
788.00	0	0	20.00	0.41	0.00		
920.00	0	0	20.00	0.41	0.00		
1.44E+04	0	0	20.00	0.41	0.00		

Chemical ID: TCE-0 Assessor:

ENVIRONMENTAL RELEASES

Scenario#:25 Number of Release Sites: 1.

Release Activity: Natrium 250 dy

Release Description:	ion: WATER LAND		STACK	FUGITIVE
Total Releases:	5.50	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:
 2.20E-02
 N/A/0.00
 N/A
 N/A

 (kg/site/day)
 (kg/site/day)
 (kg/site/day)
 (kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:25 RELEASE ACTIVITY: Natrium 250 dy

FACILITY NAME: PPG INDUSTRIES INC.

FACILITY LOCATION: NEW MARTINSVILLE WV 26155

RECEIVING WATER NAME: OHIO R

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

NPDES PERMIT #: WV0004359 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	0.022	2.20E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	3.88E+04	1.13E+04	8396.41	6686.06	NA	
CONCENTRATION (µg/L)	5.66E-04	1.94E-03	2.62E-03	3.29E-03	NA	

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES							
Exposure Units	Drinking Water Results	Drinking Water Units	Fish Ingestion Results	Fish Ingestion Units			
Cancer							
LADD _{pot}	2.13E-09 mg/kg/day		0.00 mg/kg/day				
LADC _{pot}	1.64E-07	1.64E-07 mg/L		mg/kg			
Acute							
ADR _{pot}	7.34E-08 mg/kg/day 0.00 mg/kg/da						

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 25 RELEASE ACTIVITY: Natrium 250 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 GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

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

(MLD):378.44

RESULTS							
		Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)		
3.00	0	0	250.00	2.20E-02	0.00		
788.00	0	0	250.00	2.20E-02	0.00		
920.00	0	0	250.00	2.20E-02	0.00		
1.44E+04	0	0	250.00	2.20E-02	0.00		

Chemical ID: TCE-0

Assessor:

Scenario#:26 Number of Release Sites: 1.

Release Activity: Natrium 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	5.40	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
0.27	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:26 RELEASE ACTIVITY: Natrium 20 dy

FACILITY NAME: PPG INDUSTRIES INC.

FACILITY LOCATION: NEW MARTINSVILLE WV 26155

RECEIVING WATER NAME: OHIO R

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

NPDES PERMIT #: WV0004359 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.27	0.27	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	3.88E+04	1.13E+04	8396.41	6686.06	NA	
CONCENTRATION (µg/L)	6.95E-03	2.38E-02	3.22E-02	4.04E-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}	2.10E-09 mg/kg/day		0.00 mg/kg/day			
LADC _{pot}	1.61E-07 mg/L		0.00	mg/kg		
Acute						
ADR_{pot}	9.01E-07	9.01E-07 mg/kg/day 0.00 mg/kg/day				

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 26 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 GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

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

(MLD):378.44

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 (%)	
3.00	0	0	20.00	0.27	0.00	
788.00	0	0	20.00	0.27	0.00	
920.00	0	0	20.00	0.27	0.00	
1.44E+04	0	0	20.00	0.27	0.00	

Chemical ID: TCE-0

Assessor:

Scenario#:27 Number of Release Sites: 1.

Release Activity: Leroy 250 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	4.75	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

250.00	0.00/0.00	N/A	N/A
1.90E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:27 RELEASE ACTIVITY: Leroy 250 dy

FACILITY NAME: LEROY (V) SEWAGE TRT PLT

FACILITY LOCATION: LE ROY NY 14482 RECEIVING WATER NAME: OATKA CR

REACH NUMBER: 04130003005 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: NY0030546 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	0.019	1.90E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLAN					PLANT	
FLOW (MLD)	117.02	44.26	26.95	22.34	NA	
CONCENTRATION (µg/L)	0.16	0.43	0.71	0.85	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}	6.12E-07 mg/kg/day		0.00	mg/kg/day		
LADC _{pot}	4.71E-05 mg/L		0.00	mg/kg		
Acute						
ADR _{pot}	1.63E-05	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 27 RELEASE ACTIVITY: Leroy 250 dy

FACILITY NAME: LEROY (V) SEWAGE TRT PLT

FACILITY LOCATION: LE ROY NY 14482 RECEIVING STREAM NAME: OATKA CR

REACH NUMBER: 04130003005 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NY0030546 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 363.79 7q10 FLOW (MLD): 26.95 EFFLUENT FLOW

(MLD):1.89

RESULTS							
COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)		
3.00	0	0	250.00	1.90E-02	0.00		
788.00	0	0	250.00	1.90E-02	0.00		
920.00	0	0	250.00	1.90E-02	0.00		
1.44E+04	0	0	250.00	1.90E-02	0.00		

Chemical ID: TCE-0

Assessor:

Scenario#:28 Number of Release Sites: 1.

Release Activity: Leroy 20 dy

Release Description:	WATER	WATER LANDFILL		FUGITIVE
	Non-sludge/Sludge			
Total Releases:	4.80	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
0.24	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:28 RELEASE ACTIVITY: Leroy 20 dy

FACILITY NAME: LEROY (V) SEWAGE TRT PLT

FACILITY LOCATION: LE ROY NY 14482 RECEIVING WATER NAME: OATKA CR

REACH NUMBER: 04130003005 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: NY0030546 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.24	0.24	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT					PLANT
FLOW (MLD)	117.02	44.26	26.95	22.34	NA
CONCENTRATION (µg/L)	2.05	5.42	8.91	10.74	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}	6.18E-07 mg/kg/day 0.00 mg/kg/day					
LADC _{pot}	4.75E-05	4.75E-05 mg/L		mg/kg		
Acute						
ADR _{pot}	2.05E-04 mg/kg/day 0.00 mg/kg/day					

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 28 RELEASE ACTIVITY: Leroy 20 dy

FACILITY NAME: LEROY (V) SEWAGE TRT PLT

FACILITY LOCATION: LE ROY NY 14482 RECEIVING STREAM NAME: OATKA CR

REACH NUMBER: 04130003005 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NY0030546 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 363.79 7q10 FLOW (MLD): 26.95 EFFLUENT FLOW

(MLD):1.89

RESULTS							
COC (µg/L)	Percent of Year COC Exceeded	Number of Days COC Exceeded	Release days/year	Pre-treatment Loading (kg/site/day)	Waste Water Treatment (%)		
3.00	1	3	20.00	0.24	0.00		
788.00	0	0	20.00	0.24	0.00		
920.00	0	0	20.00	0.24	0.00		
1.44E+04	0	0	20.00	0.24	0.00		

Chemical ID: TCE-0

Assessor:

Scenario#:29 Number of Release Sites: 1.

Release Activity: Marshall 250 dy

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

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

250.00	0.00/0.00	N/A	N/A
1.00E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:29 RELEASE ACTIVITY: Marshall 250 dy

FACILITY NAME: TELEDYNE WAH CHANG HUNTSVILLE

FACILITY LOCATION: HUNTSVILLE AL 35806

RECEIVING WATER NAME: INDIAN CR

REACH NUMBER: 06030002080 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: AL0025585 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	0.01	1.00E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	135.55	79.60	49.48	40.84	NA	
CONCENTRATION (µg/L)	7.38E-02	0.13	0.20	0.24	NA	

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES						
Exposure Units	Drinking Water Results	Drinking Water Units	Fish Ingestion Results Units			
Cancer						
LADD _{pot}	2.78E-07 mg/kg/day 0.00 mg/kg/day					
LADC _{pot}	2.14E-05	2.14E-05 mg/L 0.00 mg/kg				
Acute						
ADR _{pot}	4.76E-06 mg/kg/day 0.00 mg/kg/day					

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 29 RELEASE ACTIVITY: Marshall 250 dy

FACILITY NAME: TELEDYNE WAH CHANG HUNTSVILLE

FACILITY LOCATION: HUNTSVILLE AL 35806

RECEIVING STREAM NAME: INDIAN CR

REACH NUMBER: 06030002080 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: AL0025585 GAGING STATION ID: 03575830

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 10/01/75 - 09/29/89 NUMBER OF REACH: 1

OBSERVATIONS: 4748.00

50 %ile FLOW (MLD): 63.60 10 %ile FLOW (MLD): 13.70 EFFLUENT FLOW

(MLD):5.00E-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 (%)	
3.00	0	0	250.00	1.00E-02	0.00	
788.00	0	0	250.00	1.00E-02	0.00	
920.00	0	0	250.00	1.00E-02	0.00	
1.44E+04	0	0	250.00	1.00E-02	0.00	

Assessor:

Chemical ID: TCE-0

ENVIRONMENTAL RELEASES		
Scenario#:30	Number of Release Sites: 1.	

Scenario#:30

Marshall 20 dy Release Activity:

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

Non-sludge/Sludge

Release Days/yr: 20.00 N/AN/A 0.00/0.00 Per Site Release: 0.13 N/A/0.00N/AN/A

(kg/site/day) (kg/site/day) (kg/site/day) (kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:30 RELEASE ACTIVITY: Marshall 20 dy

FACILITY NAME: TELEDYNE WAH CHANG HUNTSVILLE

FACILITY LOCATION: HUNTSVILLE AL 35806

RECEIVING WATER NAME: INDIAN CR

REACH NUMBER: 06030002080 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: AL0025585 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.13	0.13	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	135.55	79.60	49.48	40.84	NA	
CONCENTRATION (μg/L) 0.96 1.63 2.63 3.18 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}	2.89E-07 mg/kg/day 0.00 mg/kg/day			mg/kg/day		
LADC _{pot}	2.22E-05 mg/L		0.00	mg/kg		
Acute						
ADR_{pot}	6.19E-05 mg/kg/day 0.00 mg/kg/day					

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 30 RELEASE ACTIVITY: Marshall 20 dy

FACILITY NAME: TELEDYNE WAH CHANG HUNTSVILLE

FACILITY LOCATION: HUNTSVILLE AL 35806

RECEIVING STREAM NAME: INDIAN CR

REACH NUMBER: 06030002080 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: AL0025585 GAGING STATION ID: 03575830

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 10/01/75 - 09/29/89 NUMBER OF REACH: 1

OBSERVATIONS: 4748.00

50 %ile FLOW (MLD): 63.60 10 %ile FLOW (MLD): 13.70 EFFLUENT FLOW

(MLD):5.00E-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 (%)	
3.00	2	8	20.00	0.13	0.00	
788.00	0	0	20.00	0.13	0.00	
920.00	0	0	20.00	0.13	0.00	
1.44E+04	0	0	20.00	0.13	0.00	

Chemical ID: TCE-0

Assessor:

Scenario#:31 Number of Release Sites: 1.

Release Activity: Whelan 250 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	2.25	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

250.00	0.00/0.00	N/A	N/A
9.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:31 RELEASE ACTIVITY: Whelan 250 dy

FACILITY NAME: WHELAN ENERGY CENTER PWR PLANT

FACILITY LOCATION: HASTINGS NE 68901 RECEIVING WATER NAME: PAWNEE CR

REACH NUMBER: 10270206016 FACILITY ON REACH: Unk DISCHARGE TYPE: Direct

NPDES PERMIT #: NE0113506 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	0.009	9.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	13.41	5.45	3.08	2.59	NA	
CONCENTRATION (µg/L)	0.67	1.65	2.92	3.47	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}	2.53E-06 mg/kg/day 0.00 mg/kg/day			mg/kg/day		
LADC _{pot}	1.95E-04	mg/L	0.00	mg/kg		
Acute						
ADR _{pot}	6.26E-05	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 31 RELEASE ACTIVITY: Whelan 250 dy

FACILITY NAME: WHELAN ENERGY CENTER PWR PLANT

FACILITY LOCATION: HASTINGS NE 68901 RECEIVING STREAM NAME: PAWNEE CR

REACH NUMBER: 10270206016 FACILITY ON REACH: Unk DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NE0113506 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 46.88 7q10 FLOW (MLD): 3.08 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 (%)		
3.00	8	30	250.00	9.00E-03	0.00		
788.00	0	0	250.00	9.00E-03	0.00		
920.00	0	0	250.00	9.00E-03	0.00		
1.44E+04	0	0	250.00	9.00E-03	0.00		

Chemical ID: TCE-0

Assessor:

Scenario#:32 Number of Release Sites: 1.

Release Activity: Whelan 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE	
		Non-sludge/Sludge			
Total Releases:	2.40	N/A	N/A	N/A	
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)	

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
0.12	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:32 RELEASE ACTIVITY: Whelan 20 dy

FACILITY NAME: WHELAN ENERGY CENTER PWR PLANT

FACILITY LOCATION: HASTINGS NE 68901 RECEIVING WATER NAME: PAWNEE CR

REACH NUMBER: 10270206016 FACILITY ON REACH: Unk DISCHARGE TYPE: Direct

NPDES PERMIT #: NE0113506 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.12	0.12	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT					PLANT	
FLOW (MLD)	13.41	5.45	3.08	2.59	NA	
CONCENTRATION (µg/L)	8.95	22.04	38.96	46.29	NA	

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES						
Exposure Units	Drinking Water Results	Fish Ingestion Units				
Cancer						
LADD _{pot}	2.70E-06	mg/kg/day	0.00 mg/kg/day			
LADC _{pot}	2.07E-04	mg/L	0.00	mg/kg		
Acute						
ADR _{pot}	8.35E-04	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 32 RELEASE ACTIVITY: Whelan 20 dy

FACILITY NAME: WHELAN ENERGY CENTER PWR PLANT

FACILITY LOCATION: HASTINGS NE 68901 RECEIVING STREAM NAME: PAWNEE CR

REACH NUMBER: 10270206016 FACILITY ON REACH: Unk DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NE0113506 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 46.88 7q10 FLOW (MLD): 3.08 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 (%)	
3.00	4	13	20.00	0.12	0.00	
788.00	0	0	20.00	0.12	0.00	
920.00	0	0	20.00	0.12	0.00	
1.44E+04	0	0	20.00	0.12	0.00	

Chemical ID: TCE-0%

Assessor:

Scenario#:20 Number of Release Sites: 1.

Release Activity: Akzo 350 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	0.12	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

350.00	0.00/0.00	N/A	N/A
3.30E-04	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:20 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: Yes DISCHARGE TYPE: Direct

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.	0.00033	3.30E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	1098.93	713.96	479.41	389.48	NA	
CONCENTRATION (µg/L)	3.00E-04	4.62E-04	6.88E-04	8.47E-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}	1.58E-09 mg/kg/day 0.00 mg/kg/da			mg/kg/day		
LADC _{pot}	1.22E-07	mg/L	0.00 mg/kg			
Acute						
ADR _{pot}	1.75E-08	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 20 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: IL0026069 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

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 (%)	
3.00	0	0	350.00	3.30E-04	0.00	
788.00	0	0	350.00	3.30E-04	0.00	
920.00	0	0	350.00	3.30E-04	0.00	
1.44E+04	0	0	350.00	3.30E-04	0.00	

Chemical ID: TCE-2

Assessor:

ENVIRONMENTAL RELEASES							
Scenario#:21		Number of Release Sites	:: 1.				
Release Activity:	Akzo 20 dy	Akzo 20 dy					
Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE			
Total Releases:	0.12	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-03	N/A/0.00	N/A	N/A			
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)			

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:21 RELEASE ACTIVITY: Akzo 20 dy

FACILITY NAME: AKZO NOBEL SURFACE CHEMISTRY

FACILITY LOCATION: MORRIS IL 60450

RECEIVING WATER NAME: AUX SABLE CR

REACH NUMBER: 07120005014 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

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.	20.	0.006	6.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	1098.93	713.96	479.41	389.48	NA	
CONCENTRATION (μg/L) 5.46E-03 8.40E-03 1.25E-02 1.54E-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}	1.65E-09 mg/kg/day		0.00 mg/kg/day			
LADC _{pot}	1.27E-07 mg/L		0.00	mg/kg		
Acute						
ADR _{pot}	3.18E-07	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 21 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 GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

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 (%)		
3.00	0	0	20.00	6.00E-03	0.00		
788.00	0	0	20.00	6.00E-03	0.00		
920.00	0	0	20.00	6.00E-03	0.00		
1.44E+04	0	0	20.00	6.00E-03	0.00		

Chemical ID: TCE-0%

Assessor:

13505551.							
	ENV	TRONMENTAL RELEASES					
Scenario#:21		Number of Release Sites:	1.				
Release Activity: Solutia 350 dy							
Release Description:	WATER	LANDFILL	STACK	FUGITIVE			
Non-sludge/Sludge							
Total Releases:	0.11	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:	3.20E-04	N/A/0.00	N/A	N/A			

(kg/site/day)

(kg/site/day)

(kg/site/day)

(kg/site/day)

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:21 RELEASE ACTIVITY: Solutia 350 dy

FACILITY NAME: NITRO CITY OF

FACILITY LOCATION: NITRO WV 25143

RECEIVING WATER NAME: KANAWHA R

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

NPDES PERMIT #: WV0023299 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	350.	0.00032	3.20E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	1.50E+04	4737.79	3400.47	2724.98	NA	
CONCENTRATION (µg/L)	2.14E-05	6.75E-05	9.41E-05	1.17E-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}	1.13E-10 mg/kg/day		0.00 mg/kg/day			
LADC _{pot}	8.68E-09 mg/L		0.00	mg/kg		
Acute						
ADR_{pot}	2.56E-09 mg/kg/day		0.00	mg/kg/day		

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 21 RELEASE ACTIVITY: Solutia 350 dy

FACILITY NAME: NITRO CITY OF

FACILITY LOCATION: NITRO WV 25143

RECEIVING STREAM NAME: KANAWHA R

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

NPDES PERMIT NUMBER: WV0023299 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

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

(MLD):3.15

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 (%)		
3.00	0	0	350.00	3.20E-04	0.00		
788.00	0	0	350.00	3.20E-04	0.00		
920.00	0	0	350.00	3.20E-04	0.00		
1.44E+04	0	0	350.00	3.20E-04	0.00		

Chemical ID: TCE-2

Assessor:

Scenario#:23

Number of Release Sites: 1.

Release Activity:

Solutia 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	0.12	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr: Per Site Release:

(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)	
6.00E-03	N/A/0.00	N/A	N/A	
20.00	0.00/0.00	N/A	N/A	

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:23 RELEASE ACTIVITY: Solutia 20 dy

FACILITY NAME: NITRO CITY OF

FACILITY LOCATION: NITRO WV 25143

RECEIVING WATER NAME: KANAWHA R

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

NPDES PERMIT #: WV0023299 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.006	6.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	1.50E+04	4737.79	3400.47	2724.98	NA	
CONCENTRATION (µg/L)	4.01E-04	1.27E-03	1.76E-03	2.20E-03	NA	

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES									
Exposure Units Drinking Water Results Drinking Water Units Fish Ingestion Results Units The Property of the Pr									
Cancer									
LADD _{pot}	1.21E-10	mg/kg/day	0.00 mg/kg/day						
LADC _{pot}	9.30E-09	mg/L	0.00	mg/kg					
Acute									
ADR _{pot}	ADR _{pot} 4.80E-08 mg/kg/day 0.00 mg/kg/day								

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 23 RELEASE ACTIVITY: Solutia 20 dy

FACILITY NAME: NITRO CITY OF

FACILITY LOCATION: NITRO WV 25143

RECEIVING STREAM NAME: KANAWHA R

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

NPDES PERMIT NUMBER: WV0023299 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

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

(MLD):3.15

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 (%)					
3.00	0	0	20.00	6.00E-03	0.00					
788.00	0	0	20.00	6.00E-03	0.00					
920.00	0	0	20.00	6.00E-03	0.00					
1.44E+04	0	0	20.00	6.00E-03	0.00					

Chemical ID: TCE-0%

Assessor:

ENVIRONMENTAL RELEASES									
Scenario#:22 Number of Release Sites: 1.									
Release Activity:	Amphenol 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)					

Chemical ID: TCE-0%

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

SCENARIO #: 22 Number of Sites: 1 RELEASE ACTIVITY: Amphenol

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.	0.0002	2.00E-04	0.00	0.00

	AQUATIC EXPOSURE ESTIMATES - SURFACE WATER										
PLANT TYPE	% ILE FACILITY		STREAM FI	LOW (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 Results		Drinking Water Units	Fish Ingest	tion Results	Fish Ingestion Units	
	50%	10%		50%	10%				
Cancer									
$LADD_{pot}$	3.73E-10	2.09E-08	mg/kg/day	0.00	0.00	mg/kg/day			
LADC _{pot}	2.87E-08	1.60E-06	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:

Chemical ID: TCE-0%

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 22 RELEASE ACTIVITY: Amphenol 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					
3.00	0	0	350.00	2.00E-04	0.00	High					
788.00	0	0	350.00	2.00E-04	0.00	High					
920.00	0	0	350.00	2.00E-04	0.00	High					
1.44E+04	0	0	350.00	2.00E-04	0.00	High					

Chemical ID: TCE-2

Assessor:

ENVIRONMENTAL RELEASES									
Scenario#:29		Number of Release Site	s: 1.						
Release Activity:	Amphenol 20 dy								
Release Description:	WATER	LANDFILL	STACK	FUGITIVE					
		Non-sludge/Sludge							
Total Releases:	8.00E-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:	4.00E-03	N/A/0.00	N/A	N/A					
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)					

Chemical ID: TCE-2

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

SCENARIO #: 29 Number of Sites: 1 RELEASE ACTIVITY: Amphenol

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.	0.004	4.00E-03	0.00	0.00

	AQUATIC EXPOSURE ESTIMATES - SURFACE WATER										
PLANT TYPE	% ILE FACILITY		STREAM FI	LOW (MLD)	STREAM CONC. (μg/l)					
		Harmonic Mean						7Q10	1Q10		
ALL	50	2825.61	935.49	634.16	514.20	1.42E-03	4.28E-03	6.31E-03	7.78E-03		
ALL	10	50.57	9.38	5.41	4.53	7.91E-02	0.43	0.74	0.88		

DRINKING WATER AND FISH INGESTION EXPOSURE ESTIMATES									
Exposure Units	Drinking Water Results		e		Drinking Water Units	Fish Ingestion Results		Fish Ingestion Units	
	50%	10%		50%	10%				
Cancer									
$LADD_{pot}$	4.27E-10	2.38E-08	mg/kg/day	0.00	0.00	mg/kg/day			
LADC _{pot}	3.28E-08	1.83E-06	mg/L	0.00	0.00	mg/kg			
Acute									
ADR _{pot}	1.62E-07	1.62E-05	mg/kg/day	0.00	0.00	mg/kg/day			

SIC Code Comments:

Chemical ID: TCE-2

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 29 RELEASE ACTIVITY: Amphenol 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					
3.00	0	1	20.00	4.00E-03	0.00	High					
788.00	0	0	20.00	4.00E-03	0.00	High					
920.00	0	0	20.00	4.00E-03	0.00	High					
1.44E+04	0	0	20.00	4.00E-03	0.00	High					

Chemical ID: TCE-0%

Assessor:

ENVIRONMENTAL RELEASES								
Scenario#:1	Number of Release Sites: 1.							
Release Activity:	Army Cold 250 dy	Army Cold 250 dy						
Release Description:	WATER	WATER LANDFILL STA						
Non-sludge/Sludge								
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	2.00E-04 N/A/0.00		N/A				
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)				

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:1 RELEASE ACTIVITY: Army Cold 250 dy

FACILITY NAME: HANOVER W W T P

FACILITY LOCATION: HANOVER NH 03755

RECEIVING WATER NAME: CONNECTICUT R

REACH NUMBER: 01080104036 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: NH0100099 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	0.0002	2.00E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	7529.34	2763.39	1946.10	1565.62	NA	
CONCENTRATION (µg/L)	2.66E-05	7.24E-05	1.03E-04	1.28E-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}	1.00E-10	1.00E-10 mg/kg/day		mg/kg/day		
LADC _{pot}	7.70E-09 mg/L		0.00	mg/kg		
Acute						
ADR _{pot}	2.74E-09	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 1 RELEASE ACTIVITY: Army Cold 250 dy

FACILITY NAME: HANOVER W W T P

FACILITY LOCATION: HANOVER NH 03755

RECEIVING STREAM NAME: CONNECTICUT R

REACH NUMBER: 01080104036 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NH0100099 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 1.64E+04 7q10 FLOW (MLD): 1946.10 EFFLUENT FLOW

(MLD):5.52

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 (%)	
3.00	0	0	250.00	2.00E-04	0.00	
788.00	0	0	250.00	2.00E-04	0.00	
920.00	0	0	250.00	2.00E-04	0.00	
1.44E+04	0	0	250.00	2.00E-04	0.00	

Chemical ID: TCE-0%

Assessor:

Scenario#:2 Number of Release Sites: 1.

Release Activity: Army Cold 20 dy

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

20.00	0.00/0.00	N/A	N/A
3.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:2 RELEASE ACTIVITY: Army Cold 20 dy

FACILITY NAME: HANOVER W W T P

FACILITY LOCATION: HANOVER NH 03755

RECEIVING WATER NAME: CONNECTICUT R

REACH NUMBER: 01080104036 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: NH0100099 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.003	3.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	7529.34	2763.39	1946.10	1565.62	NA	
CONCENTRATION (µg/L)	3.98E-04	1.09E-03	1.54E-03	1.92E-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}	1.20E-10 mg/kg/day		0.00	mg/kg/day		
LADC _{pot}	9.24E-09 mg/L		0.00	mg/kg		
Acute						
ADR_{pot}	4.11E-08	4.11E-08 mg/kg/day 0.00 mg/kg/day				

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 2 RELEASE ACTIVITY: Army Cold 20 dy

FACILITY NAME: HANOVER W W T P

FACILITY LOCATION: HANOVER NH 03755

RECEIVING STREAM NAME: CONNECTICUT R

REACH NUMBER: 01080104036 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NH0100099 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 1.64E+04 7q10 FLOW (MLD): 1946.10 EFFLUENT FLOW

(MLD):5.52

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 (%)	
3.00	0	0	20.00	3.00E-03	0.00	
788.00	0	0	20.00	3.00E-03	0.00	
920.00	0	0	20.00	3.00E-03	0.00	
1.44E+04	0	0	20.00	3.00E-03	0.00	

Chemical ID: TCE-0

Assessor:

Scenario#:35 Number of Release Sites: 1.

Release Activity: Corning 250 dy

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

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

250.00	0.00/0.00	N/A	N/A
2.00E-04	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:35 RELEASE ACTIVITY: Corning 250 dy

FACILITY NAME: DEKALB JUNCTION STP

FACILITY LOCATION: DEKALB JUNCTION NY 13630

RECEIVING WATER NAME: OSWEGATCHIE R

REACH NUMBER: 04150302004 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: NY0034762 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	0.0002	2.00E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT					
FLOW (MLD)	1972.81	869.99	588.26	477.23	NA
CONCENTRATION (μg/L) 1.01E-04 2.30E-04 3.40E-04 4.19E-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}	3.82E-10 mg/kg/day 0.00 mg/kg/day					
LADC _{pot}	2.94E-08 mg/L		0.00	mg/kg		
Acute						
ADR _{pot}	8.71E-09	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 35 RELEASE ACTIVITY: Corning 250 dy

FACILITY NAME: DEKALB JUNCTION STP

FACILITY LOCATION: DEKALB JUNCTION NY 13630

RECEIVING STREAM NAME: OSWEGATCHIE R

REACH NUMBER: 04150302004 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NY0034762 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 3907.84 7q10 FLOW (MLD): 588.26 EFFLUENT FLOW

(MLD):3.00E-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 (%)	
3.00	0	0	250.00	2.00E-04	0.00	
788.00	0	0	250.00	2.00E-04	0.00	
920.00	0	0	250.00	2.00E-04	0.00	
1.44E+04	0	0	250.00	2.00E-04	0.00	

Assessor:

Chemical ID: TCE-0

ENVIRONMENTAL	RELEASES
LIVINOIMILIVIAL	KLLLADLD

Scenario#:36 Number of Release Sites: 1.

Release Activity: Corning 20 dy

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

Non-sludge/Sludge

Release Days/yr: Per Site Release:

20.00	0.00/0.00	N/A	N/A
3.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:36 RELEASE ACTIVITY: Corning 20 dy

FACILITY NAME: DEKALB JUNCTION STP

FACILITY LOCATION: DEKALB JUNCTION NY 13630

RECEIVING WATER NAME: OSWEGATCHIE R

REACH NUMBER: 04150302004 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: NY0034762 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.003	3.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER					
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT					
FLOW (MLD)	1972.81	869.99	588.26	477.23	NA
CONCENTRATION (μg/L) 1.52E-03 3.45E-03 5.10E-03 6.29E-03 N					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}	4.58E-10 mg/kg/day		0.00 mg/kg/day				
LADC _{pot}	3.53E-08 mg/L		0.00	mg/kg			
Acute							
ADR_{pot}	1.31E-07	mg/kg/day	0.00	mg/kg/day			

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 36 RELEASE ACTIVITY: Corning 20 dy

FACILITY NAME: DEKALB JUNCTION STP

FACILITY LOCATION: DEKALB JUNCTION NY 13630

RECEIVING STREAM NAME: OSWEGATCHIE R

REACH NUMBER: 04150302004 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NY0034762 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 3907.84 7q10 FLOW (MLD): 588.26 EFFLUENT FLOW

(MLD):3.00E-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 (%)		
3.00	0	0	20.00	3.00E-03	0.00		
788.00	0	0	20.00	3.00E-03	0.00		
920.00	0	0	20.00	3.00E-03	0.00		
1.44E+04	0	0	20.00	3.00E-03	0.00		

Chemical ID: TCE-0%

Assessor:

ENVIRONMENTAL	DELEVEES
ENVIKONMENTAL	KELEASES

Scenario#:23 Number of Release Sites: 1.

Release Activity: Keeshan 350 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	3.33E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

350.00	0.00/0.00	N/A	N/A
9.50E-05	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS				
SCENARIO #: 23 RELEASE ACTIVITY: Keeshan 350 dy				
FACILITY NAME: KEESHAN AND CO-MANVEL				
FACILITY LOCATION: MANVE	FACILITY LOCATION: MANVEL TX 77578			
RECEIVING WATER NAME: W.	RECEIVING WATER NAME: WEST BAY			
REACH NUMBER: 12040204020 FACILITY ON REACH: No DISCHARGE TYPE: Direct				
NPDES PERMIT #: TX0072168	PDES 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	0.0002	9.50E-05	0.00

AQUATIC EXPOSURE ESTIMATES				
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)		
ACUTE SCENARIO	1.00	9.50		
CHRONIC SCENARIO	1.00	9.50		

FISH INGESTION EXPOSURE ESTIMATES					
		ASSUMPTIONS			
Exposure Units	Results	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:

Chemical ID: TCE-2

Assessor:

Scenario#:41

Number of Release Sites: 1.

Release Activity:

Keeshan 20 dy

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

 20.00
 0.00/0.00
 N/A
 N/A

 2.00E-03
 N/A/0.00
 N/A
 N/A

 (kg/site/day)
 (kg/site/day)
 (kg/site/day)
 (kg/site/day)

Chemical ID: TCE-2

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS			
SCENARIO #: 41 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	PDES 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	0.002	2.00E-03	0.00

AQUATIC EXPOSURE ESTIMATES				
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)		
ACUTE SCENARIO	1.00	200.00		
CHRONIC SCENARIO	1.00	200.00		

FISH INGESTION EXPOSURE ESTIMATES						
		ASSUMPTIONS				
Exposure Units	Results	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)						

Lakes Comments:

Chemical ID: TCE

Assessor:

Scenario#:7 Number of Release Sites: 1.

Release Activity: Ames 250 dy

Release Description:	WATER	WATER LANDFILL		FUGITIVE
	Non-sludge/Sludge			
Total Releases:	2.75E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

250.00	0.00/0.00 N/A		N/A
1.10E-04	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:7 RELEASE ACTIVITY: Ames 250 dy

FACILITY NAME: AMES RUBBER CORP

FACILITY LOCATION: HAMBURG NJ 07419

RECEIVING WATER NAME: WALLKILL R

REACH NUMBER: 02020007028 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: NJ0000141 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	0.00011	1.10E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLAN						
FLOW (MLD)	42.70	12.63	7.36	6.16	NA	
CONCENTRATION (µg/L)	2.58E-03	8.71E-03	1.49E-02	1.79E-02	NA	

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES							
Exposure Units	Drinking Water Results	Drinking Water Units	Fish Ingestion Results	Fish Ingestion Units			
Cancer							
LADD _{pot}	9.71E-09	mg/kg/day	0.00	mg/kg/day			
LADC _{pot}	7.47E-07	mg/L	0.00 mg/kg				
Acute							
ADR _{pot} 3.30E-07 mg/kg/day 0.00 mg/kg/day							

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 7 RELEASE ACTIVITY: Ames 250 dy

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

FACILITY NAME: AMES RUBBER CORP

FACILITY LOCATION: HAMBURG NJ 07419 RECEIVING STREAM NAME: WALLKILL R

REACH NUMBER: 02020007028 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NJ0000141 GAGING STATION ID: 01368720

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/68 - 09/29/80 NUMBER OF REACH: 1

OBSERVATIONS: 3813.00

50 %ile FLOW (MLD): 2.69 10 %ile FLOW (MLD): 0.00 EFFLUENT FLOW

(MLD):0.31

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 (%)		
3.00	14	53	250.00	1.10E-04	0.00		
788.00	14	50	250.00	1.10E-04	0.00		
920.00	14	50	250.00	1.10E-04	0.00		
1.44E+04	14	50	250.00	1.10E-04	0.00		

Chemical ID: TCE

Assessor:

Scenario#:8 Number of Release Sites: 1.

Release Activity: Ames 20 dy

Release Description:	WATER	WATER LANDFILL		FUGITIVE
	Non-sludge/Sludge			
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:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
1.30E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:8 RELEASE ACTIVITY: Ames 20 dy

FACILITY NAME: AMES RUBBER CORP

FACILITY LOCATION: HAMBURG NJ 07419

RECEIVING WATER NAME: WALLKILL R

REACH NUMBER: 02020007028 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: NJ0000141 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.0013	1.30E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER							
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLA					PLANT		
FLOW (MLD)	42.70	12.63	7.36	6.16	NA		
CONCENTRATION (µg/L)	3.04E-02	0.10	0.18	0.21	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}	9.18E-09 mg/kg/day		0.00 mg/kg/day				
LADC _{pot}	7.06E-07 mg/L		0.00	mg/kg			
Acute							
ADR _{pot}	3.90E-06	mg/kg/day	0.00	mg/kg/day			

Surface Water Comments:

INITIAL REVIEW EXPOSURE REPORT

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 8 RELEASE ACTIVITY: Ames 20 dy

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

FACILITY NAME: AMES RUBBER CORP

FACILITY LOCATION: HAMBURG NJ 07419 RECEIVING STREAM NAME: WALLKILL R

REACH NUMBER: 02020007028 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NJ0000141 GAGING STATION ID: 01368720

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/68 - 09/29/80 NUMBER OF REACH: 1

OBSERVATIONS: 3813.00

50 %ile FLOW (MLD): 2.69 10 %ile FLOW (MLD): 0.00 EFFLUENT FLOW

(MLD):0.31

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 (%)			
3.00	2	6	20.00	1.30E-03	0.00			
788.00	1	4	20.00	1.30E-03	0.00			
920.00	1	4	20.00	1.30E-03	0.00			
1.44E+04	1	4	20.00	1.30E-03	0.00			

Chemical ID: TCE-0

Assessor:

ENVIRONMENTAL RELEASES								
Scenario#:39	Scenario#:39 Number of Release Sites: 1.							
Release Activity:	Gorham 250 dy							
Release Description:	Description: WATER LANDFILL STACK FUGITIVE Non-sludge/Sludge							
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)				

Chemical ID: TCE-0

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

SCENARIO #: 39

Number of Sites: 1

RELEASE ACTIVITY:Gorham

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.	0.0001	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	288.00	123.84	78.18	66.05	3.47E-04	8.07E-04	1.28E-03	1.51E-03
ALL	10	39.60	13.29	7.76	7.57	2.53E-03	7.52E-03	1.29E-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								
$LADD_{pot}$	1.31E-09	9.51E-09	mg/kg/day	0.00	0.00	mg/kg/day		
LADC _{pot}	1.01E-07	7.32E-07	mg/L	0.00	0.00	mg/kg		
Acute								
ADR_{pot}	3.06E-08	2.85E-07	mg/kg/day	0.00	0.00	mg/kg/day		

SIC Code Comments:

Chemical ID: TCE-0

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 39 RELEASE ACTIVITY: Gorham 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			
3.00	0	0	250.00	1.00E-04	0.00	High			
788.00	0	0	250.00	1.00E-04	0.00	High			
920.00	0	0	250.00	1.00E-04	0.00	High			
1.44E+04	0	0	250.00	1.00E-04	0.00	High			

Chemical ID: TCE-0

Assessor:

Scenario#:40 Number of Release Sites: 1.

Release Activity: Gorham 20 dy

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

20.00	0.00/0.00	N/A	N/A
1.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

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

SCENARIO #: 40

Number of Sites: 1

RELEASE ACTIVITY:Gorham 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.	0.001	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 50% 10%		Drinking Water Units	Fish Ingestion Results		Fish Ingestion Units		
				50%	10%			
	Cancer							
$\mathrm{LADD}_{\mathrm{pot}}$	1.05E-09	7.61E-09	mg/kg/day	0.00	0.00	mg/kg/day		
LADC _{pot}	8.05E-08 5.85E-07		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:

Chemical ID: TCE-0

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 40 RELEASE ACTIVITY: Gorham 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	
3.00	0	0	20.00	1.00E-03	0.00	High	
788.00	0	0	20.00	1.00E-03	0.00	High	
920.00	0	0	20.00	1.00E-03	0.00	High	
1.44E+04	0	0	20.00	1.00E-03	0.00	High	

OTHER COMMERCIAL USES

Chemical ID: TCE-0

Assessor:

Scenario#:41 Number of Release Sites: 1.

Release Activity: Corning NY 250 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	3.25	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

250.00	0.00/0.00	N/A	N/A
1.30E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:41 RELEASE ACTIVITY: Corning NY 250 dy

FACILITY NAME: CORNING (C) STP

FACILITY LOCATION: CORNING NY 14850 RECEIVING WATER NAME: CHEMUNG R

REACH NUMBER: 02050105014 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: NY0025721 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	0.013	1.30E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER							
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT							
FLOW (MLD)	2176.36	715.15	480.24	390.15	NA		
CONCENTRATION (µg/L)	5.97E-03	1.82E-02	2.71E-02	3.33E-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}	2.25E-08 mg/kg/day 0.00 mg/kg/day			mg/kg/day		
LADC _{pot}	1.73E-06 mg/L 0.00 mg/kg			mg/kg		
Acute						
ADR _{pot}	6.88E-07	mg/kg/day	0.00	mg/kg/day		

Surface Water Comments:

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 41 RELEASE ACTIVITY: Corning NY 250 dy

FACILITY NAME: CORNING (C) STP

FACILITY LOCATION: CORNING NY 14850 RECEIVING STREAM NAME: CHEMUNG R

REACH NUMBER: 02050105014 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NY0025721 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 6094.30 7q10 FLOW (MLD): 480.24 EFFLUENT FLOW

(MLD):6.74

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 (%)		
3.00	0	0	250.00	1.30E-02	0.00		
788.00	0	0	250.00	1.30E-02	0.00		
920.00	0	0	250.00	1.30E-02	0.00		
1.44E+04	0	0	250.00	1.30E-02	0.00		

Chemical ID: TCE-0

Assessor:

Scenario#:42 Number of Release Sites: 1.

Release Activity: Corning NY 20 dy

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

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
0.16	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:42 RELEASE ACTIVITY: Corning NY 20 dy

FACILITY NAME: CORNING (C) STP

FACILITY LOCATION: CORNING NY 14850 RECEIVING WATER NAME: CHEMUNG R

REACH NUMBER: 02050105014 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: NY0025721 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.16	0.16	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	2176.36	715.15	480.24	390.15	NA	
CONCENTRATION (µg/L)	7.35E-02	0.22	0.33	0.41	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}	2.22E-08 mg/kg/day		0.00 mg/kg/day				
LADC _{pot}	1.70E-06 mg/L		0.00	mg/kg			
Acute							
ADR _{pot}	8.47E-06 mg/kg/day 0.00			mg/kg/day			

Surface Water Comments:

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 42 RELEASE ACTIVITY: Corning NY 20 dy

FACILITY NAME: CORNING (C) STP

FACILITY LOCATION: CORNING NY 14850 RECEIVING STREAM NAME: CHEMUNG R

REACH NUMBER: 02050105014 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NY0025721 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 6094.30 7q10 FLOW (MLD): 480.24 EFFLUENT FLOW

(MLD):6.74

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 (%)			
3.00	0	0	20.00	0.16	0.00			
788.00	0	0	20.00	0.16	0.00			
920.00	0	0	20.00	0.16	0.00			
1.44E+04	0	0	20.00	0.16	0.00			

Chemical ID: TCE-0%

Assessor:

ENVIR	ONN	MENTA	AL F	REL	EAS	ES

Scenario#:5

Number of Release Sites: 1.

Release Activity:

Water 250 dy

Release Description:	Release Description: WATER		STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	0.75	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr: Per Site Release:

250.00	0.00/0.00	N/A	N/A
3.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:5 RELEASE ACTIVITY: Water 250 dy

FACILITY NAME: GENERAL MOTORS CORPORATION

FACILITY LOCATION: DAYTON OH 45401

RECEIVING WATER NAME: GREAT MIAMI R

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

NPDES PERMIT #: OH0009521 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	0.003	3.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER							
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT		
FLOW (MLD)	2284.23	789.03	531.69	431.64	NA		
CONCENTRATION (µg/L)	1.31E-03	3.80E-03	5.64E-03	6.95E-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}	4.95E-09	mg/kg/day	0.00	mg/kg/day			
LADC _{pot}	3.81E-07	3.81E-07 mg/L 0.00 mg/kg		mg/kg			
Acute							
ADR _{pot}	1.44E-07 mg/kg/day 0.00 mg/kg/day						

Surface Water Comments:

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 5 RELEASE ACTIVITY: Water 250 dy

FACILITY NAME: GENERAL MOTORS CORPORATION

FACILITY LOCATION: DAYTON OH 45401

RECEIVING STREAM NAME: GREAT MIAMI R

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

NPDES PERMIT NUMBER: OH0009521 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

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

(MLD):7.28

	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 (%)				
3.00	0	0	250.00	3.00E-03	0.00				
788.00	0	0	250.00	3.00E-03	0.00				
920.00	0	0	250.00	3.00E-03	0.00				
1.44E+04	0	0	250.00	3.00E-03	0.00				

Chemical ID: TCE-0%

Assessor:

Scenario#:6 Number of Release Sites: 1.

Release Activity: Water 20 dy

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

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
3.50E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:6 RELEASE ACTIVITY: Water 20 dy

FACILITY NAME: GENERAL MOTORS CORPORATION

FACILITY LOCATION: DAYTON OH 45401

RECEIVING WATER NAME: GREAT MIAMI R

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

NPDES PERMIT #: OH0009521 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.035	3.50E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	2284.23	789.03	531.69	431.64	NA	
CONCENTRATION (μg/L)	1.53E-02	4.44E-02	6.58E-02	8.11E-02	NA	

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES						
Exposure Units	Drinking Water Results			Fish Ingestion Units		
Cancer						
LADD _{pot}	4.62E-09 mg/kg/day 0.00 mg/kg/day			mg/kg/day		
LADC _{pot}	3.55E-07 mg/L		0.00	mg/kg		
Acute						
ADR _{pot}	1.68E-06 mg/kg/day 0.00 mg/kg/day					

Surface Water Comments:

Chemical ID: TCE-0%

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 6 RELEASE ACTIVITY: Water 20 dy

FACILITY NAME: GENERAL MOTORS CORPORATION

FACILITY LOCATION: DAYTON OH 45401

RECEIVING STREAM NAME: GREAT MIAMI R

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

NPDES PERMIT NUMBER: OH0009521 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

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

(MLD):7.28

	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 (%)			
3.00	0	0	20.00	3.50E-02	0.00			
788.00	0	0	20.00	3.50E-02	0.00			
920.00	0	0	20.00	3.50E-02	0.00			
1.44E+04	0	0	20.00	3.50E-02	0.00			

Chemical ID: TCE-0

Assessor:

Scenario#:45

Number of Release Sites: 1.

Release Activity:

Union 250 dy

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

Non-sludge/Sludge

Release Days/yr: Per Site Release:

250.00	0.00/0.00	N/A	N/A N/A	
4.00E-04	N/A/0.00	N/A		
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)	

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:45 RELEASE ACTIVITY: Union 250 dy

FACILITY NAME: GLENDALE CITY OF

FACILITY LOCATION: GLENDALE CO 802461511

RECEIVING WATER NAME: CHERRY CR

REACH NUMBER: 10190003027 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: CO0020095 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	0.0004	4.00E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	20.45	7.92	4.54	4.54	NA	
CONCENTRATION (µg/L)	1.96E-02	5.05E-02	8.81E-02	8.81E-02	NA	

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES						
Exposure Units	Drinking Water Results Drinking Water Units Fish Ingestion Results Units					
Cancer						
LADD _{pot}	7.37E-08 mg/kg/day 0.00 mg/kg/day					
LADC _{pot}	5.67E-06 mg/L 0.00 mg/kg			mg/kg		
Acute						
ADR _{pot}	1.91E-06	1.91E-06 mg/kg/day 0.00 mg/kg/day				

Surface Water Comments:

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 45 RELEASE ACTIVITY: Union 250 dy

FACILITY NAME: GLENDALE CITY OF

FACILITY LOCATION: GLENDALE CO 802461511

RECEIVING STREAM NAME: CHERRY CR

REACH NUMBER: 10190003027 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: CO0020095 GAGING STATION ID: 06713000

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/66 - 09/29/89 NUMBER OF REACH: 1

OBSERVATIONS: 8674.00

50 %ile FLOW (MLD): 0.00 10 %ile FLOW (MLD): 0.00 EFFLUENT FLOW

(MLD):4.54

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 (%)	
3.00	58	213	250.00	4.00E-04	0.00	
788.00	58	213	250.00	4.00E-04	0.00	
920.00	58	213	250.00	4.00E-04	0.00	
1.44E+04	58	213	250.00	4.00E-04	0.00	

Chemical ID: TCE-0

Assessor:

Scenario#:46 Number of Release Sites: 1.

Release Activity: Union 20 dy

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

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
5.00E-03	5.00E-03 N/A/0.00		N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:46 RELEASE ACTIVITY: Union 20 dy

FACILITY NAME: GLENDALE CITY OF

FACILITY LOCATION: GLENDALE CO 802461511

RECEIVING WATER NAME: CHERRY CR

REACH NUMBER: 10190003027 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: CO0020095 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.005	5.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	7.92	4.54	4.54	NA		
CONCENTRATION (μg/L) 0.24 0.63 1.10 1.10 NA						

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES						
Exposure Units	Drinking Water Results Drinking Water Units Fish Ingestion Results Units Drinking Water Units Property Control of the Units Pr					
Cancer						
LADD _{pot}	7.37E-08 mg/kg/day 0.00 mg/kg/day			mg/kg/day		
LADC _{pot}	5.67E-06 mg/L 0.00 mg/kg			mg/kg		
Acute						
ADR _{pot}	2.39E-05 mg/kg/day 0.00 mg/kg/day					

Surface Water Comments:

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 46 RELEASE ACTIVITY: Union 20 dy

FACILITY NAME: GLENDALE CITY OF

FACILITY LOCATION: GLENDALE CO 802461511

RECEIVING STREAM NAME: CHERRY CR

REACH NUMBER: 10190003027 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: CO0020095 GAGING STATION ID: 06713000

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/66 - 09/29/89 NUMBER OF REACH: 1

OBSERVATIONS: 8674.00

50 %ile FLOW (MLD): 0.00 10 %ile FLOW (MLD): 0.00 EFFLUENT FLOW

(MLD):4.54

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 (%)	
3.00	5	18	20.00	5.00E-03	0.00	
788.00	5	17	20.00	5.00E-03	0.00	
920.00	5	17	20.00	5.00E-03	0.00	
1.44E+04	5	17	20.00	5.00E-03	0.00	

Chemical ID: TCE

Assessor:

ENVIRONMENTAL RELEASES								
Scenario#:1		Number of Release Sites: 1.						
Release Activity:	Confluence 250 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:	250.00	0.00/0.00	N/A	N/A				
Per Site Release:	2.80E-04	N/A/0.00	N/A	N/A				
	(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)				

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:1 RELEASE ACTIVITY: Confluence 250 dy

FACILITY NAME: GLENDALE CITY OF

FACILITY LOCATION: GLENDALE CO 802461511

RECEIVING WATER NAME: CHERRY CR

REACH NUMBER: 10190003027 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: CO0020095 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	250.	0.00028	2.80E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT						
FLOW (MLD)	20.45	7.92	4.54	4.54	NA	
CONCENTRATION (µg/L)	CONCENTRATION (μg/L) 1.37E-02 3.53E-02 6.17E-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}	5.16E-08	mg/kg/day	0.00	mg/kg/day		
LADC _{pot}	3.97E-06 mg/L 0.00 mg/kg					
Acute						
ADR _{pot}	1.34E-06	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 1 RELEASE ACTIVITY: Confluence 250 dy

FACILITY NAME: GLENDALE CITY OF

FACILITY LOCATION: GLENDALE CO 802461511

RECEIVING STREAM NAME: CHERRY CR

REACH NUMBER: 10190003027 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: CO0020095 GAGING STATION ID: 06713000

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/66 - 09/29/89 NUMBER OF REACH: 1

OBSERVATIONS: 8674.00

50 %ile FLOW (MLD): 0.00 10 %ile FLOW (MLD): 0.00 EFFLUENT FLOW

(MLD):4.54

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 (%)		
3.00	58	213	250.00	2.80E-04	0.00		
788.00	58	213	250.00	2.80E-04	0.00		
920.00	58	213	250.00	2.80E-04	0.00		
1.44E+04	58	213	250.00	2.80E-04	0.00		

Chemical ID: TCE

Assessor:

Scenario#:2 Number of Release Sites: 1.

Release Activity: Confluence 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	7.00E-02	N/A	N/A	NI/A
Total Releases.	7.00E-02	IN/A	IN/A	N/A

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
3.50E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:2 RELEASE ACTIVITY: Confluence 20 dy

FACILITY NAME: GLENDALE CITY OF

FACILITY LOCATION: GLENDALE CO 802461511

RECEIVING WATER NAME: CHERRY CR

REACH NUMBER: 10190003027 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: CO0020095 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.0035	3.50E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT					PLANT	
FLOW (MLD)	20.45	7.92	4.54	4.54	NA	
CONCENTRATION (µg/L)	0.17	0.44	0.77	0.77	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}	5.16E-08 mg/kg/day 0.00 mg/kg/day					
LADC _{pot}	3.97E-06 mg/L 0.00 mg/kg					
Acute						
ADR _{pot}	1.67E-05	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 2 RELEASE ACTIVITY: Confluence 20 dy

FACILITY NAME: GLENDALE CITY OF

FACILITY LOCATION: GLENDALE CO 802461511

RECEIVING STREAM NAME: CHERRY CR

REACH NUMBER: 10190003027 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: CO0020095 GAGING STATION ID: 06713000

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 01/01/66 - 09/29/89 NUMBER OF REACH: 1

OBSERVATIONS: 8674.00

50 %ile FLOW (MLD): 0.00 10 %ile FLOW (MLD): 0.00 EFFLUENT FLOW

(MLD):4.54

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 (%)		
3.00	5	17	20.00	3.50E-03	0.00		
788.00	5	17	20.00	3.50E-03	0.00		
920.00	5	17	20.00	3.50E-03	0.00		
1.44E+04	5	17	20.00	3.50E-03	0.00		

Chemical ID: TCE

Assessor:

Scenario#:3 Number of Release Sites: 1.

Release Activity: Park 250 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	Total Releases: 6.75E-02 N/A		N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

250.00	0.00/0.00	N/A	N/A
2.70E-04	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS					
SCENARIO #: 3 RELEASE ACTIVITY: Park 250 dy					
FACILITY NAME: DREAMS LANDING CONDO WWTP					
FACILITY LOCATION: ANNAPO	LIS MD 21401				
RECEIVING WATER NAME: SEV	RECEIVING WATER NAME: SEVERN R				
REACH NUMBER: 02060004002 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct					
NPDES PERMIT #: MD0052868	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.	3.00E-02	0.00027	2.70E-04	0.00

AQUATIC EXPOSURE ESTIMATES					
MIXING ZONE DILUTION FACTOR WATER CONCENTRATION					
ACUTE SCENARIO	1.00	9.00			
CHRONIC SCENARIO	1.00	9.00			

FISH INGESTION EXPOSURE ESTIMATES					
		ASSUMPTIONS			
Exposure Units	Results	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:

Chemical ID: TCE

Assessor:

Scenario#:4 Number of Release Sites: 1.

Release Activity: Park 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	6.60E-02	6.60E-02 N/A		N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr: Per Site Release:

20.00	0.00/0.00	N/A	N/A
3.30E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS					
SCENARIO #: 4 RELEASE ACTIVITY: Park 20 dy					
FACILITY NAME: DREAMS LAN	FACILITY NAME: DREAMS LANDING CONDO WWTP				
FACILITY LOCATION: ANNAPO	LIS MD 21401				
RECEIVING WATER NAME: SEV	RECEIVING WATER NAME: SEVERN R				
REACH NUMBER: 02060004002 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct					
NPDES PERMIT #: MD0052868	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.	3.00E-02	0.0033	3.30E-03	0.00

AQUATIC EXPOSURE ESTIMATES					
MIXING ZONE DILUTION FACTOR WATER CONCENTRATION (
ACUTE SCENARIO	1.00	110.00			
CHRONIC SCENARIO	1.00	110.00			

FISH INGESTION EXPOSURE ESTIMATES					
			ASSUMI	PTIONS	
Exposure Units	Results	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:

WASTE WATER TREATMENT PLANT

Chemical ID: TCE-0

Assessor:

Scenario#:51 Number of Release Sites: 1.

Release Activity: Rochelle 365 dy

WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge		
15.69	N/A	N/A	N/A
(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)
	15.69	Non-sludge/Sludge 15.69 N/A	Non-sludge/Sludge 15.69 N/A N/A

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

365.00	0.00/0.00	N/A	N/A
4.30E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

CHEMICAL ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS				
SCENARIO #: 51	SCENARIO #: 51 RELEASE ACTIVITY: Rochelle 365 dy			
FACILITY NAME: NEW ROCHEI	FACILITY NAME: NEW ROCHELLE SD			
FACILITY LOCATION: NEW ROCHELLE NY 10802				
RECEIVING WATER NAME: LONG ISLAND SOUND				
REACH NUMBER: 02030102001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct				
NPDES PERMIT #: NY0026697 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.	365.	61.75	0.043	4.30E-02	0.00

AQUATIC EXPOSURE ESTIMATES				
MIXING ZONE	DILUTION FACTOR	WATER CONCENTRATION (ug/L)		
ACUTE SCENARIO	1.00	0.70		
CHRONIC SCENARIO	1.00	0.70		

FISH INGESTION EXPOSURE ESTIMATES					
	ASSUMPTIONS				
Exposure Units	Results	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:

Chemical ID: TCE-0

Assessor:

Scenario#:52 Number of Release Sites: 1.

Release Activity: Rochelle 20 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	15.80	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr: Per Site Release:

20.00	0.00/0.00	N/A	N/A
0.79	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

CHEMICAL ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES: LAKES, BAYS, ESTUARIES, AND OCEANS				
SCENARIO #: 52	SCENARIO #: 52 RELEASE ACTIVITY: Rochelle 20 dy			
FACILITY NAME: NEW ROCHE	FACILITY NAME: NEW ROCHELLE SD			
FACILITY LOCATION: NEW ROCHELLE NY 10802				
RECEIVING WATER NAME: LONG ISLAND SOUND				
REACH NUMBER: 02030102001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct				
NPDES PERMIT #: NY0026697 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.	61.75	0.79	0.79	0.00

AQUATIC EXPOSURE ESTIMATES					
MIXING ZONE DILUTION FACTOR WATER CONCENTRATION (ug					
ACUTE SCENARIO	12.79				
CHRONIC SCENARIO	1.00	12.79			

FISH INGESTION EXPOSURE ESTIMATES							
		ASSUMPTIONS					
Exposure Units	Results	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:

Chemical ID: TCE-0

Assessor:

Scenario#:53 Number of Release Sites: 1.

Release Activity: Everett 365 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	5.84	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

365.00	0.00/0.00	N/A	N/A
1.60E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:53 RELEASE ACTIVITY: Everett 365 dy

FACILITY NAME: EVERETT CITY OF

FACILITY LOCATION: EVERETT WA 98205
RECEIVING WATER NAME: SNOHOMISH R

REACH NUMBER: 17110011001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: WA0024490 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	365.	0.016	1.60E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER							
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLANT							
FLOW (MLD)	126.32	151.78	96.51	96.51	NA		
CONCENTRATION (µg/L)	CONCENTRATION (μg/L) 0.13 0.11 0.17 0.17 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}	6.97E-07 mg/kg/day 0.00 mg/kg/day					
LADC _{pot}	5.36E-05 mg/L 0.00 mg			mg/kg		
Acute						
ADR _{pot}	3.99E-06	3.99E-06 mg/kg/day 0.00 mg/kg/day				

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 53 RELEASE ACTIVITY: Everett 365 dy

FACILITY NAME: EVERETT CITY OF

FACILITY LOCATION: EVERETT WA 98205 RECEIVING STREAM NAME: SNOHOMISH R

REACH NUMBER: 17110011001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: WA0024490 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 96.51 7q10 FLOW (MLD): 96.51 EFFLUENT FLOW

(MLD):96.51

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 (%)		
3.00	0	0	365.00	1.60E-02	0.00		
788.00	0	0	365.00	1.60E-02	0.00		
920.00	0	0	365.00	1.60E-02	0.00		
1.44E+04	0	0	365.00	1.60E-02	0.00		

Chemical ID: TCE-0

Assessor:

Scenario#:54

Number of Release Sites: 1.

Release Activity:

Everett 20 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:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
0.30	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:54 RELEASE ACTIVITY: Everett 20 dy

FACILITY NAME: EVERETT CITY OF

FACILITY LOCATION: EVERETT WA 98205 RECEIVING WATER NAME: SNOHOMISH R

REACH NUMBER: 17110011001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT #: WA0024490 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.3	0.30	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR Harmonic Mean 30Q5 7Q10 1Q10 PLAN					PLANT	
FLOW (MLD)	126.32	151.78	96.51	96.51	NA	
CONCENTRATION (µg/L)	2.37	1.98	3.11	3.11	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}	7.16E-07 mg/kg/day		0.00 mg/kg/day			
LADC _{pot}	5.51E-05 mg/L		0.00	mg/kg		
Acute						
ADR _{pot}	7.49E-05	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 54 RELEASE ACTIVITY: Everett 20 dy

FACILITY NAME: EVERETT CITY OF

FACILITY LOCATION: EVERETT WA 98205 RECEIVING STREAM NAME: SNOHOMISH R

REACH NUMBER: 17110011001 FACILITY ON REACH: Yes DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: WA0024490 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 96.51 7q10 FLOW (MLD): 96.51 EFFLUENT FLOW

(MLD):96.51

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 (%)		
3.00	2	7	20.00	0.30	0.00		
788.00	0	0	20.00	0.30	0.00		
920.00	0	0	20.00	0.30	0.00		
1.44E+04	0	0	20.00	0.30	0.00		

Chemical ID: TCE-0

Assessor:

Scenario#:55 Number of Release Sites: 1.

Release Activity: Sullivan 365 dy

Release Description:	WATER	LANDFILL Non-sludge/Sludge	STACK	FUGITIVE
Total Releases:	3.65	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

365.00	0.00/0.00	N/A	N/A
1.00E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:55 RELEASE ACTIVITY: Sullivan 365 dy

FACILITY NAME: SULLIVAN WWTP

FACILITY LOCATION: SULLIVAN MO 63080

RECEIVING WATER NAME: SPRING CR

REACH NUMBER: 07140103011 FACILITY ON REACH: Unk DISCHARGE TYPE: Direct

NPDES PERMIT #: MO0104736 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	365.	0.01	1.00E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	64.11	27.41	16.41	13.65	NA	
CONCENTRATION (µg/L)	0.16	0.36	0.61	0.73	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}	8.58E-07 mg/kg/day 0.00 mg/kg/day			mg/kg/day		
LADC _{pot}	6.60E-05 mg/L 0.00 mg/kg			mg/kg		
Acute						
ADR _{pot}	1.38E-05	mg/kg/day	0.00	mg/kg/day		

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 55 RELEASE ACTIVITY: Sullivan 365 dy

FACILITY NAME: SULLIVAN WWTP

FACILITY LOCATION: SULLIVAN MO 63080

RECEIVING STREAM NAME: SPRING CR

REACH NUMBER: 07140103011 FACILITY ON REACH: Unk DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: MO0104736 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 181.90 7q10 FLOW (MLD): 16.41 EFFLUENT FLOW

(MLD):2.61

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 (%)		
3.00	0	2	365.00	1.00E-02	0.00		
788.00	0	0	365.00	1.00E-02	0.00		
920.00	0	0	365.00	1.00E-02	0.00		
1.44E+04	0	0	365.00	1.00E-02	0.00		

Chemical ID: TCE-0

Assessor:

Scenario#:56 Number of Release Sites: 1.

Release Activity: Sullivan 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
	Non-sludge/Sludge			
Total Releases:	3.60	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
0.18	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:56 RELEASE ACTIVITY: Sullivan 20 dy

FACILITY NAME: SULLIVAN WWTP

FACILITY LOCATION: SULLIVAN MO 63080

RECEIVING WATER NAME: SPRING CR

REACH NUMBER: 07140103011 FACILITY ON REACH: Unk DISCHARGE TYPE: Direct

NPDES PERMIT #: MO0104736 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.18	0.18	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	64.11	27.41	16.41	13.65	NA	
CONCENTRATION (µg/L)	2.81	6.57	10.97	13.19	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}	8.46E-07 mg/kg/day 0.00 mg/kg/day						
LADC _{pot}	6.51E-05 mg/L		0.00	mg/kg			
Acute							
ADR _{pot}	2.49E-04	2.49E-04 mg/kg/day 0.00 mg/kg/day					

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 56 RELEASE ACTIVITY: Sullivan 20 dy

FACILITY NAME: SULLIVAN WWTP

FACILITY LOCATION: SULLIVAN MO 63080

RECEIVING STREAM NAME: SPRING CR

REACH NUMBER: 07140103011 FACILITY ON REACH: Unk DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: MO0104736 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 181.90 7q10 FLOW (MLD): 16.41 EFFLUENT FLOW

(MLD):2.61

	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 (%)			
3.00	2	7	20.00	0.18	0.00			
788.00	0	0	20.00	0.18	0.00			
920.00	0	0	20.00	0.18	0.00			
1.44E+04	0	0	20.00	0.18	0.00			

Chemical ID: TCE-0

Assessor:

Scenario#:57 Number of Release Sites: 1.

Release Activity: Sunnyside 365 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
Non-sludge/Sludge				
Total Releases:	1.82	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

365.00	0.00/0.00	N/A	N/A
5.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:57 RELEASE ACTIVITY: Sunnyside 365 dy

FACILITY NAME: SUNNYSIDE CITY OF

FACILITY LOCATION: SUNNYSIDE WA 989442206

RECEIVING WATER NAME: YAKIMA R

REACH NUMBER: 17030003005 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: WA0020991 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	365.	0.005	5.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	3427.34	1090.43	743.20	601.94	NA	
CONCENTRATION (µg/L)	1.46E-03	4.59E-03	6.73E-03	8.31E-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}	8.02E-09 mg/kg/day		0.00 mg/kg/day				
LADC _{pot}	6.17E-07 mg/L		0.00	mg/kg			
Acute							
ADR_{pot}	1.74E-07 mg/kg/day		0.00	mg/kg/day			

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 57 RELEASE ACTIVITY: Sunnyside 365 dy

FACILITY NAME: SUNNYSIDE CITY OF

FACILITY LOCATION: SUNNYSIDE WA 989442206

RECEIVING STREAM NAME: YAKIMA R

REACH NUMBER: 17030003005 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: WA0020991 GAGING STATION ID: 12508990

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 10/01/70 - 02/04/91 NUMBER OF REACH: 1

OBSERVATIONS: 7433.00

50 %ile FLOW (MLD): 5430.08 10 %ile FLOW (MLD): 3008.56 EFFLUENT FLOW

(MLD):5.67

RESULTS								
COC (μg/L) Percent of Year COC Exceeded		Number of Days COC Exceeded	· ·		Waste Water Treatment (%)			
3.00	0	0	365.00	5.00E-03	0.00			
788.00	0	0	365.00	5.00E-03	0.00			
920.00	0	0	365.00	5.00E-03	0.00			
1.44E+04	0	0	365.00	5.00E-03	0.00			

Chemical ID: TCE-0

Assessor:

Scenario#:58 Number of Release Sites: 1.

Release Activity: Sunnyside 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	1.66	N/A	N/A	N/A

Non-sludge/Sludge

Release Days/yr: Per Site Release:

20.00	0.00/0.00	N/A	N/A
8.30E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:58 RELEASE ACTIVITY: Sunnyside 20 dy

FACILITY NAME: SUNNYSIDE CITY OF

FACILITY LOCATION: SUNNYSIDE WA 989442206

RECEIVING WATER NAME: YAKIMA R

REACH NUMBER: 17030003005 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: WA0020991 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.083	8.30E-02	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	3427.34	1090.43	743.20	601.94	NA	
CONCENTRATION (µg/L)	2.42E-02	7.61E-02	0.11	0.14	NA	

DRINKING WATER INGESTION AND FISH INGESTION EXPOSURE ESTIMATES							
Exposure Units	Drinking Water Results	Fish Ingestion Units					
Cancer							
LADD _{pot}	7.30E-09 mg/kg/day		0.00 mg/kg/day				
LADC _{pot}	5.61E-07	mg/L	0.00	mg/kg			
Acute							
ADR _{pot}	2.88E-06	mg/kg/day	0.00	mg/kg/day			

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 58 RELEASE ACTIVITY: Sunnyside 20 dy

FACILITY NAME: SUNNYSIDE CITY OF

FACILITY LOCATION: SUNNYSIDE WA 989442206

RECEIVING STREAM NAME: YAKIMA R

REACH NUMBER: 17030003005 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: WA0020991 GAGING STATION ID: 12508990

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: 10/01/70 - 02/04/91 NUMBER OF REACH: 1

OBSERVATIONS: 7433.00

50 %ile FLOW (MLD): 5430.08 10 %ile FLOW (MLD): 3008.56 EFFLUENT FLOW

(MLD):5.67

RESULTS								
COC (µg/L)	COC (μg/L) Percent of Year COC Exceeded		Number of Days COC Exceeded Release days/year		Waste Water Treatment (%)			
3.00	0	0	20.00	8.30E-02	0.00			
788.00	0	0	20.00	8.30E-02	0.00			
920.00	0	0	20.00	8.30E-02	0.00			
1.44E+04	0	0	20.00	8.30E-02	0.00			

Chemical ID: TCE-0

Assessor:

ENVIRONMENTAL RELEASES

Scenario#:59 Number of Release Sites: 1.

Release Activity: Port of Sunnyside 365 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE				
Non-sludge/Sludge								
Total Releases:	0.73	N/A	N/A	N/A				
	(kg/yr) (kg/yr)		(kg/yr)	(kg/yr)				
		Non-sludge/Sludge						
Release Days/yr:	365.00	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)

Chemical ID: TCE-0

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

SCENARIO #: 59 Number of Sites: 1

RELEASE ACTIVITY:Port of

Sunnyside 365 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	365.	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	288.00	123.84	78.18	66.05	6.94E-03	1.61E-02	2.56E-02	3.03E-02	
ALL	10	39.60	13.29	7.76	7.57	5.05E-02	0.15	0.26	0.26	

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						
$LADD_{pot}$	3.82E-08	2.78E-07	mg/kg/day	0.00	0.00	mg/kg/day
LADC _{pot}	2.94E-06	2.14E-05	mg/L	0.00	0.00	mg/kg
Acute						
ADR_{pot}	6.12E-07	5.70E-06	mg/kg/day	0.00	0.00	mg/kg/day

SIC Code Comments:

Chemical ID: TCE-0

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 59 RELEASE ACTIVITY: Port of Sunnyside 365 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
3.00	0	0	365.00	2.00E-03	0.00	High
788.00	0	0	365.00	2.00E-03	0.00	High
920.00	0	0	365.00	2.00E-03	0.00	High
1.44E+04	0	0	365.00	2.00E-03	0.00	High

Assessor:

Chemical ID: TCE-0

ENVIRONMENTAL RELEASES

Scenario#:60 Number of Release Sites: 1.

Release Activity: Port of Sunnyside 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE	
Non-sludge/Sludge					
Total Releases:	0.70	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:

20.00	0.00/0.00	N/A	N/A
3.50E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

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

SCENARIO #: 60 Number of Sites: 1 RELEASE ACTIVITY:Port of

Sunnyside 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.	0.035	3.50E-02	0.00	0.00

	AQUATIC EXPOSURE ESTIMATES - SURFACE WATER										
PLANT TYPE	% ILE FACILITY		STREAM FI	LOW (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	0.28	0.45	0.53		
ALL	10	39.60	13.29	7.76	7.57	0.88	2.63	4.51	4.62		

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									
$LADD_{pot}$	3.66E-08	2.66E-07	mg/kg/day	0.00	0.00	mg/kg/day			
LADC _{pot}	2.82E-06	2.05E-05	mg/L	0.00	0.00	mg/kg			
Acute									
ADR_{pot}	1.07E-05	9.97E-05	mg/kg/day	0.00	0.00	mg/kg/day			

SIC Code Comments:

Chemical ID: TCE-0

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 60 RELEASE ACTIVITY: Port of Sunnyside 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					
3.00	1	5	20.00	3.50E-02	0.00	High					
788.00	0	0	20.00	3.50E-02	0.00	High					
920.00	0	0	20.00	3.50E-02	0.00	High					
1.44E+04	0	0	20.00	3.50E-02	0.00	High					

Chemical ID: TCE-0

Assessor:

Scenario#:61 Number of Release Sites: 1.

Release Activity: USAF 365 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE			
	Non-sludge/Sludge						
Total Releases:	0.73	N/A	N/A	N/A			
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)			

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

365.00	0.00/0.00	N/A	N/A
2.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

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

SCENARIO #: 61

Number of Sites: 1

RELEASE ACTIVITY:USAF 365

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	365.	0.002	2.00E-03	0.00	0.00

	AQUATIC EXPOSURE ESTIMATES - SURFACE WATER										
PLANT TYPE	% ILE FACILITY		STREAM FI	LOW (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-03	1.61E-02	2.56E-02	3.03E-02		
ALL	10	39.60	13.29	7.76	7.57	5.05E-02	0.15	0.26	0.26		

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									
$LADD_{pot}$	3.82E-08	2.78E-07	mg/kg/day	0.00	0.00	mg/kg/day			
LADC _{pot}	2.94E-06	2.14E-05	mg/L	0.00	0.00	mg/kg			
Acute									
ADR _{pot}	6.12E-07	5.70E-06	mg/kg/day	0.00	0.00	mg/kg/day			

SIC Code Comments:

Chemical ID: TCE-0

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 61 RELEASE ACTIVITY: USAF 365 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					
3.00	0	0	365.00	2.00E-03	0.00	High					
788.00	0	0	365.00	2.00E-03	0.00	High					
920.00	0	0	365.00	2.00E-03	0.00	High					
1.44E+04	0	0	365.00	2.00E-03	0.00	High					

Chemical ID: TCE-0

Assessor:

Scenario#:62 Number of Release Sites: 1.

Release Activity: USAF 20 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	0.64	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr: Per Site Release:

20.00	0.00/0.00	N/A	N/A
3.20E-02	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

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

SCENARIO #: 62

Number of Sites: 1

RELEASE ACTIVITY:USAF 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.	0.032	3.20E-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	0.11	0.26	0.41	0.48	
ALL	10	39.60	13.29	7.76	7.57	0.81	2.41	4.12	4.23	

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							
$LADD_{pot}$	3.35E-08	2.44E-07	mg/kg/day	0.00	0.00	mg/kg/day		
LADC _{pot}	2.58E-06	1.87E-05	mg/L	0.00	0.00	mg/kg		
Acute								
ADR_{pot}	9.79E-06	9.12E-05	mg/kg/day	0.00	0.00	mg/kg/day		

SIC Code Comments:

Chemical ID: TCE-0

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 62 RELEASE ACTIVITY: USAF 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			
3.00	1	4	20.00	3.20E-02	0.00	High			
788.00	0	0	20.00	3.20E-02	0.00	High			
920.00	0	0	20.00	3.20E-02	0.00	High			
1.44E+04	0	0	20.00	3.20E-02	0.00	High			

Chemical ID: TCE-0

Assessor:

Scenario#:63 Number of Release Sites: 1.

Release Activity: Gnf-A 365 dy

Release Description:	WATER	WATER LANDFILL		FUGITIVE
	Non-sludge/Sludge			
Total Releases:	0.15	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

365.00	0.00/0.00	N/A	N/A	
4.00E-04	N/A/0.00	N/A	N/A	
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)	

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:63 RELEASE ACTIVITY: Gnf-A 365 dy

FACILITY NAME: GLOBAL NUCLEAR FUEL-AMERICAS

FACILITY LOCATION: WILMINGTON NC 28402 RECEIVING WATER NAME: NE CAPE FEAR R

REACH NUMBER: 03030007001 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: NC0001228 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	365.	0.0004	4.00E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	1313.96	315.54	205.88	168.25	NA	
CONCENTRATION (µg/L)	3.04E-04	1.27E-03	1.94E-03	2.38E-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}	1.67E-09 mg/kg/day		0.00 mg/kg/day				
LADC _{pot}	1.29E-07 mg/L		0.00	mg/kg			
Acute							
ADR _{pot}	4.80E-08	mg/kg/day	0.00	mg/kg/day			

Surface Water Comments:

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 63 RELEASE ACTIVITY: Gnf-A 365 dy

FACILITY NAME: GLOBAL NUCLEAR FUEL-AMERICAS

FACILITY LOCATION: WILMINGTON NC 28402 RECEIVING STREAM NAME: NE CAPE FEAR R

REACH NUMBER: 03030007001 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NC0001228 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 5634.95 7q10 FLOW (MLD): 205.88 EFFLUENT FLOW

(MLD):2.59

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 (%)		
3.00	0	0	365.00	4.00E-04	0.00		
788.00	0	0	365.00	4.00E-04	0.00		
920.00	0	0	365.00	4.00E-04	0.00		
1.44E+04	0	0	365.00	4.00E-04	0.00		

Chemical ID: TCE-0

Assessor:

Scenario#:64 Number of Release Sites: 1.

Release Activity: Gnf-A 20 dy

Release Description:	WATER	WATER LANDFILL		FUGITIVE
	Non-sludge/Sludge			
Total Releases:	Total Releases: 0.14		N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
7.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:64 RELEASE ACTIVITY: Gnf-A 20 dy

FACILITY NAME: GLOBAL NUCLEAR FUEL-AMERICAS

FACILITY LOCATION: WILMINGTON NC 28402 RECEIVING WATER NAME: NE CAPE FEAR R

REACH NUMBER: 03030007001 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: NC0001228 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.007	7.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	1313.96	315.54	205.88	168.25	NA	
CONCENTRATION (µg/L)	5.33E-03	2.22E-02	3.40E-02	4.16E-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}	1.61E-09 mg/kg/day 0.00 mg/kg/day					
LADC _{pot}	1.24E-07 mg/L		0.00	mg/kg		
Acute						
ADR_{pot}	8.40E-07	mg/kg/day	0.00	mg/kg/day		

Surface Water Comments:

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 64 RELEASE ACTIVITY: Gnf-A 20 dy

FACILITY NAME: GLOBAL NUCLEAR FUEL-AMERICAS

FACILITY LOCATION: WILMINGTON NC 28402 RECEIVING STREAM NAME: NE CAPE FEAR R

REACH NUMBER: 03030007001 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: NC0001228 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 5634.95 7q10 FLOW (MLD): 205.88 EFFLUENT FLOW

(MLD):2.59

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 (%)		
3.00	0	0	20.00	7.00E-03	0.00		
788.00	0	0	20.00	7.00E-03	0.00		
920.00	0	0	20.00	7.00E-03	0.00		
1.44E+04	0	0	20.00	7.00E-03	0.00		

Chemical ID: TCE-0

Assessor:

Scenario#:65 Number of Release Sites: 1.

Release Activity: Cameron 365 dy

Release Description:	WATER	WATER LANDFILL		FUGITIVE
	Non-sludge/Sludge			
Total Releases: 0.11		NT/A	NT/A	NT/A
Total Releases.	0.11	N/A	N/A	N/A

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

365.00	0.00/0.00	N/A	N/A
3.00E-04	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

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

SCENARIO #: 65 Number of Sites: 1 RELEASE ACTIVITY:Cameron

365 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	365.	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								
$LADD_{pot}$	5.73E-09	4.17E-08	mg/kg/day	0.00	0.00	mg/kg/day		
LADC _{pot}	4.41E-07	3.21E-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:

Chemical ID: TCE-0

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 65 RELEASE ACTIVITY: Cameron 365 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				
3.00	0	0	365.00	3.00E-04	0.00	High				
788.00	0	0	365.00	3.00E-04	0.00	High				
920.00	0	0	365.00	3.00E-04	0.00	High				
1.44E+04	0	0	365.00	3.00E-04	0.00	High				

Chemical ID: TCE-0

Assessor:

ENTER ON THE PERSON	DEL EL CEC
ENVIRONMENTAL	RELEASES

Scenario#:66 Number of Release Sites: 1.

Release Activity: Cameron 20 dy

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

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

20.00	0.00/0.00	N/A	N/A
5.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

Chemical ID: TCE-0

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

SCENARIO #: 66

Number of Sites: 1

RELEASE ACTIVITY:Cameron

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.	0.005	5.00E-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	1.74E-02	4.04E-02	6.40E-02	7.57E-02	
ALL	10	39.60	13.29	7.76	7.57	0.13	0.38	0.64	0.66	

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								
$\mathrm{LADD}_{\mathrm{pot}}$	5.23E-09	3.81E-08	mg/kg/day	0.00	0.00	mg/kg/day			
LADC _{pot}	4.02E-07	2.93E-06	mg/L	0.00	0.00	mg/kg			
Acute									
ADR_{pot}	1.53E-06	1.42E-05	mg/kg/day	0.00	0.00	mg/kg/day			

SIC Code Comments:

Chemical ID: TCE-0

SIC CODE EXPOSURES TO SURFACE WATER RELEASES

SCENARIO #: 66

RELEASE ACTIVITY: Cameron 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				
3.00	0	0	20.00	5.00E-03	0.00	High				
788.00	0	0	20.00	5.00E-03	0.00	High				
920.00	0	0	20.00	5.00E-03	0.00	High				
1.44E+04	0	0	20.00	5.00E-03	0.00	High				

Chemical ID: TCE-0

Assessor:

Scenario#:67 Number of Release Sites: 1.

Release Activity: Coal 365 dy

Release Description:	WATER	LANDFILL	STACK	FUGITIVE
		Non-sludge/Sludge		
Total Releases:	7.30E-02	N/A	N/A	N/A
	(kg/yr)	(kg/yr)	(kg/yr)	(kg/yr)

Non-sludge/Sludge

Release Days/yr:
Per Site Release:

365.00	0.00/0.00	N/A	N/A
2.00E-04	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:67 RELEASE ACTIVITY: Coal 365 dy

FACILITY NAME: COAL GROVE STP VILLAGE OF

FACILITY LOCATION: COAL GROVE OH 45638

RECEIVING WATER NAME: OHIO R

REACH NUMBER: 05090103035 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: OH0029432 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	365.	0.0002	2.00E-04	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	8.00E+04	2.09E+04	1.58E+04	1.25E+04	NA	
CONCENTRATION (µg/L)	2.50E-06	9.57E-06	1.27E-05	1.60E-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}	1.38E-11	mg/kg/day	0.00 mg/kg/day			
LADC _{pot}	1.06E-09	mg/L	0.00	mg/kg		
Acute						
ADR _{pot}	3.62E-10	mg/kg/day	0.00	mg/kg/day		

Surface Water Comments:

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 67 RELEASE ACTIVITY: Coal 365 dy

FACILITY NAME: COAL GROVE STP VILLAGE OF

FACILITY LOCATION: COAL GROVE OH 45638

RECEIVING STREAM NAME: OHIO R

REACH NUMBER: 05090103035 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: OH0029432 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 2.10E+05 7q10 FLOW (MLD): 1.58E+04 EFFLUENT FLOW

(MLD):0.98

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 (%)		
3.00	0	0	365.00	2.00E-04	0.00		
788.00	0	0	365.00	2.00E-04	0.00		
920.00	0	0	365.00	2.00E-04	0.00		
1.44E+04	0	0	365.00	2.00E-04	0.00		

Chemical ID: TCE-0

Assessor:

Scenario#:68 Number of Release Sites: 1.

Release Activity: Coal 20 dy

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

20.00	0.00/0.00	N/A	N/A
3.00E-03	N/A/0.00	N/A	N/A
(kg/site/day)	(kg/site/day)	(kg/site/day)	(kg/site/day)

INITIAL EXPOSURE REVIEW REPORT

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER:68 RELEASE ACTIVITY: Coal 20 dy

FACILITY NAME: COAL GROVE STP VILLAGE OF

FACILITY LOCATION: COAL GROVE OH 45638

RECEIVING WATER NAME: OHIO R

REACH NUMBER: 05090103035 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT #: OH0029432 EXPOSED POPULATION: Adult

WWT REMOVAL (%)	RELEASE DAYS	PRETREATMENT RELEASE (kg/site/day)	POSTTREATMENT RELEASE (kg/site/day)	DWT (%)	BCF (L/kg)
0.	20.	0.003	3.00E-03	0.00	0.00

AQUATIC EXPOSURE ESTIMATES - SURFACE WATER						
FLOW DESCRIPTOR	Harmonic Mean	30Q5	7Q10	1Q10	PLANT	
FLOW (MLD)	8.00E+04	2.09E+04	1.58E+04	1.25E+04	NA	
CONCENTRATION (µg/L)	3.75E-05	1.44E-04	1.90E-04	2.39E-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}	1.13E-11	mg/kg/day	0.00 mg/kg/day			
LADC _{pot}	8.70E-10	mg/L	0.00	mg/kg		
Acute						
ADR _{pot}	5.44E-09	mg/kg/day	0.00	mg/kg/day		

Surface Water Comments:

Chemical ID: TCE-0

SITE-SPECIFIC HUMAN AND AQUATIC EXPOSURES TO SURFACE WATER RELEASES

SCENARIO NUMBER: 68 RELEASE ACTIVITY: Coal 20 dy

FACILITY NAME: COAL GROVE STP VILLAGE OF

FACILITY LOCATION: COAL GROVE OH 45638

RECEIVING STREAM NAME: OHIO R

REACH NUMBER: 05090103035 FACILITY ON REACH: No DISCHARGE TYPE: Direct

NPDES PERMIT NUMBER: OH0029432 GAGING STATION ID: N/A

GAGING STATION PERIOD OF GAGING STATION NUMBER OF STATIONS ON

RECORD: N/A

NUMBER OF

REACH: N/A

OBSERVATIONS: N/A

MEAN FLOW (MLD): 2.10E+05 7q10 FLOW (MLD): 1.58E+04 EFFLUENT FLOW

(MLD):0.98

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 (%)		
3.00	0	0	20.00	3.00E-03	0.00		
788.00	0	0	20.00	3.00E-03	0.00		
920.00	0	0	20.00	3.00E-03	0.00		
1.44E+04	0	0	20.00	3.00E-03	0.00		