TNRCC

Protecting Texas by Reducing and Preventing Pollution

Screening Site Inspection Report
PREScore

Appendix B

R&H Oil Company
a.k.a. Eldorado Refining and Marketing, Inc.
San Antonio, Bexar County, Texas
TXD 057 577 579

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI

Prepared in cooperation with the
U.S. Environmental Protection Agency

June 2000

916923

NPL Characteristics Data Collection Form
R&H Oil Company - 06/21/00

Record Information

1. Site Name: R&H Oil Company
   (as entered in CERCLIS)

2. Site CERCLIS Number: TXD 057 577 579

3. Site Reviewer: Allan M. Seils

4. Date: 03/07/00

5. Site Location: San Antonio, Bexar County, Texas
   (City/County,State)

6. Congressional District:

7. Site Coordinates: Single

   Latitude: 29°22'17. Longitude: 098°32'16.

Site Description

1. Setting: Urban

2. Current Owner: Private - Industrial

3. Current Site Status: Site with Unknown Source

4. Years of Operation: Inactive Site, from and to dates: pre-1938 to present

5. How Initially Identified: State/Local Program

6. Entity Responsible for Waste Generation:

   - Manufacturing
   - Recyclers

7. Site Activities/Waste Deposition:

   - Drum/Container Storage
   - Illegal Dumping
   - Unauthorized Dumping by a Third Party
   - Tanks - Above Ground
   - Tanks - Below Ground

Waste Description

8. Wastes Deposited or Detected Onsite:

- Organic Chemicals
- Inorganic Chemicals
- Oily Waste
- Municipal Waste

Response Actions

9. Response/Removal Actions:

RCRA Information

10. For All Active Facilities, RCRA Site Status:

- Not Applicable

Demographic Information

11. Workers Present Onsite: No

12. Distance to Nearest Non-Worker Individual: Unknown

13. Residential Population Within 1 Mile: 20000.0

14. Residential Population Within 4 Miles: 112000.0

Water Use Information

15. Local Drinking Water Supply Source:

- Ground Water (within 4 mile distance limit)

16. Total Population Served by Local Drinking Water Supply Source: 78,584

17. Drinking Water Supply System Type for Local Drinking Water Supply Sources:

- Municipal (Services over 25 People)
- Private

18. Surface Water Adjacent to/Draining Site:

- None

Robert J. Huston, *Chairman*
R. B. "Ralph" Marquez, *Commissioner*
John M. Baker, *Commissioner*
Jeffrey A. Saitas, *Executive Director*

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Protecting Texas by Reducing and Preventing Pollution

Mr. William Rhotenberry
Superfund Site Assessment Team (6SF-RA)
U. S. Environmental Protection Agency, Region 6
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

RE: Draft Screening Site Inspection Report for FY'98/'99 MSCA
Number V-006461-01-e and h

Dear Mr. Rhotenberry:

Enclosed is a copy of the draft version of the Texas Natural Resource Conservation Commission Screening Site Inspection Report, including PREScore, for the following site:

SITE NAME	EPA ID#
R&H Oil Company a.k.a. Eldorado Refining and Marketing, Inc. San Antonio, Bexar County, Texas	TXD 057 577 579

Should you have any questions please feel free to contact me at (512) 239-2514 (Mail Code 142).

Sincerely,

Allan M. Seils, Manager, PA/SI Program
Superfund Site Discovery and Assessment Team
Site Assessment and Management Section
Remediation Division

AMS/WGN/ok

Enclosure

cc: Karen A. Bond, EPA Region 6

HRS DOCUMENTATION RECORD
R&H Oil Company - 06/21/00

1. Site Name: R&H Oil Company
(as entered in CERCLIS)

2. Site CERCLIS Number: TXD 057 577 579

3. Site Reviewer: Allan M. Sells

4. Date: 03/07/00

5. Site Location: San Antonio, Bexar County, Texas
(City/County,State)

6. Congressional District:

7. Site Coordinates: Single

Latitude: 29°22'17. Longitude: 098°32'16,

	Score
Ground Water Migration Pathway Score (Sgw)	100.00
Surface Water Migration Pathway Score (Ssw)	0.00
Soil Exposure Pathway Score (Ss)	0.00
Air Migration Pathway Score (Sa)	0.00

Site Score	50.00

NOTE

Site names, and references to specific parcels or properties, are provided for general identification purposes only. Knowledge regarding the extent of sites will be refined as more information is developed during the RI/FS and even during implementation of the remedy.

GROUND WATER MIGRATION PATHWAY SCORESHEET
R&H Oil Company - 06/21/00

GROUND WATER MIGRATION PATHWAY Factor Categories & Factors	Maximum Value	Value Assigned
Likelihood of Release to an Aquifer Aquifer: Edwards Aquifer		
1. Observed Release	550	0
2. Potential to Release		
2a. Containment	10	10
2b. Net Precipitation	10	6
2c. Depth to Aquifer	5	1
2d. Travel Time	35	35
2e. Potential to Release [lines 2a(2b+2c+2d)]	500	420
3. Likelihood of Release	550	420
Waste Characteristics		
4. Toxicity/Mobility	*	1.00E+04
5. Hazardous Waste Quantity	*	100
6. Waste Characteristics	100	32
Targets		
7. Nearest Well	50	2.00E+01
8. Population		
8a. Level I Concentrations	**	0.00E+00
8b. Level II Concentrations	**	0.00E+00
8c. Potential Contamination	**	7.30E+03
8d. Population (lines 8a+8b+8c)	**	7.30E+03
9. Resources	5	5.00E+00
10. Wellhead Protection Area	20	5.00E+00
11. Targets (lines 7+8d+9+10)	**	7.33E+03
12. Targets (including overlaying aquifers)	**	7.33E+03
13. Aquifer Score	100	100.00
GROUND WATER MIGRATION PATHWAY SCORE (Sgw)	100	100.00

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET
R&H Oil Company - 06/21/00

SURFACE WATER OVERLAND/ FLOOD MIGRATION COMPONENT Factor Categories & Factors DRINKING WATER THREAT	Maximum Value	Value Assigned
Likelihood of Release		
1. Observed Release	550	0
2. Potential to Release by Overland Flow		
2a. Containment	10	10
2b. Runoff	25	0
2c. Distance to Surface Water	25	25
2d. Potential to Release by Overland Flow [lines 2a(2b+2c.)]	500	250
3. Potential to Release by, Flood		
3a. Containment (Flood)	10	10
3b. Flood Frequency	50	25
3c. Potential to Release by Flood (lines 3a x 3b)	500	250
4. Potential to Release (lines 2d+3c)	500	500
5. Likelihood of Release	550	500
Waste Characteristics		
6. Toxicity/Persistence	*	l.00E+04
7. Hazardous Waste Quantity	*	100
8. Waste Characteristics	100	32
Targets		
9. Nearest Intake	50	0.00E+00
10. Population		
lOa. Level I Concentrations	**	0.00E+00
lOb. Level II Concentrations	**	0.00E+00
lOc. Potential Contamination	**	0.00E+00
lOd. Population (lines lOa+lOb+lOc)	**	0.00E+00
11. Resources	5	0.00E+00
12. Targets (lines 9+10d+ll)	**	0.00E+00
13. DRINKING WATER THREAT SCORE	100	0.00

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET
R&H Oil Company - 06/21/00

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT Factor Categories & Factors HUMAN FOOD CHAIN THREAT	Maximum Value	Value Assigned
Likelihood of Release		
14. Likelihood of Release (same as line 5)	550	500
Waste Characteristics		
15. Toxicity/Persistence/Bioaccumulation	*	2.00E+08
16. Hazardous Waste Quantity	*	100
17. Waste Characteristics	1000	320
Targets		
18. Food Chain Individual	50	0.00E+00
19. Population		
19a. Level I Concentrations	**	0.00E+00
19b. Level II Concentrations	**	0.00E+00
19c. Pot. Human Food Chain Contamination	**	0.00E+00
19d. Population (lines :19a+19b+19c)	**	0.00E+00
20. Targets (lines 18+19d)	**	0.00E+00
21. HUMAN FOOD CHAIN THREAT, SCORE	100	0.00

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET
R&H Oil Company - 06/21/00

SURFACE WATER OVERLAND/ FLOOD MIGRATION COMPONENT Factor Categories & Factors ENVIRONMENTAL THREAT	Maximum Value	Value Assigned
Likelihood of Release		
22. Likelihood of Release (same as line 5)	550	500
Waste Characteristics		
23. Ecosystem Toxicity/Persistence/Bioacc. 24. Hazardous Waste Quantity 25. Waste Characteristics	* * 1000	5.00E+08 100 320
Targets		
26. Sensitive Environments 26a. Level I Concentrations 26b. Level II Concentrations 26c. Potential Contamination 26d. Sensitive Environments (lines 26a+26b+26c) 27. Targets (line 26d)	 ** *+ ** ** **	 0.00E+00 0.00E+00 0.00E+00 0.00E+00 0.00E+00
28. ENVIRONMENTAL THREAT SCORE	60	0.00
29. WATERSHED SCORE	100	0.00
30. SW: OVERLAND/FLOOD COMPONENT SCORE (Sof)	100	0.00

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

SOIL EXPOSURE PATHWAY SCORESHEET
R&H Oil Company - 06/21/00

SOIL EXPOSURE PATHWAY Factor Categories & Factors RESIDENT POPULATION THREAT	Maximum Value	Value Assigned
Likelihood of Exposure		
1. Likelihood of Exposure	550	550
Waste Characteristics		
2. Toxicity	*	l.00E+04
3. Hazardous Waste Quantity	*	100
4. Waste Characteristics	100	32
Targets		
5. Resident Individual	50	0.00E+00
6. Resident Population		
6a. Level I Concentrations	***	0.00E+00
6b. Level II Concentrations	**	0.00E+00
6c. Resident Population (lines 6a+6b)	**	0.00E+00
7. Workers	15	0.00E+00
8. Resources	5	0.00E+00
9. Terrestrial Sensitive Environments	***	0.00E+00
10. Targets (lines 5+6c+7+8+9)	**	0.00E+00
11. RESIDENT POPULATION THREAT SCORE	**	0.00E+00

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.
*** No specific maximum value applies, see HRS for details.

SOIL EXPOSURE PATHWAY SCORESHEET
R&H Oil Company - 06/21/00

SOIL EXPOSURE PATHWAY Factor Categories & Factors NEARBY POPULATION THREAT	Maximum Value	Value Assigned
Likelihood of Exposure		
12. Attractiveness/Accessibility 13. Area of Contamination 14. Likelihood of Exposure	100 100 500	1.00E+01 0.00E+00 0.00E+00
Waste Characteristics		
15. Toxicity 16. Hazardous Waste Quantity 17. Waste Characteristics	* * 100	1.00E+04 100 32
Targets		
18. Nearby Individual 19. Population Within 1 Mile 20. Targets (lines 18+19)	1 ** **	0.00E+00 0.00E+00 0.00E+00
21. NEARBY POPULATION THREAT SCORE	**	0.00E+00
SOIL EXPOSURE PATHWAY SCORE (S s)	100	0.00

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

AIR PATHWAY SCORESHEET
R&H Oil Company - 06/21/00

AIR MIGRATION PATHWAY Factor Categories & Factors	Maximum Value	Value Assigned
Likelihood of Release		
1. Observed Release	550	0
2. Potential to Release		
2a. Gas Potential to Release	500	0
2b. Particulate Potential to Release	500	0
2c. Potential to Release	500	0
3. Likelihood of Release	550	0
Waste Characteristics		
4. Toxicity/Mobility	*	0.00E+00
5. Hazardous Waste Quantity	*	0
6. Waste Characteristics	100	0
Targets		
7. Nearest Individual	50	0.00E+00
8. Population		
8a. Level I Concentrations	**	0.00E+00
8b. Level II Concentrations	**	0.00E+00
8c. Potential Contamination	**	0.00E+00
8d. Population (lines 8a+8b+8c)	**	0.00E+00
9. Resources	5	0.00E+00
10. Sensitive Environments		
10a. Actual Contamination	***	0.00E+00
10b. Potential Contamination	***	0.00E+00
10c. Sens. Environments (lines 10a+10b)	***	0.00E+00
11. Targets (lines 7+8d+9+10c)	**	0.00E+00
AIR MIGRATION PATHWAY SCORE (Sa)	100	0.00E+00

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.
*** No specific maximum value applies, see HRS for details.

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: AST

a. Wastestream ID	
b. Hazardous Constituent Quantity (C) (Ibs.)	0.00
c. Data Complete?	NO
d. Hazardous Wastestream Quantity (W) (lbs.)	0.00
e. Data Complete?	NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID	AST
b. Source Type	Non-Drum Container
c. Secondary Source Type	N.A.
d. Source Vol. (yd3/gal) Source Area (ft2)	198.10 0.00
e. Source Volume/Area Value	7.92E+01
f. Source Hazardous Constituent Quantity (HCQ) Value (sum of 1b)	0.00E+00
g. Data Complete?	NO
h. Source Hazardous Wastestream Quantity (WSQ) Value (sum of If)	0.00E+00
i. Data Complete?	NO
k. Source Hazardous Waste Quantity (HWQ) Value (2e, 2f, or 2h)	7.92E+01

Source Hazardous Substances	Depth (feet)	Liquid	Concent.	Units
Antimony	< 2	NO	l.0E+00	ppm
Arsenic	< 2	NO	1.8E+00	ppm
Barium	< 2	NO	1.3E+01	ppm
Benzene	< 2	NO	4.9E+00	ppm
Cadmium	< 2	NO	1.8E+00	ppm
Chromium	< 2	NO	2.9E+00	ppm
Copper	< 2	NO	6.4E+01	ppm
Ethyl benzene	< 2	NO	1.8E+01	ppm
Lead	< 2	NO	7.1E+01	ppm
Manganese	< 2	NO	4.3E+00	ppm
Methylnaphthalene, 2-	< 2	NO	l.0E+02	ppm
Nickel	< 2	NO	1.8E+00	ppm
Potassium	< 2	NO	3.0E+01	ppm
Selenium	< 2	NO	1.8E+00	ppm
Tetrachloroethylene	< 2	NO	2.1E+00	ppm
Toluene	< 2	NO	4.4E+01	ppm
Zinc	<2	NO	5.1E+02	ppm

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: Drums

a. Wastestream ID	
b. Hazardous Constituent Quantity (C) (Ibs.)	0.00
c. Data Complete?	NO
d. Hazardous Wastestream Quantity (W) (Ibs.)	0.00
e. Data Complete?	NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID	Drums	
b. Source Type	Drums	
c. Secondary Source Type	N.A.	
d. Source Vol. (yd3/gal) / Source Area (ft2)	10.00	0.00
e. Source Volume/Area Value	2.00E-02	
f. Source Hazardous Constituent Quantity (HCQ) Value (sum of Ib)	0.00E+00	
g. Data Complete?	NO	
h. Source Hazardous Wastestream Quantity (WSQ) Value (sum of If)	0.00E+00	
i. Data Complete?	NO	
k. Source Hazardous Waste Quantity (HWQ) Value (2e, 2f, or 2h)	2.00E-02	

Source Hazardous Substances	Depth (feet)	Liquid	Concent.	Units
Arsenic	< 2	NO	1.9E+00	ppm
Barium	< 2	NO	7.5E+00	ppm
Chromium	< 2	NO	6.2E+00	ppm
Copper	< 2	NO	5.4E+00	ppm
Lead	< 2	NO	1.4E+01	ppm
Manganese	< 2	NO	3.3E+00	ppm
Nickel	< 2	NO	1.3E+00	ppm
Potassium	< 2	NO	1.9E+00	ppm
Selenium	< 2	NO	1.3E+00	ppm
Toluene	< 2	NO	1.2E+00	ppm
Zinc	< 2	NO	6.2E+01	ppm

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: AST (oil and acid)

a. Wastestream ID	
b. Hazardous Constituent Quantity (C) (Ibs.)	0.00
c. Data Complete?	NO
d. Hazardous Wastestream Quantity (W) (Ibs.)	0.00
e. Data Complete?	NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID		AST (oil and acid)	
b. Source Type		Non-Drum Container	
c. Secondary Source Type		N.A.	
d. Source Vol. (yd3/gal)	Source Area (ft2)	474.00	0.00
e. Source Volume/Area Value		1.90E+02	
f. Source Hazardous Constituent Quantity (HCQ) Value (sum of Ib)		0.00E+00	
g. Data Complete?		NO	
h. Source Hazardous Wastestream Quantity (WSQ) Value (sum of If)		0.00E+00	
i. Data Complete?		NO	
k. Source Hazardous Waste Quantity (HWQ) Value (2e, 2f, or 2h)		1.90E+02	

Source Hazardous Substances	Depth (feet)	Liquid	Concent.	Units
Arsenic	< 2	YES	1.8E+00	ppm
Selenium	< 2	YES	2.0E+00	ppm

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: AST (oil and solid)

a. Wastestream *ID*	
b. Hazardous Constituent Quantity (C) (lbs.)	0.00
c. Data Complete?	NO
d. Hazardous Wastestream Quantity (W) (Ibs.)	0.00
e. Data Complete?	NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID	AST (oil and solid)	
b. Source Type	Non-Drum Container	
c. Secondary Source Type	N.A.	
d. Source Vol. (yd3/gal) / Source Area (ft2)	3.50	0.00
e. Source Volume/Area Value	1.40E+00	
f. Source Hazardous Constituent Quantity (HCQ) Value (sum of Ib)	0.00E+00	
g. Data Complete?	NO	
h. Source Hazardous Wastestream Quantity (WSQ) Value (sum of If)	0.00E+00	
i. Data Complete?	NO	
k. Source Hazardous Waste Quantity (HWQ) Value (2e, 2f, or 2h)	1.40E+00	

Source Hazardous Substances	Depth (feet)	Liquid	Concent.	Units
Aluminum	< 2	YES	2.6E+03	ppm
Arsenic	< 2	YES	2.3E+01	ppm
Barium	< 2	YES	1.1E+03	ppm
Benz(a)anthracene	< 2	YES	4.3E+00	ppm
Benzo(b)fluoranthene	< 2	YES	4.3E+00	ppm
Cadmium	< 2	YES	3.0E+00	ppm
Chromium	< 2	YES	4.0E+01	ppm
Chrysene	< 2	YES	4.3E+00	ppm
Cobalt	< 2	YES	9.6E+01	ppm
Copper	< 2	YES	1.5E+02	ppm
Cyanide	< 2	YES	3.0E+00	ppm
Ethyl benzene	< 2	YES	2.2E-02	ppm
Fluoranthene	< 2	YES	4.3E+00	ppm
Lead	< 2	YES	2.4E+02	ppm
Manganese	< 2	YES	1.3E+02	ppm
Nickel	< 2	YES	3.2E+01	ppm
Potassium	< 2	YES	4.8E+02	ppm
Pyrene	< 2	YES	4.3E+00	ppm
Selenium	< 2	YES	3.0E+00	ppm
Tetrachloroethylene	< 2	NO	5.9E-02	ppm
Toluene	< 2	YES	9.7E-02	ppm
Zinc	< 2	YES	1.2E+03	ppm

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: API Separator

a. Wastestream ID	
b. Hazardous Constituent Quantity (C) (Ibs.)	0.00
c. Data Complete?	NO
d. Hazardous Wastestream Quantity (W) (Ibs.)	0.00
e. Data Complete?	NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID	API Separator	
b. Source Type	Contaminated Soil	
c. Secondary Source Type	N.A.	
d. Source Vol. (yd3/gal) Source Area (ft2)	11.10	0.00
e. Source Volume/Area Value	4.44E-03	
f. Source Hazardous Constituent Quantity (HCQ) Value (sum of Ib)	0.00E+00	
g. Data Complete?	NO	
h. Source Hazardous Wastestream Quantity (WSQ) Value (sum of If)	0.00E+00	
i. Data Complete?	NO	
k. Source Hazardous Waste Quantity (HWQ) Value (2e, 2f, or 2h)	4.44E-03	

Source Hazardous Substances	Depth (feet)	Liquid	Concent.	Units
Arsenic	< 2	NO	5.7E+00	ppm
Chromium	< 2	NO	2.4E+01	ppm
Cobalt	< 2	NO	4.5E+01	ppm
Copper	< 2	NO	3.8E+01	ppm
Mercury	< 2	NO	3.6E-01	ppm
Selenium	< 2	NO	1.5E+00	ppm
Zinc	< 2	NO	1.4E+02	ppm

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: North Sump Area

a. Wastestream ID	
b. Hazardous Constituent Quantity (C) (Ibs.)	0.00
c. Data Complete?	NO
d. Hazardous Wastestream Quantity (W) (Ibs.)	0.00
e. Data Complete?	NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID	North Sump Area	
b. Source Type	Contaminated Soil	
c. Secondary Source Type	N.A.	
d. Source Vol. (yd3/gal) / Source Area (ft2)	11.10	0.00
e. Source Volume/Area Value	4.44E-03	
f. Source Hazardous Constituent Quantity (HCQ) Value (sum of Ib)	0.00E+00	
g. Data Complete?	NO	
h. Source Hazardous Wastestream Quantity (WSQ) Value (sum of If)	0.00E+00	
i. Data Complete?	NO	
k. Source Hazardous Waste Quantity (HWQ) Value (2e, 2f, or 2h)	4.44E-03	

Source Hazardous Substances	Depth (feet)	Liquid	Concent.	Units
Chromium	< 2	NO	8.9E+00	ppm
Copper	< 2	NO	9.8E+00	ppm
Mercury	< 2	NO	2.6E-01	ppm
Zinc	< 2	NO	1.1E+02	ppm

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: Soils - Truck Load

a. Wastestream ID	
b. Hazardous Constituent Quantity (C) (lbs.)	0.00
c. Data Complete?	NO
d. Hazardous Wastestream Quantity (W) (lbs.)	0.00
e. Data Complete?	NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID	Soils - Truck Load	
b. Source Type	Contaminated Soil	
c. Secondary Source Type	N.A.	
d. Source Vol. (yd3/gal) / Source Area (ft2)	29.60	0.00
e. Source Volume/Area Value	1.18E-02	
f. Source Hazardous Constituent Quantity (HCQ) Value (sum of Ib)	0.00E+00	
g. Data Complete?	NO	
h. Source Hazardous Wastestream Quantity (WSQ) Value (sum of If)	0.00E+00	
i. Data Complete?	NO	
k. Source Hazardous Waste Quantity (HWQ) Value (2e, 2f, or 2h)	1.18E-02	

Source Hazardous Substances	Depth (feet)	Liquid	Concent.	Units
Cumene	< 2	NO	2.4E-03	ppm
Ethyl benzene	< 2	NO	6.9E-03	ppm
Naphthalene	< 2	NO	4.8E-02	ppm
Toluene	< 2	NO	8.IE-03	ppm
Xylene, –	< 2	NO	6.8E-01	ppm

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: North Spill Area

a. Wastestream ID	
b. Hazardous Constituent Quantity (C) (Ibs.)	0.00
c. Data Complete?	NO
d. Hazardous Wastestream Quantity (W) (Ibs.)	0.00
e. Data Complete?	NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID		North Spill Area	
b. Source Type		Contaminated Soil	
c. Secondary Source Type		N.A.	
d. Source Vol. (yd3/gal)	Source Area (ft2)	503.70	0.00
e. Source Volume/Area Value		2.01E-01	
f. Source Hazardous Constituent Quantity (HCQ) Value (sum of Ib)		0.00E+00	
g. Data Complete?		NO	
h. Source Hazardous Wastestream Quantity (WSQ) Value (sum of If)		0.00E+00	
i. Data Complete?		NO	
k. Source Hazardous Waste Quantity (HWQ) Value (2e, 2f, or 2h)		2.01E-01	

Source Hazardous Substances	Depth (feet)	Liquid	Concent.	Units
Naphthalene	< 2	NO	4.5E-02	ppm

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: Soils - Process Area

a. Wastestream ID	
b. Hazardous Constituent Quantity (C) (Ibs.)	0.00
c. Data Complete?	NO
d. Hazardous Wastestream Quantity (W) (Ibs.)	0.00
e. Data Complete?	NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID		Soils - Process Area	
b. Source Type		Contaminated Soil	
c. Secondary Source Type		N.A.	
d. Source Vol. (yd3/gal)	Source Area (ft2)	128.70	0.00
e. Source Volume/Area Value		5.15E-02	
f. Source Hazardous Constituent Quantity (HCQ) Value (sum of Ib)		0.00E+00	
g. Data Complete?		NO	
h. Source Hazardous Wastestream Quantity (WSQ) Value (sum of If)		0.00E+00	
i. Data Complete?		NO	
k. Source Hazardous Waste Quantity (HWQ) Value (2e, 2f, or 2h)		5.15E-02	

Source Hazardous Substances	Depth (feet)	Liquid	Concent.	Units
Arsenic	< 2	NO	4.2E+01	ppm
Benzene	< 2	NO	6.8E-01	ppm
Bis (2-ethylhexyl) phthalate	< 2	NO	7.3E+01	ppm
Cobalt	< 2	NO	4.1E+02	ppm
Copper	< 2	NO	2.9E+01	ppm
Selenium	< 2	NO	1.9E+00	ppm
Zinc	< 2	NO	5.2E+02	ppm

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: Tank 301 Area

a. Wastestream ID	
b. Hazardous Constituent Quantity (C) {Ibs.)	0.00
c. Data Complete?	NO
d. Hazardous Wastestream Quantity (W) (Ibs.)	0.00
e. Data Complete?	NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID	Tank 301 Area	
b. Source Type	Contaminated Soil	
c. Secondary Source Type	N.A.	
d. Source Vol. (yd3/gal) / Source Area (ft2)	250.00	0.00
e. Source Volume/Area Value	l.00E-01	
f. Source Hazardous Constituent Quantity (HCQ) Value (sum of Ib)	0.00E+00	
g. Data Complete?	NO	
h. Source Hazardous Wastestream Quantity (WSQ) Value (sum of If)	0.00E+00	
i. Data Complete?	NO	
k. Source Hazardous Waste Quantity (HWQ) Value (2e, 2f, or 2h)	l.00E-01	

Source Hazardous Substances	Depth (feet)	Liquid	Concent.	Units
Fluoranthene	< 2	NO	1.4E+01	ppm
Mercury	< 2	NO	2.6E-01	ppm
Pyrene	< 2	NO	1.4E+01	ppm

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: Soils - Tks 302-03

a. Wastestream ID	
b. Hazardous Constituent Quantity (C) (lbs.)	0.00
c. Data Complete?	NO
d. Hazardous Wastestream Quantity (W) (lbs.)	0.00
e. Data Complete?	NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID	Soils - Tks 302-03	
b. Source Type	Contaminated Soil	
c. Secondary Source Type	N.A.	
d. Source Vol. (yd3/gal) / Source Area (ft2)	421.30	0.00
e. Source Volume/Area Value	1.69E-01	
f. Source Hazardous Constituent Quantity (HCQ) Value (sum of Ib)	0.00E+00	
g. Data Complete?	NO	
h. Source Hazardous Wastestream Quantity (WSQ) Value (sum of If)	0.00E+00	
i. Data Complete?	NO	
k. Source Hazardous Waste Quantity (HWQ) Value (2e, 2f, or 2h)	1.69E-01	

Source Hazardous Substances	Depth (feet)	Liquid	Concent.	Units
Benzene	< 2	NO	4.3E-01	ppm
Copper	< 2	NO	2.7E+01	ppm
Naphthalene	< 2	NO	8.7E-01	ppm

3. SITE HAZARDOUS WASTE QUANTITY SUMMARY

No.	Source ID	Migration Pathways	Vol. or Area Value (2e)	Constituent or Wastestream Value (2f,2h)	Hazardous WasteQty. Value (2k)
1	AST	GW-SW-SE	7.92E+01	0.00E+00	7.92E+01
2	Drums	GW-SW-SE	2.00E-02	0.00E+00	2.00E-02
3	AST {oil and acid)	GW-SW-SE	1.90E+02	0.00E+00	1.90E+02
4	AST (oil and solid)	GW-SW-SE	1.40E+00	0.00E+00	1.40E+00
5	API Separator	GW-SW-SE	4.44E-03	0.00E+00	4.44E-03
6	North Sump Area	GW-SW-SE	4.44E-03	0.00E+00	4.44E-03
7	Soils - Truck Load	GW-SW-SE	1.18E-02	0.00E+00	1.18E-02
8	North Spill Area	GW-SW-SE	2.01E-01	0.00E+00	2.01E-01
9	Soils - Process Are	GW-SW-SE	5.15E-02	0.00E+00	5.15E-02
10	Tank 301 Area	GW-SW-SE	l.00E-01	0.00E+00	l.00E-01
11	Soils - Tks 302-03	GW-SW-SE	1.69E-01	0.00E+00	1.69E-01

4. PATHWAY HAZARDOUS WASTE QUANTITY AND WASTE CHARACTERISTICS SUMMARY TABLE

Migration Pathway	Contaminant Values		HWQVs*	WCVs**
Ground Water	Toxici,ty./Mobility	l.00E+04	100	32
SW: Overland Flow, DW	Tox./Persistence	l.00E+04	100	32
SW: Overland Flow, HFC	Tox./Persis./Bioacc.	2.00E+08	100	320
SW: Overland Flow, Env	Etox./Persis./Bioacc.	5.00E+08	100	320
SW: GW to SW, DW	Tox./Persistence	l.00E+04	100	32
SW: GW to SW, HFC	Tox./Persis./Bioacc.	5.00E+06	100	100
SW: GW to SW, Env	Etox./Persis./Bioacc.	5.00E+06	100	100
Soil Exposure: Resident	Toxicity	l.00E+04	100	32
Soil Exposure: Nearby	Toxicity	l.00E+04	100	32
Air	Toxicity/Mobility	0.00E+00	0	0

* Hazardous Waste Quantity Factor Values
** Waste Characteristics Factor Category Values

Note: SW = Surface Water
GW = Ground Water
DW = Drinking Water Threat
HFC = Human Food Chain Threat
Env = Environmental Threat

GROUND WATER PATHWAY AQUIFER SUMMARY
R&H Oil Company - 06/21/00

No.	Aquifer ID	Type	Overlaying No.	Inter-Connected with	Likelihood of Release	Targets
1	shallow alluvial	Non K	0	0	550	5.00E+00
2	Edwards Aquifer	Karst	1	0	420	7.33E+03

Containment

No.	Source ID	HWQ Value	Containment Value
1	AST	7.92E+01	10
2	Drums	2.00E-02	10
3	AST (oil and acid)	1.90E+02	10
4	AST (oil and solid)	1.40E+00	10
5	API Separator	4.44E-03	10
6	North Sump Area	4.44E-03	10
7	Soils - Truck Load	1.18E-02	10
8	North Spill Area	2.01E-01	10
9	Soils - Process Are	5.15E-02	10
10	Tank 301 Area	l.00E-01	10
11	Soils - Tks 302-03	1.69E-01	10

Containment Factor 10

Net Precipitation

Net Precipitation (inches) 29.00

GROUND WATER PATHWAY LIKELIHOOD OF RELEASE shallow alluvial AQUIFER
R&H Oil Company - 06/21/00

Aquifer: shallow alluvial

Type of Aquifer: Non Karst

Overlaying Aquifer: 0

Interconnected with: 0

OBSERVED RELEASE

No.	Well ID	Well Type	Distance (miles)	Level of Contamination
I	TPGW-01/MW-01	Monitoring Well	0.000	Level I
2	TPGW-02/MW-02	Monitoring Well	0.000	Level I
3	TPGW-03/MW-04	Monitoring Well	0.000	Level I
4	TPGW-04/MW-05	Monitoring Well	0.000	Level I
5	RHGW-06/MW-184	Monitoring Well	0.140	Level II

Well No.	Hazardous Substance	Concent,.	MCL	Cancer	RFD	Units
I	Arsenic	7.3E-02	5.0E+01	5.7E-02	1.1E+01	ppb
I	Barium	5.4E-01	2.0E+03	0.0E+00	2.6E+03	ppb
1	Benzene	2.0E+00	5.0E+00	2.9E+00	0.0E+00	ppb
I	Ethyl benzene	8.4E-02	7.0E+02	0.0E+00	3.7E+03	ppb
I	Manganese	3.7E-01	0.0E+00	0.0E+00	5.1E+03	ppb
I	Methylnaphthalene, 2-	9.4E-02	0.0E+00	0.0E+00	0.0E+00	ppb
I	Naphthalene	1.9E-01	0.0E+00	0.0E+00	1.5E+03	ppb
I	Toluene	1.7E-02	1.0E+03	0.0E+00	7.3E+03	ppb
I	Xylene, -	2.0E-02	1.0E+04	0.0E+00	7.3E+04	ppb
2	Arsenic	5.6E-01	5.0E+01	5.7E-02	1.1E+01	ppb
2	Benzene	7.8E-01	5.0E+00	2.9E+00	0.0E+00	ppb
2	Ethyl benzene	4.4E-02	7.0E+02	0.0E+00	3.7E+03	ppb
2	Manganese	7.4E-01	0.0E+00	0.0E+00	5.1E+03	ppb
2	Methylnaphthalene, 2-	1.2E-02	0.0E+00	0.0E+00	0.0E+00	ppb
2	Naphthalene	3.6E-02	0.0E+00	0.0E+00	1.5E+03	ppb
2	Toluene	7.5E-03	1.0E+03	0.0E+00	7.3E+03	ppb
2	Xylene, -	I.6E-02	1.0E+04	0.0E+00	7.3E+04	ppb
3	Arsenic	6.IE-02	5.0E+01	5.7E-02	1.1E+01	ppb
3	Benzene	1.6E-01	5.0E+00	2.9E+00	0.0E+00	ppb
3	Manganese	5.IE-01	0.0E+00	0.0E+00	5.1E+03	ppb
3	Toluene	2.8E-03	1.0E+03	0.0E+00	7.3E+03	ppb
3	Xylene, -	2.5E-03	1.0E+04	0.0E+00	7.3E+04	ppb
3	Zinc	1.IE-01	0.0E+00	0.0E+00	1.1E+04	ppb
4	Arsenic	1.IE-01	5.0E+01	5.7E-02	1.1E+01	ppb
4	Benzene	4.IE-01	5.0E+00	2.9E+00	0.0E+00	ppb
4	Manganese	6.IE-01	0.0E+00	0.0E+00	5.1E+03	ppb
4	Methylnaphthalene, 2-	9.8E-02	0.0E+00	0.0E+00	0.0E+00	ppb
4	Toluene	4.3E-03	1.0E+03	0.0E+00	7.3E+03	ppb
4	Xylene, -	3.4E-03	1.0E+04	0.0E+00	7.3E+04	ppb
5	Manganese	5.2E-01	0.0E+00	0.0E+00	5.1E+03	ppb

GROUND WATER PATHWAY LIKELIHOOD OF RELEASE shallow alluvial AQUIFER
R&H Oil Company - 06/21/00

POTENTIAL TO RELEASE

Containment

Containment Factor	10	

Net Precipitation

Net Precipitation Factor	6	

Depth to Aquifer

A. Depth of Hazardous Substances	0.00	feet
B. Depth to Aquifer from Surface	0.00	feet
C. Depth to Aquifer (B - A)	0.00	feet
Depth to Aquifer Factor •	5	

Travel Time

Are All Layers Karst?	NO	
Thickness of Layer(s) with Lowest Conductivity	0.00	feet
Hydraulic Conductivity (cm/sec)	0.0E-00	
Travel Time Factor	35	

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Potential to Release Factor 460

GROUND WATER PATHWAY LIKELIHOOD OF RELEASE Edwards aquifer
R&H Oil Company - 06/21/00

Aquifer: Edwards Aquifer

Type of Aquifer: Karst

Overlaying Aquifer: 1

Interconnected with: 0

OBSERVED RELEASE

No.	Well ID	Well Type	Distance (miles)	Level of Contamination
- N/A and/or data not specified				

Observed Release Factor 0

GROUND WATER PATHWAY LIKELIHOOD OF RELEASE Edwards aquifer
R&H Oil Company - 06/21/00

POTENTIAL TO RELEASE

Containment

Containment Factor	10	

Net Precipitation

Net Precipitation Factor	6	

Depth to Aquifer

A. Depth of Hazardous Substances	48.00	feet
B. Depth to Aquifer from Surface	968.00	feet
C. Depth to Aquifer (B - A)	920.00	feet
Depth to Aquifer Factor	1	

Travel Time

Are All Layers Karst?	YES	
Thickness of Layer(s) with Lowest Conductivity	0.00	feet
Hydraulic Conductivity (cm/sec)	0.0E-00	
Travel Time Factor	35	

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Potential to Release Factor 420

GROUND WATER PATHWAY WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 1 AST

Source Hazardous Waste Quantity Value: 79.24

Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value
Antimony	10000	l.00E+00	l.00E+04
Arsenic	10000	l.00E+00	l.00E+04
Barium	10000	l.00E+00	l.00E+04
Benzene	100	l.00E+00	l.00E+02
Cadmium	10000	2.00E-01	2.00E+03
Chromium	10000	l.00E+00	l.00E+04
Copper	0	l.00E+00	0.00E+00
Ethyl benzene	10	l.00E+00	l.00E+01
Lead	10000	2.00E-03	2.00E+01
Manganese	10000	l.00E+00	l.00E+04
Methylnaphthalene, 2-	0	2.00E-01	0.00E+00
Nickel	10000	2.00E-03	2.00E+01
Potassium	0	l.00E+00	0.00E+00
Selenium	100	l.00E+00	l.00E+02
Tetrachloroethylene	100	l.00E+00	l.00E+02
Toluene	10	l.00E+00	l.00E+01
Zinc	10	2.00E-01	2.00E+00

GROUND WATER PATHWAY WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 2 Drums

Source Hazardous Waste Quantity Value: 0.02

Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value
Arsenic	10000	1.00E+00	1.00E+04
Barium	10000	1.00E+00	1.00E+04
Chromium	10000	1.00E+00	1.00E+04
Copper	0	1.00E+00	0.00E+00
Lead	10000	2.00E-03	2.00E+01
Manganese	10000	1.00E+00	1.00E+04
Nickel	10000	2.00E-03	2.00E+01
Potassium	0	1.00E+00	0.00E+00
Selenium	100	1.00E+00	1.00E+02
Toluene	10	1.00E+00	1.00E+01
Zinc	10	2.00E-01	2.00E+00

GROUND WATER PATHWAY WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 3 AST (oil and acid)

Source Hazardous Waste Quantity Value: 189.60

Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value
Arsenic	10000	l.00E+00	l.00E+04
Selenium	100	l.00E+00	l.00E+02

GROUND WATER PATHWAY WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 4 AST (oil and solid)

Source Hazardous Waste Quantify Value: 1.40

Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value
Aluminum	0	l.00E+00	0.00E+00
Arsenic	10000	l.00E+00	l.00E+04
Barium	10000	l.00E+00	l.00E+04
Benz(a)anthracene	1000	l.00E+00	l.00E+03
Benzo(b)fluoranthene	1000	l.00E+00	l.00E+03
Cadmium	10000	l.00E+00	l.00E+04
Chromium	10000	l.00E+00	l.00E+04
Chrysene	10	l.00E+00	l.00E+01
Cobalt	1	l.00E+00	l.00E+00
Copper	0	l.00E+00	0.00E+00
Cyanide	100	l.00E+00	l.00E+02
Ethyl benzene	10	l.00E+00	l.00E+01
Fluoranthene	100	l.00E+00	l.00E+02
Lead	10000	l.00E+00	l.00E+04
Manganese	10000	l.00E+00	l.00E+04
Nickel	10000	l.00E+00	l.00E+04
Potassium	0	l.00E+00	0.00E+00
Pyrene	100	l.00E+00	l.00E+02
Selenium	100	l.00E+00	l.00E+02
Tetrachloroethylene	100	l.00E+00	l.00E+02
Toluene	10	l.00E+00	l.00E+01
Zinc	10	l.00E+00	l.00E+01

GROUND WATER PATHWAY WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 5 API Separator

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value
Arsenic	10000	l.00E+00	l.00E+04
Chromium	10000	l.00E+00	l.00E+04
Cobalt	1	l.00E+00	l.00E+00
Copper	0	l.00E+00	0.00E+00
Mercury	10000	2.00E-05	2.00E-01
Selenium	100	l.00E+00	l.00E+02
Zinc	10	2.00E-01	2.00E+00

GROUND WATER PATHWAY WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 6 North Sump Area

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value
Chromium	10000	l.00E+00	l.00E+04
Copper	0	l.00E+00	0.00E+00
Mercury	10000	2.00E-05	2.00E-01
Zinc	10	2.00E-01	2.00E+00

GROUND WATER PATHWAY WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 7 Soils - Truck Load

Source Hazardous Waste Quantity Value: 0.01

Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value
Cumene	1000	2.00E-01	2.00E+02
Ethyl benzene	10	l.00E+00	l.00E+01
Naphthalene	100	2.00E-01	2.00E+01
Toluene	10	l.00E+00	l.00E+01
Xylene, –	1	l.00E+00	l.00E+00

GROUND WATER PATHWAY WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 8 North Spill Area

Source Hazardous Waste Quantity Value: 0.20

Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value
Naphthalene	100	2.00E-01	2.00E+01

GROUND WATER PATHWAY WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 9 Soils - Process Are

Source Hazardous Waste Quantity Value: 0.05

Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value
Arsenic	10000	1.00E+00	1.00E+04
Benzene	100	1.00E+00	1.00E+02
Bis (2-ethylhexyl) phthalate	100	2.00E-03	2.00E-01
Cobalt	1	1.00E+00	1.00E+00
Copper	0	1.00E+00	0.00E+00
Selenium	100	1.00E+00	1.00E+02
Zinc	10	2.00E-01	2.00E+00

GROUND WATER PATHWAY WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 10 Tank 301 Area

Source Hazardous Waste Quantity Value: 0.10

Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value
Fluoranthene	100	2.00E-03	2.00E-01
Mercury	10000	2.00E-05	2.00E-01
Pyrene	100	2.00E-03	2.00E-01

GROUND WATER PATHWAY WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 11 Soils - Tks 302-03

Source Hazardous Waste Quantity Value: 0.17

Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value
Benzene	100	l.00E+00	l.00E+02
Copper	0	l.00E+00	0.00E+00
Naphthalene	100	2.00E-01	2.00E+01

GROUND WATER PATHWAY WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Hazardous Substances Found in an Observed Release

Well No.	Observed Release Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value

- N/A and/or data not specified

GROUND WATER PATHWAY WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Toxicity/Mobility Value from Source Hazardous Substances:	l.00E+04
Toxicity/Mobility Value from Observed Release Hazardous Substances:	l.00E+04
Toxicity/Mobility Factor:	l.00E+04
Sum of Source Hazardous Waste Quantity Values:	2.71E+02
Hazardous Waste Quantity Factor:	100
Waste Characteristics Factor Category:	32

GROUND WATER PATHWAY TARGETS FOR AQUIFER shallow alluvial
R&H Oil Company - 06/21/00

Population by Well

No.	Well ID	Sample Type	Distance (miles)	Level of Contamination	Population

- N/A and/or data not specified

Level I Population Factor: 0.00

Level II Population Factor: 0.00

GROUND WATER PATHWAY TARGETS FOR AQUIFER shallow alluvial
R&H Oil Company - 06/21/00

Potential Contamination by Distance Category

Distance Category (miles)	Population	Value
> 0 to 1/4	0.0	0.00E+00
> 1/4 to ½	0.0	0.00E+00
> ½ to 1	0.0	0.00E+00
> 1 to 2	0.0	0.00E+00
> 2 to 3	0.0	0.00E+00
> 3 to 4	0.0	0.00E+00

Potential Contamination Factor: 0.000

Nearest Well

Level of Contamination: N.A.

Nearest Well Factor: 0.00E+00

Resources

Resource Use: NO

Resource Factor: 0.00E+00

Wellhead Protection Area

There is a designated wellhead protection area

Wellhead Protection Area Factor: 5.00E+00

GROUND WATER PATHWAY TARGETS FOR AQUIFER Edwards Aquifer
R&H Oil Company - 06/21/00

Population by Well

No.	Well ID	Sample Type	Distance (miles)	Level of Contamination	Population

- N/A and/or data not specified

Level I Population Factor: 0.00

Level II Population Factor: 0.00

GROUND WATER PATHWAY TARGETS FOR AQUIFER Edwards Aquifer
R&H Oil Company - 06/21/00

Potential Contamination by Distance Category

Distance Category (miles)	Population	Value
> 0 to 1/4	0.0	0.00E+00
> 1/4 to ½	23595.0	1.01E+03
> ½ to I	17696.0	8.16E+02
> I to 2	54357.0	2.61E+03
> 2 to 3	99791.0	2.61E+03
> 3 to 4	5329.0	2.61E+02

Potential Contamination Factor: 7303.000

Nearest Well

Level of Contamination: Potential
Distance in miles: 0.27

Nearest Well Factor: 2.00E+01

Resources

Resource Use: YES

Resource Factor: 5.00E+00

Wellhead Protection Area

There is a designated wellhead protection area

Wellhead Protection Area Factor: 5.00E+00

SURFACE WATER PATHWAY SEGMENT SUMMARY
R&H Oil Company - 06/21/00

No.	Segment ID	Segment Type	Water Type	Start Point (mi)	End Point (mi)	Average Flow (cfs)
0		River	Fresh	0.00	0.00	0

SURFACE WATER PATHWAY OVERLAND FLOW/FLOOD COMPONENT LIKELIHOOD OF RELEASE
R&H Oil Company - 06/21/00

OBSERVED RELEASE

No.	Sample ID	Sample Type	Distance (miles)	Level of Contamination DW	HFC	Env

- N/A and/or data not specified

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Observed Release Factor 0

SURFACE WATER PATHWAY OVERLAND FLOW/FLOOD COMPONENT LIKELIHOOD OF RELEASE
R&H Oil Company - 06/21/00

POTENTIAL TO RELEASE

Potential to Release by Overland Flow

Containment

No.	Source ID	HWQ Value	Containment Value
1	AST	7.92E+01	10
2	Drums	2.00E-02	10
3	AST (oil and acid)	1.90E+02	10
4	AST (oil and solid)	1.40E+00	10
5	API Separator	4.44E-03	10
6	North Sump Area	4.44E-03	10
7	Soils - Truck Load	1.18E-02	10
8	North Spill Area	2.01E-01	10
9	Soils - Process Are	5.15E-02	10
10	Tank 301 Area	l.00E-01	10
11	Soils - Tks 302-03	1.69E-01	10

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Containment Factor: 10

SURFACE WATER PATHWAY OVERLAND FLOW/FLOOD COMPONENT LIKELIHOOD OF RELEASE
R&H Oil Company - 06/21/00

Distance to Surface Water

Distance to Surface Water: -	0.0 feet
Distance to Surface Water Factor:	25

Runoff

A. Drainage Area:	0.0 acres
B. 2-year, 24-hour Rainfall:	0.0 inches
C. Soil Group: Coarse-textured soils with high infiltration rates	A
Runoff Factor:	0

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Potential to Release by Overland Flow Factor:	250

SURFACE WATER PATHWAY OVERLAND FLOW/FLOOD COMPONENT LIKELIHOOD OF RELEASE
R&H Oil Company - 06/21/00

Potential to Release by Flood

No.	Source ID	HWQ Value	Flood Containment Value	Flood Frequency Value	Potential to Release by Flood
1	AST	7.92E+01	10	25	250
2	Drums	2.00E-02	10	25	250
3	AST (oil and acid)	1.90E+02	10	7	70
4	AST (oil and solid)	1.40E+00	10	25	250
5	API Separator	4.44E-03	10	25	250
6	North Sump Area	4.44E-03	10	25	250
7	Soils - Truck Load	1.18E-02	10	25	250
8	North Spill Area	2.01E-01	10	25	250
9	Soils - Process Are	5.15E-02	10	25	250
10	Tank 301 Area	l.00E-tl	10	25	250
11	Soils - Tks 302-03	1.69E-01	10	25	250

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Potential to Release by Flood Factor: 250

SW PATHWAY: OVERLAND/FLOOD DRINKING WATER THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 1 AST

Source Hazardous Waste Quantity Value: 79.24

Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value
Antimony	10000	1.00E+00	1.00E+04
Arsenic	10000	1.00E+00	1.00E+04
Barium	10000	1.00E+00	1.00E+04
Benzene	100	4.00E-01	4.00E+01
Cadmium	10000	1.00E+00	1.00E+04
Chromium	10000	1.00E+00	1.00E+04
Copper	0	1.00E+00	0.00E+00
Ethyl benzene	10	4.00E-01	4.00E+00
Lead	10000	1.00E+00	1.00E+04
Manganese	10000	1.00E+00	1.00E+04
Methylnaphthalene, 2-	0	4.00E-01	0.00E+00
Nickel	10000	1.00E+00	1.00E+04
Potassium	0	1.00E+00	0.00E+00
Selenium	100	1.00E+00	1.00E+02
Tetrachloroethylene	100	4.00E-01	4.00E+01
Toluene	10	4.00E-01	4.00E+00
Zinc	10	1.00E+00	1.00E+01

SW PATHWAY: OVERLAND/FLOOD DRINKING WATER THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 2 Drums

Source Hazardous Waste Quantity Value: 0.02

Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value
Arsenic	10000	1.00E+00	1.00E+04
Barium	10000	1.00E+00	1.00E+04
Chromium	10000	1.00E+00	1.00E+04
Copper	0	1.00E+00	0.00E+00
Lead	10000	1.00E+00	1.00E+04
Manganese	10000	1.00E+00	1.00E+04
Nickel	10000	1.00E+00	1.00E+04
Potassium	0	1.00E+00	0.00E+00
Selenium	100	1.00E+00	1.00E+02
Toluene	10	4.00E-01	4.00E+00
Zinc	10	1.00E+00	l.00E+01

SW PATHWAY: OVERLAND/FLOOD DRINKING WATER THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 3 AST (oil and acid)

Source Hazardous Waste Quantity Value: 189.60

Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value
Arsenic	10000	l.00E+00	l.00E+04
Selenium	100	l.00E+00	l.00E+02

SW PATHWAY: OVERLAND/FLOOD DRINKING WATER THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 4 AST (oil and solid)

Source Hazardous Waste Quantity Value: 1.40

Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value
Aluminum	0	l.00E+00	0.00E+00
Arsenic	10000	l.00E+00	l.00E+04
Barium	10000	l.00E+00	l.00E+04
Benz(a)anthracene	1000	l.00E+00	l.00E+03
Benzo(b)fluoranthene	1000	l.00E+00	l.00E+03
Cadmium	10000	l.00E+00	l.00E+04
Chromium	10000	l.00E+00	l.00E+04
Chrysene	10	l.00E+00	l.00E+01
Cobalt	1	l.00E+00	l.00E+00
Copper	0	l.00E+00	0.00E+00
Cyanide	100	4.00E-01	4.00E+01
Ethyl benzene	10	4.00E-01	4.00E+00
Fluoranthene	100	l.00E+00	l.00E+02
Lead	10000	l.00E+00	l.00E+04
Manganese	10000	l.00E+00	l.00E+04
Nickel	10000	l.00E+00	l.00E+04
Potassium	0	l.00E+00	0.00E+00
Pyrene	100	l.00E+00	l.00E+02
Selenium	100	l.00E+00	l.00E+02
Tetrachloroethylene	100	4.00E-01	4.00E+01
Toluene	10	4.00E-01	4.00E+00
Zinc	10	l.00E+00	l.00E+01

SW PATHWAY: OVERLAND/FLOOD DRINKING WATER THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 5 API Separator

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value
Arsenic	10000	l.00E+00	l.00E+04
Chromium	10000	l.00E+00	l.00E+04
Cobalt	1	l.00E+00	l.00E+00
Copper	0	l.00E+00	0.00E+00
Mercury	10000	4.00E-01	4.00E+03
Selenium	100	l.00E+00	l.00E+02
Zinc	10	l.00E+00	l.00E+01

SW PATHWAY: OVERLAND/FLOOD DRINKING WATER THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 6 North Sump Area

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value
Chromium	10000	l.00E+00	l.00E+04
Copper	0	l.00E+00	0.00E+00
Mercury	10000	4.00E-01	4.00E+03
Zinc	10	l.00E+00	l.00E+01

SW PATHWAY: OVERLAND/FLOOD DRINKING WATER THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 7 Soils - Truck Load

Source Hazardous Waste Quantity Value: 0.01

Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value
Cumene	1000	4.00E-01	4.00E+02
Ethyl benzene	10	4.00E-01	4..00E+00
Naphthalene	100	4.00E-01	4.00E+01
Toluene	10	4.00E-01	4.00E+00
Xylene, –	1	4.00E-01	4.00E-01

SW PATHWAY: OVERLAND/FLOOD DRINKING WATER THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 8 North Spill Area

Source Hazardous Waste Quantity Value: 0.20

Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value
Naphthalene	100	4.00E-01	4.00E+01

SW PATHWAY: OVERLAND/FLOOD DRINKING WATER THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 9 Soils - Process Are

Source Hazardous Waste Quantity Value: 0.05

Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value
Arsenic	10000	l.00E+00	l.00E+04
Benzene	100	4.00E-01	4.00E+01
Bis (2-ethylhexyl) phthalate	100	l.00E+00	l.00E+02
Cobalt	1	l.00E+00	l.00E+00
Copper	0	l.00E+00	0.00E+00
Selenium	100	l.00E+00	l.00E+02
Zinc	10	l.00E+00	l.00E+01

SW PATHWAY: OVERLAND/FLOOD DRINKING WATER THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 10 Tank 301 Area

Source Hazardous Waste Quantity Value: 0.10

Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value
Fluoranthene	100	l.00E+00	l.00E+02
Mercury	10000	4.00E-01	4.00E+03
Pyrene	100	l.00E+00	l.00E+02

SW PATHWAY: OVERLAND/FLOOD DRINKING WATER THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 11 Soils - Tks 302-03

Source Hazardous Waste Quantity Value: 0.17

Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value
Benzene	100	4.00E-01	4.00E+01
Copper	0	l.OOE+00	O.OOE+00
Naphthalene	100	4.00E-01	4.00E+01

Hazardous Substances Found in an Observed Release

Sample No.	Observed Release Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value

- N/A and/or data not specified

SW PATHWAY: OVERLAND/FLOOD DRINKING WATER THREAT WASTE CHARACTERISTICS

R&H Oil Company - 06/21/00

Toxicity/Persistence Value from Source Hazardous Substances:	l.00E+04
Toxicity/Persistence Value from Observed Release Hazardous Substances:	0.00E+00
Toxicity/Persistence Factor:	l.00E+04
Sum of Source Hazardous Waste Quantity Values:	2.71E+02
Hazardous Waste Quantity Factor:	100
Waste Characteristics Factor Category:	32

SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT DRINKING WATER THREAT TARGETS
R&H Oil Company - 06/21/00

Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

- N/A and/or data not specified

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

- N/A and/or data not specified

SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT DRINKING WATER THREAT TARGETS
R&H Oil Company - 06/21/00

Level I Concentrations

Intake	Distance Along the In-water Segment from the Probable Point of Entry (miles)	Population
- N/A and/or data not specified		

Population Served by Level I Intakes: 0.0

Level I Population Factor: 0.00E+00

SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT DRINKING WATER THREAT TARGETS
R&H Oil Company - 06/21/00

Level II Concentrations

Intake	Distance Along the In-water Segment from the Probable Point of Entry (miles)	Population

- N/A and/or data not specified

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Population Served by Level II Intakes: 0.0

Level II Population Factor: 0.0,OE+00

SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT DRINKING WATER THREAT TARGETS
R&H Oil Company - 06/21/00

Potential Contamination

Intake ID	Average Annual Flow (cfs)	Population Served
- N/A and/or data not specified		

Type of Surface Water Body	Total Population	Dilution-Weighted Population
- N/A and/or data not specified		

Dilution-Weighted Population Served
by Potentially Contaminated Intakes: 0.0

Potential Contamination Factor: 0.0

Nearest Intake

Location of Nearest Drinking Water Intake: N.A.

Nearest Intake Factor: 0.00

Resources

Resource Use: NO

Resource Value: 0.00E+00

SW PATHWAY: OVERLAND/FLOOD HUMAN FOOD CHAIN THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 1 AST

Source Hazardous Waste Quantity Value: 79.24

Hazardous Substance	Toxicity Value	Persistence Value	Bio-accum. Value	Toxicity/ Persistence/ Bioaccum. Value
Antimony	1-0000	l.00E+00	5.00E-01	5.00E+03
Arsenic	10000	l.00E+00	5.00E+02	5.00E+06
Barium	-10000	l.00E+00	5.00E-01	5.00E+03
Benzene	100	4.00E-01	5.00E+03	2.00E+05
Cadmium	10000	l.00E+00	5.00E+03	5.00E+07
Chromium	10000	l.00E+00	5.00E+02	5.00E+06
Copper	0	l.00E+00	5.00E+04	0.00E+00
Ethyl benzene	10	4.00E-01	5.00E+01	2.00E+02
Lead	10000	l.00E+00	5.00E+03	5.00E+07
Manganese	10000	l.00E+00	5.00E-01	5.00E+03
Methylnaphthalene, 2-	0	4.00E-01	5.00E+03	0.00E+00
Naphthalene	100	4.00E-01	5.00E+00	2.00E+02
Nickel	10000	l.00E+00	5.00E+02	5.00E+06
Potassium	0	l.00E+00	5.00E-01	0.00E+00
Selenium	100	l.00E+00	5.00E+01	5.00E+03
Tetrachloroethylene	100	4.00E-01	5.00E+01	2.00E+03
Toluene	10	4.00E-01	5.00E+01	2.00E+02
Xylene, –	1	4.00E-01	5.00E+02	2.00E+02
Zinc	10	l.00E+00	5.00E+04	5.00E+05

SW PATHWAY: OVERLAND/FLOOD HUMAN FOOD CHAIN THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 2 Drums /

Source Hazardous Waste Quantity Value: 0.02

Hazardous Substance	Toxicity Value	Persistence Value	Bio-accum. Value	Toxicity/ Persistence/ Bioaccum. Value
Arsenic	10000	1.00E+00	5.00E+02	5.00E+06
Barium	10000	1.00E+00	5.00E-01	5.00E+03
Chromium	10000	1.00E+00	5.00E+02	5.00E+06
Copper	0	1.00E+00	5.00E+04	0.00E+00
Lead	10000	1.00E+00	5.00E+03	5.00E+07
Manganese	10000	1.00E+00	5.00E-01	5.00E+03
Nickel	10000	1.00E+00	5.00E+02	5.00E+06
Potassium	0	1.00E+00	5.00E-01	0.00E+00
Selenium	100	1.00E+00	5.00E+01	5.00E+03
Toluene	10	4.00E-01	5.00E+01	2.00E+02
Zinc	10	1.00E+00	5.00E+04	5.00E+05

SW PATHWAY: OVERLAND/FLOOD HUMAN FOOD CHAIN THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 3 AST (oil and acid)

Source Hazardous Waste Quantity Value: 189.60

Hazardous Substance	Toxicity Value	Persistence Value	Bio-accum. Value	Toxicity/ Persistence/ Bioaccum. Value
Arsenic	X0000	l.00E+00	5.00E+02	5.00E+06
Selenium	' 100	l.00E+00	5.00E+01	5.00E+03

SW PATHWAY: OVERLAND/FLOOD HUMAN FOOD CHAIN THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 4 AST (oil and solid)'

Source Hazardous Waste Quantity Value: 1.40

Hazardous Substance	Toxicity Value	Persistence Value	Bio-accum. Value	Toxicity/ Persistence/ Bioaccum. Value
Aluminum	0	l.00E+00	5.00E+01	0.00E+00
Arsenic	10000	l.00E+00	5.00E+02	5.00E+06
Barium	10000	l.00E+00	5.00E-01	5.00E+03
Benz(a)anthracene	1000	l.00E+00	5.00E+04	5.00E+07
Benzo(b)fluoranthene	1000	l.00E+00	5.00E+04	5.00E+07
Cadmium	10000	l.00E+00	5.00E+03	5.00E+07
Chromium	10000	l.00E+00	5.00E+02	5.00E+06
Chrysene	10	l.00E+00	5.00E+02	5.00E+03
Cobalt	1	l.00E+00	5.00E-01	5.00E-01
Copper	0	l.00E+00	5.00E+04	0.00E+00
Cyanide	100	4.00E-01	5.00E-01	2.00E+01
Ethyl benzene	10	4.00E-01	5.00E+01	2.00E+02
Fluoranthene	100	l.00E+00	5.00E+03	5.00E+05
Lead	10000	l.00E+00	5.00E+03	5.00E+07
Manganese	10000	l.00E+00	5.00E-01	5.00E+03
Nickel	10000	l.00E+00	5.00E+02	5.00E+06
Potassium	0	l.00E+00	5.00E-01	0.00E+00
Pyrene	100	l.00E+00	5.00E+03	5.00E+05
Selenium	100	l.00E+00	5.00E+01	5.00E+03
Tetrachloroethylene	100	4.00E-01	5.00E+01	2.00E+03
Toluene	10	4.00E-01	5.00E+01	2.00E+02
Zinc	10	l.00E+00	5.00E+04	5.00E+05

SW PATHWAY: OVERLAND/FLOOD HUMAN FOOD CHAIN THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 5 API Separator

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value	Persistence Value	Bio-accum. Value	Toxicity/ Persistence/ Bioaccum. Value
Arsenic	10000	l.00E+00	5.00E+02	5.00E+06
Chromium	10000	l.00E+00	5.00E+02	5.00E+06
Cobalt	1	l.00E+00	5.00E-01	5.00E-01
Copper	0	l.00E+00	5.00E+04	0.00E+00
Mercury	10000	4.00E-01	5.00E+04	2.00E+08
Selenium	100	l.00E+00	5.00E+01	5.00E+03
Zinc	10	l.00E+00	5.00E+04	5.00E+05

SW PATHWAY: OVERLAND/FLOOD HUMAN FOOD CHAIN THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 6 North Sump Area

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value	Persistence Value	Bio-accum. Value	Toxicity/ Persistence/ Bioaccum. Value
Chromium	10000	l.00E+00	5.00E+02	5.00E+06
Copper	0	l.00E+00	5.00E+04	0.00E+00
Mercury	10000	4.00E-01	5.00E+04	2.00E+08
Zinc	10	l.00E+00	5.00E+04	5.00E+05

SW PATHWAY: OVERLAND/FLOOD HUMAN FOOD CHAIN THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 7 Soils - Truck Load

Source Hazardous Waste Quantity Value: 0.01

Hazardous Substance	Toxicity Value	Persistence Value	Bio-accum. Value	Toxicity/ Persistence/ Bioaccum. Value
Cumene	1000	4.00E-01	5.00E+02	2.00E+05
Ethyl benzene	10	4.00E-01	5.00E+01	2.00E+02
Naphthalene	100	4.00E-01	5.00E+00	2.00E+02
Toluene	10	4.00E-01	5.00E+01	2.00E+02
Xylene, –	1	4.00E-01	5.00E+02	2.00E+02

SW PATHWAY: OVERLAND/FLOOD HUMAN FOOD CHAIN THREAT WASTE CHARACTERISTICS
R&H Oil 'Company - 06/21/00

Source: 8 North Spill Area

Source Hazardous Waste Quantity Value: 0.20

Hazardous Substance	Toxicity Value	Persistence Value	Bio-accum. Value	Toxicity/ Persistence/ Bioaccum. Value
Naphthalene	100	4.00E-01	5.00E+00	2.00E+02

SW PATHWAY: OVERLAND/FLOOD HUMAN FOOD CHAIN THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 9 Soils - Process Are

Source Hazardous Waste Quantity Value: 0.05

Hazardous Substance	Toxicity Value	Persistence Value	Bio-accum. Value	Toxicity/ Persistence/ Bioaccum. Value
Arsenic	10000	l.OOE+00	5.00E+02	5.00E+06
Benzene	100	4.00E-01	5.00E+03	2.00E+05
Bis (2-ethylhexyl) phthalate	100	l.OOE+00	5.00E+04	5.00E+06
Cobalt	1	l.OOE+00	5.00E-01	5.00E-01
Copper	0	l.OOE+00	5.00E+04	O.OOE+00
Selenium	100	l.OOE+00	5.00E+01	5.00E+03
Zinc	10	l.OOE+00	5.00E+04	5.00E+05

SW PATHWAY: OVERLAND/FLOOD HUMAN FOOD CHAIN THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 10 Tank 301 Area

Source Hazardous Waste Quantity Value: 0.10

Hazardous Substance	Toxicity Value	Persistence Value	Bio-accum. Value	Toxicity/ Persistence/ Bioaccum. Value
Fluoranthene	100	l.00E+00	5.00E+03	5.00E+05
Mercury	10000	4.00E-01	5.00E+04	2.00E+08
Pyrene	100	l.00E+00	5.00E+03	5.00E+05

SW PATHWAY: OVERLAND/FLOOD HUMAN FOOD CHAIN THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 11 Soils - Tks 302-03

Source Hazardous Waste Quantity Value: 0.17

Hazardous Substance	Toxicity Value	Persistence Value	Bio-accum. Value	Toxicity/ Persistence/ Bioaccum. Value
Benzene	-100	4.00E-01	5.00E+03	2.00E+05
Copper	0	l.OOE+00	5.00E+04	O.OOE+00
Naphthalene	100	4.00E-01	5.00E+00	2.00E+02

SW PATHWAY: OVERLAND/FLOOD HUMAN FOOD CHAIN THREAT WASTE CHARACTERISTICS

R&H Oil Company - 06/21/00

Hazardous Substances Found in 'an Observed Release

Sample No.	Observed Release Hazardous Substance	Toxicity Value	Persistence Value	Bio-accum. Value	Toxicity/ Persistence/ Bioaccum. Value

- N/A and/or data not specified

SW PATHWAY: OVERLAND/FLOOD HUMAN FOOD CHAIN THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Toxicity/Persistence/Bioaccumulation Value from Source Hazardous Substances:	2.00E+08
Toxicity/Persistence/Bioaccumulation Value from Observed Release Hazardous Substances:	0.00E+00
Toxicity/Persistence/Bioaccumulation Factor:	2.00E+08
Sum of Source Hazardous Waste Quantity Values:	2.71E+02
Hazardous Waste Quantity Factor:	100
Waste Characteristics Factor Category:	320

Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

- N/A and/or data not specified

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

- N/A and/or data not specified

SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT HUMAN FOOD CHAIN THREAT TARGETS
R&H Oil Company - 06/21/00

Level I Concentrations

Fishery	Annual Production (pounds)	Human Food Chain Population Value
- N/A and/or data not specified		

Sum of Human Food Chain Population Values: 0.00E+00

Level I Concentrations Factor: 0.00E+00

SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT HUMAN FOOD CHAIN THREAT TARGETS
R&H Oil Company - 06/21/00

Level II Concentrations

Fishery	Annual Production (pounds)	Human Food Chain Population Value
- N/A and/or data not specified		

Sum of Human Food Chain Population Values: 0.00E+00

Level II Concentrations Factor: 0.00E+00

SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT HUMAN FOOD CHAIN THREAT TARGETS
R&H Oil Company - 06/21/00

Potential Contamination

Fishery	Annual Production (pounds)	Type of Surface Water Body	Average Annual Flow (cfs)	Pop. Value (Pi)	Dilution Weight (Di)	Pi*Di
- N/A and/or data not specified						

Sum of (Pi*Di): 0.00E+00

Potential Human Food Chain Contamination Factor: 0.00E+00

Food Chain Individual

Location of Nearest Fishery: N.A.

Food Chain Individual Factor: 0.00

SW PATHWAY: OVERLAND FLOW/FLOOD ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
R&H Oil -Company - 06/21/00

Source: 1 AST

Source Hazardous Waste Quantity Value: 79.24

Hazardous Substance	Eco-toxicity Value	Persistence Value	Bio-accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
Antimony	100	l.00E+00	5.00E+00	5.00E+02
Arsenic	10	l.00E+00	5.00E+02	5.00E+03
Barium	I	l.00E+00	5.00E-01	5.00E-01
Benzene	100	4.00E-01	5.00E+02	2.00E+04
Cadmium	1000	l.00E+00	5.00E+03	5.00E+06
Chromium	100	l.00E+00	5.00E+00	5.00E+02
Copper	100	l.00E+00	5.00E+04	5.00E+06
Ethyl benzene	100	4.00E-01	5.00E+01	2.00E+03
Lead	1000	l.00E+00	5.00E+03	5.00E+06
Manganese	0	l.00E+00	5.00E+04	0.00E+00
Methylnaphthalene, 2-	1000	4.00E-01	5.00E+03	2.00E+06
Naphthalene	1000	4.00E-01	5.00E+02	2.00E+05
Nickel	10	l.00E+00	5.00E+02	5.00E+03
Potassium	0	l.00E+00	5.00E-01	0.00E+00
Selenium	1000	l.00E+00	5.00E+03	5.00E+06
Tetrachloroethylene	100	4.00E-01	5.00E+01	2.00E+03
Toluene	100	4.00E-01	5.00E+01	2.00E+03
Xylene, —	100	4.00E-01	5.00E+02	2.00E+04
Zinc	10	l.00E+00	5.00E+02	5.00E+03

SW PATHWAY: OVERLAND FLOW/FLOOD ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 2 Drums

Source Hazardous Waste Quantity Value: 0.02

Hazardous Substance	Eco-toxicity Value	Persistence Value	Bio-accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
Arsenic	10	l.00E+00	5.00E+02	5.00E+03
Barium	1	l.00E+00	5.00E-01	5.00E-01
Chromium	100	l.00E+00	5.00E+00	5.00E+02
Copper	100	l.00E+00	5.00E+04	5.00E+06
Lead	1000	l.00E+00	5.00E+03	5.00E+06
Manganese	0	l.00E+00	5.00E+04	0.00E+00
Nickel	10	l.00E+00	5.00E+02	5.00E+03
Potassium	0	l.00E+00	5.00E-01	0.00E+00
Selenium	1000	l.00E+00	5.00E+03	5.00E+06
Toluene	100	4.00E-01	5.00E+01	2.00E+03
Zinc	10	l.00E+00	5.00E+02	5.00E+03

SW PATHWAY: OVERLAND FLOW/FLOOD ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
R&H .Oil Company - 06/21/00

Source: 3 AST (oil and acid)

Source Hazardous Waste Quantity Value: 189.60

Hazardous Substance	Eco-toxicity Value	Persistence Value	Bio-accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
Arsenic	10	l.OOE+00	5.00E+02	5.00E+03
Selenium	1000	l.OOE+00	5.00E+03	5.00E+06

SW PATHWAY: OVERLAND FLOW/FLOOD ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 4 AST (oil and solid)

Source Hazardous Waste Quantity Value: 1.40

Hazardous Substance	Eco-toxicity Value	Persistence Value	Bio-accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
Aluminum	100	1.00E+00	5.00E+01	5.00E+03
Arsenic	10	1.00E+00	5.00E+02	5.00E+03
Barium	1	1.00E+00	5.00E-01	5.00E-01
Benz(a)anthracene	10000	1.00E+00	5.00E+04	5.00E+08
Benzo(b)fluoranthene	0	1.00E+00	5.00E+04	0.00E+00
Cadmium	1000	1.00E+00	5.00E+03	5.00E+06
Chromium	100	1.00E+00	5.00E+00	5.00E+02
Chrysene	1000	1.00E+00	5.00E+03	5.00E+06
Cobalt	0	1.00E+00	5.00E+03	0.00E+00
Copper	100	1.00E+00	5.00E+04	5.00E+06
Cyanide	1000	4.00E-01	5.00E-01	2.00E+02
Ethyl benzene	100	4.00E-01	5.00E+01	2.00E+03
Fluoranthene	10000	1.00E+00	5.00E+02	5.00E+06
Lead	1000	1.00E+00	5.00E+03	5.00E+06
Manganese	0	1.00E+00	5.00E+04	0.00E+00
Nickel	10	1.00E+00	5.00E+02	5.00E+03
Potassium	0	1.00E+00	5.00E-01	0.00E+00
Pyrene	10000	1.00E+00	5.00E+01	5.00E+05
Selenium	1000	1.00E+00	5.00E+03	5.00E+06
Tetrachloroethylene	100	4.00E-01	5.00E+01	2.00E+03
Toluene	100	4.00E-01	5.00E+01	2.00E+03
Zinc	10	1.00E+00	5.00E+02	5.00E+03

SW PATHWAY: OVERLAND FLOW/FLOOD ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
R&H Oil 'Company - 06/21/00

Source: 5 API Separator

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Eco-toxicity Value	Persistence Value	Bio-accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
Arsenic	10	l.00E+00	5.00E+02	5.00E+03
Chromium	100	l.00E+00	5.00E+00	5.00E+02
Cobalt	0	l.00E+00	5.00E+03	0.00E+00
Copper	100	l.00E+00	5.00E+04	5.00E+06
Mercury	10000	4.00E-01	5.00E+04	2.00E+08
Selenium	1000	l.00E+00	5.00E+03	5.00E+06
Zinc	10	l.00E+00	5.00E+02	5.00E+03

SW PATHWAY: OVERLAND FLOW/FLOOD ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 6 North Sump Area

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Eco-toxicity Value	Persistence Value	Bio-accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
Chromium	100	l.00E+00	5.00E+00	5.00E+02
Copper	100	l.00E+00	5.00E+04	5.00E+06
Mercury	10000	4.00E-01	5.00E+04	2.00E+08
Zinc	10	l.00E+00	5.00E+02	5.00E+03

SW PATHWAY: OVERLAND FLOW/FLOOD ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
R&H Oil 'Company - 06/21/00

Source: 7 Soils - Truck Load-

Source Hazardous Waste Quantity Value: 0.01

Hazardous Substance	Eco-toxicity Value	Persistence Value	Bio-accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
Cumene	100	4.00E-01	5.00E+02	2.00E+04
Ethyl benzene	100	4.00E-01	5.00E+01	2.00E+03
Naphthalene	1000	4.00E-01	5.00E+02	2.00E+05
Toluene	100	4.00E-01	5.00E+01	2.00E+03
Xylene, –	100	4.00E-01	5.00E+02	2.00E+04

SW PATHWAY: OVERLAND FLOW/FLOOD ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 8 North Spill Area

Source Hazardous Waste Quantity Value: 0.20

Hazardous Substance	Eco-toxicity Value	Persistence Value	Bio-accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
Naphthalene	' 'l000	4.00E-01	5.00E+02	2.00E+05

SW PATHWAY: OVERLAND FLOW/FLOOD ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 9 Soils - Process Are

Source Hazardous Waste Quantity Value: 0.05

Hazardous Substance	Eco-toxicity Value	Persistence Value	Bio-accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
Arsenic	10	l.00E+00	5.00E+02	5.00E+03
Benzene	100	4.00E-01	5.00E+02	2.00E+04
Bis (2-ethylhexyl) phthalate	1000	l.00E+00	5.00E+04	5.00E+07
Cobalt	0	l.00E+00	5.00E+03	0.00E+00
Copper	100	l.00E+00	5.00E+04	5.00E+06
Selenium	1000	l.00E+00	5.00E+03	5.00E+06
Zinc	10	l.00E+00	5.00E+02	5.00E+03

SW PATHWAY: OVERLAND FLOW/FLOOD ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 10 Tank 301 Area

Source Hazardous Waste Quantity Value: 0.10

Hazardous Substance	Eco-toxicity Value	Persistence Value	Bio-accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
Fluoranthene	10000	l.OOE+00	5.00E+02	5.00E+06
Mercury	10000	4.00E-01	5.00E+04	2.00E+08
Pyrene	10000	l.OOE+00	5.00E+01	5.00E+05

SW PATHWAY: OVERLAND FLOW/FLOOD ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 11 Soils - Tks'302-03

Source Hazardous Waste Quantity Value: 0.17

Hazardous Substance	Eco-toxicity Value	Persistence Value	Bio-accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
Benzene	100	4.00E-01	5.00E+02	2.00E+04
Copper	100	l.OOE+00	5.00E+04	5.00E+06
Naphthalene	1000	4.00E-01	5.00E+02	2.00E+05

SW PATHWAY: OVERLAND FLOW/FLOOD ENVIRONMENTAL THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Hazardous Substances Found in an Observed Release

Sample No.	Observed Release Hazardous Substance	Eco-toxicity Value	Persistence Value	Bio-accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value

- N/A and/or data not specified

SW PATHWAY: OVERLAND FLOW/FLOOD ENVIRONMENTAL THREAT WASTE CHARACTERISTICS

R&H Oil Company - 06/21/00

Ecotoxicity/Persistence/Bioaccumulation Value from Source Hazardous Substances:	5.00E+08
Ecotoxicity/Persistence/Bioaccumulation Value from Observed Release Hazardous Substances:	0.00E+00
Ecotoxicity/Persistence/Bioaccumulation Factor:	5.00E+08
Sum of Source Hazardous Waste Quantity Values:	2.71E+02
Hazardous Waste Quantity Factor:	100
Waste Characteristics Factor Category:	320

Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

- N/A and/or data not specified

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

- N/A and/or data not specified

SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT ENVIRONMENTAL THREAT TARGETS
R&H Oil Company - 06/21/00

Level I Concentrations

Sensitive Environment	Distance from Probable Point of Entry to Sensitive Env. (miles)	Sensitive Environment Value
- N/A and/or data not specified		

Sum of Sensitive Environments Values: 0

Wetlands

Wetland	Distance from Probable Point of Entry to Wetland (miles)	Wetlands Frontage (miles)
- N/A and/or data not specified		

Total Wetlands Frontage: 0.00 Miles Total Wetlands Value: 0

Sum of Sensitive Environments Value + Wetlands Value: 0.00E+00

Level I Concentrations Factor: 0.00E+00

SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT ENVIRONMENTAL THREAT TARGETS
R&H Oil Company - 06/21/00

Level II Concentrations

Sensitive Environment	Distance from Probable Point of Entry to Sensitive Env. (miles)	Sensitive Environment Value
- N/A and/or data not specified		

Sum of Sensitive Environments Values: 0

Wetlands

Wetland	Distance from Probable Point of Entry to Wetland (miles)	Wetlands Frontage (miles)
- N/A and/or data not specified		

Total Wetlands Frontage: 0.00 Miles Total Wetlands Value: 0

Sum of Sensitive Environments Value + Wetlands Value: 0.00E+00

Level II Concentrations Factor: 0.00E+00

SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT ENVIRONMENTAL THREAT TARGETS
R&H Oil Company - 06/21/00

Potential Contamination

Sensitive Environments

Type of Surface Water Body	Sensitive Environment	Sensitive Environment Value

Wetlands

Type of Surface Water Body	Sensitive Environment	Wetlands Frontage	Wetlands Value

- N/A and/or data not specified

SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT ENVIRONMENTAL THREAT TARGETS
R&H Oil Company - 06/21/00

Type of Surface Water Body	Sum of Sens. Environment Values(Sj)	Sum of Wetland Frontage Values(Wj)	Dilution Weight (Dj)	Dj(Wj+Sj)

- N/A and/or data not specified

Sum of Dj(Wj+Sj): 0.00E+00
Sum of Dj(Wj+Sj)/10: 0.00E+00

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Potential Contamination Sensitive Environment Factor: 0.00E+00

SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT LIKELIHOOD OF EXPOSURE
R&H Oil Company - 06/21/00

Likelihood of Exposure

No.	Source ID	Level of Contamination
1	AST	Level I
2	Drums	Level I
3	AST (oil and acid)	Level I
4	AST (oil and solid)	Level I
5	API Separator	Level I
6	North Sump Area	Level II
7	Soils - Truck Load	Level II
8	North Spill Area	Level II
9	Soils - Process Are	Level I
10	Tank 301 Area	Level II
11	Soils - Tks 302-03	Level II

Likelihood of Exposure Factor: 550

Source No.	Hazardous Substance	Depth (ft.)	Concent.	Cancer	RFD	Units
1	Antimony	< 2	1.0E+00	0.0E+00	3.1E+01	ppm
1	Arsenic	< 2	1.8E+00	4.3E-01	2.3E+01	ppm
1	Barium	< 2	1.3E+01	0.0E+00	5.5E+03	ppm
1	Benzene	< 2	4.9E+00	2.2E+01	0.0E+00	ppm
1	Cadmium	< 2	1.8E+00	0.0E+00	3.9E+01	ppm
1	Chromium	< 2	2.9E+00	0.0E+00	3.9E+02	ppm
1	Copper	< 2	6.4E+01	0.0E+00	0.0E+00	ppm
1	Ethyl benzene	< 2	1.8E+01	0.0E+00	7.8E+03	ppm
1	Lead	< 2	7.1E+01	0.0E+00	0.0E+00	ppm
1	Manganese	< 2	4.3E+00	0.0E+00	1.1E+04	ppm
1	Methylnaphthalene, 2-	< 2	1.0E+02	0.0E+00	0.0E+00	ppm
1	Nickel	< 2	1.8E+00	0.0E+00	1.6E+03	ppm
1	Potassium	< 2	3.0E+01	0.0E+00	0.0E+00	ppm
1	Selenium	< 2	1.8E+00	0.0E+00	3.9E+02	ppm
1	Tetrachloroethylene	< 2	2.1E+00	1.2E+01	7.8E+02	ppm
1	Toluene	< 2	4.4E+01	0.0E+00	1.6E+04	ppm
1	Zinc	< 2	5.1E+02	0.0E+00	2.3E+04	ppm
2	Arsenic	< 2	1.9E+00	4.3E-01	2.3E+01	ppm
2	Barium	< 2	7.5E+00	0.0E+00	5.5E+03	ppm
2	Chromium	< 2	6.2E+00	0.0E+00	3.9E+02	ppm
2	Copper	< 2	5.4E+00	0.0E+00	0.0E+00	ppm
2	Lead	< 2	1.4E+01	0.0E+00	0.0E+00	ppm
2	Manganese	< 2	3.3E+00	0.0E+00	1.1E+04	ppm
2	Nickel	< 2	1.3E+00	0.0E+00	1.6E+03	ppm
2	Potassium	< 2	1.9E+00	0.0E+00	0.0E+00	ppm
2	Selenium	< 2	1.3E+00	0.0E+00	3.9E+02	ppm
2	Toluene	< 2	1.2E+00	0.0E+00	1.6E+04	ppm
2	Zinc	< 2	6.2E+01	0.0E+00	2.3E+04	ppm
3	Arsenic	< 2	1.8E+00	4.3E-01	2.3E+01	ppm
3	Selenium	< 2	2.0E+00	0.0E+00	3.9E+02	ppm
4	Aluminum	< 2	2.6E+03	0.0E+00	0.0E+00	ppm
4	Arsenic	< 2	2.3E+01	4.3E-01	2.3E+01	ppm

4	Barium	< 2	1.1E+03	0.OE+00	5.5E+03	ppm
4	Benz(a)anthracene	< 2	4.3E+00	8.8E-01	0.OE+00	ppm
4	Benzo(b)fluoranthene	< 2	4.3E+00	8.8E-01	0.OE+00	ppm
4	Cadmium	< 2	3.OE+00	0.OE+00	3.9E+01	ppm
4	Chromium	< 2	4.0E+01	0.OE+00	3.9E+02	ppm
4	Chrysene	< 2	4.3E+00	8.8E+01	0.OE+00	ppm
4	Cobalt	< 2	9.6E+01	0.OE+00	0.OE+00	ppm
4	Copper	< 2	1.5E+02	0.OE+00	0.OE+00	ppm
4	Cyanide	< 2	3.OE+00	0.OE+00	1.6E+03	ppm
4	Ethyl benzene	< 2	2.2E-02	0.OE+00	7.8E+03	ppm
4	Fluoranthene	< 2	4.3E+00	0.OE+00	3.1E+03	ppm
4	Lead	< 2	2.4E+02	0.OE+00	0.OE+00	ppm
4	Manganese	< 2	1.3E+02	0.OE+00	1.1E+04	ppm
4	Nickel	< 2	3.2E+01	0.OE+00	1.6E+03	ppm
4	Potassium	< 2	4.8E+02	0.OE+00	0.OE+00	ppm
4	Pyrene	< 2	4.3E+00	0.OE+00	2.3E+03	ppm
4	Selenium	< 2	3.OE+00	0.OE+00	3.9E+02	ppm
4	Tetrachloroethylene	< 2	5.9E-02	1.2E+01	7.8E+02	ppm
4	Toluene	< 2	9.7E-02	0.OE+00	1.6E+04	ppm
4	Zinc	< 2	1.2E+03	0.OE+00	2.3E+04	ppm
5	Arsenic	< 2	5.7E+00	4.3E-01	2.3E+01	ppm
5	Chromium	< 2	2.4E+01	0.OE+00	3.9E+02	ppm
5	Cobalt	< 2	4.5E+01	0.OE+00	0.OE+00	ppm
5	Copper	< 2	3.8E+01	0.OE+00	0.OE+00	ppm
5	Mercury	< 2	3.6E-01	0.OE+00	2.3E+01	ppm
5	Selenium	< 2	1.5E+00	0.OE+00	3.9E+02	ppm
5	Zinc	< 2	1.4E+02	0.OE+00	2.3E+04	ppm
6	Chromium	< 2	8.9E+00	0.OE+00	3.9E+02	ppm
6	Copper	< 2	9.8E+00	0.OE+00	0.OE+00	ppm
6	Mercury	< 2	2.6E-01	0.OE+00	2.3E+01	ppm
6	Zinc	< 2	1.1E+02	0.OE+00	2.3E+04	ppm
7	Cumene	< 2	2.4E-03	0.OE+00	3.1E+03	ppm
7	Ethyl benzene	< 2	6.9E-03	0.OE+00	7.8E+03	ppm
7	Naphthalene	< 2	4.8E-02	0.OE+00	3.1E+03	ppm
7	Toluene	< 2	8.IE-03	0.OE+00	1.6E+04	ppm
7	Xylene, –	< 2	6.8E-01	0.OE+00	1.6E+05	ppm
8	Naphthalene	< 2	4.5E-02	0.OE+00	3.1E+03	ppm
9	Arsenic	< 2	4.2E+01	4.3E-01	2.3E+01	ppm
9	Benzene	< 2	6.8E-01	2.2E+01	0.OE+00	ppm
9	Bis (2-ethylhexyl) phthalate	< 2	7.3E+01	4.6E+01	1.6E+03	ppm
9	Cobalt	< 2	4.1E+02	0.OE+00	0.OE+00	ppm
9	Copper	< 2	2.9E+01	0.OE+00	0.OE+00	ppm
9	Selenium	< 2	1.9E+00	0.OE+00	3.9E+02	ppm
9	Zinc	< 2	5.2E+02	0.OE+00	2.3E+04	ppm
10	Fluoranthene	< 2	1.4E+01	0.OE+00	3.1E+03	ppm
10	Mercury	< 2	2.6E-01	0.OE+00	2.3E+01	ppm
10	Pyrene	< 2	1.4E+01	0.OE+00	2.3E+03	ppm
11	Benzene	< 2	4.3E-01	2.2E+01	0.OE+00	ppm
11	Copper	< 2	2.7E+01	0.OE+00	0.OE+00	ppm
11	Naphthalene	< 2	8.7E-01	0.OE+00	3.1E+03	ppm

SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT WASTE CHARACTERISTICS

R&H *Oil* .Company - 06/21/00

Source: 1 AST

Source Hazardous Waste Quantity Value: 79.24

Hazardous Substance	Toxicity Value
Antimony	10000
Arsenic	10000
Barium	10000
Benzene	100
Cadmium	10000
Chromium	10000
Copper	0
Ethyl benzene	10
Lead	10000
Manganese	10000
Methylnaphthalene, 2-	0
Nickel	10000
Potassium	0
Selenium	100
Tetrachloroethylene	100
Toluene	10
Zinc	10

SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 2 Drums

Source Hazardous Waste Quantity Value: 0.02

Hazardous Substance	Toxicity Value
Arsenic	10000
Barium	10000
Chromium	1*0000
Copper	0
Lead	10000
Manganese	10000
Nickel	10000
Potassium	0
Selenium	100
Toluene	10
Zinc	10

SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 3 AST (oil and acid)

Source Hazardous Waste Quantity Value: 189.60

Hazardous Substance	Toxicity Value
Arsenic	10000
Selenium	100

SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 4 AST (oil and solid)

Source Hazardous Waste Quantity Value: 1.40

Hazardous Substance	Toxicity Value
Aluminum	0
Arsenic	X0000
Barium	10000
Benz(a)anthracene	1000
Benzo(b)fluoranthene	1000
Cadmium	10000
Chromium	10000
Chrysene	10
Cobalt	1
Copper	0
Cyanide	100
Ethyl benzene	10
Fluoranthene	100
Lead	10000
Manganese	10000
Nickel	10000
Potassium	0
Pyrene	100
Selenium	100
Tetrachloroethylene	100
Toluene	10
Zinc	10

SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT WASTE CHARACTERISTICS
R&H Oil 'Company - 06/21/00

Source: 5 API Separator

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value
Arsenic	10000
Chromium	10000
Cobalt	1
Copper	0
Mercury	10000
Selenium	100
Zinc	10

SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 6 North Sump Area

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value
Chromium	10000
Copper	0
Mercury	10000
Zinc	10

SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT WASTE CHARACTERISTICS
R&H Oil 'Company - 06/21/00

Source: 7 Soils - Truck Load-

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value
Cumene	1000
Ethyl benzene	10
Naphthalene	100
Toluene	10
Xylene, —	1

SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 8 North Spill Area

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value
Naphthalene	100

SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT WASTE CHARACTERISTICS
R&H Oil 'Company - 06/21/00

Source: 9 Soils - Process Are

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value
Arsenic	10000
Benzene	100
Bis (2-ethylhexyl) phthalate	100
Cobalt	1
Copper	0
Selenium	100
Zinc	10

SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 10 Tank 301 Area

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value
Fluoranthene	100
Mercury	10000
Pyrene	100

SOIL EXPOSURE PATHWAY RESIDENT -POPULATION THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 11 Soils - Tks 302-03

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value
Benzene	100
Copper	0
Naphthalene	100

SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT WASTE CHARACTERISTICS

R&H Oil Company - 06/21/00

Toxicity Factor:	l.00E+04
Sum of Source Hazardous Waste Quantity Values:	2.70E+02
Hazardous Waste Quantity Factor:	100
Waste Characteristics Factor, Category:	32

SOIL EXPOSURE PATHWAY RESIDENT POPULATION THREAT TARGETS
R&H'Oil Company - 06/21/00

Targets

Level I Population:	0.0	Value:	0.00
Level II Population:	0.0	Value:	0.00
Workers:	0.0	Value:	0.00
Resident Individual:	Potential	Value:	0.00
Resources:	NO	Value:	0.00

Terrestrial Sensitive Environment	Value
- N/A and/or data not specified	

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Terrestrial Sensitive Environments Factor: 0.00

SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT LIKELIHOOD OF EXPOSURE
R&H Oil Company - 06/21/00

Likelihood of Exposure

No.	Source ID	Level of Contamination	Attractiveness/ Accessibility	Area of Contam. (sq. feet)
1	AST	Level I	10	0
2	Drums	Level I	10	0
3	AST (oil and acid)	Level I	10	0
4	AST (oil and solid)	Level 1	10	0
5	API Separator	Level I	10	0
6	North Sump Area	Level II	10	0
7	Soils - Truck Load	Level II	10	0
8	North Spill Area	Level II	10	0
9	Soils - Process Are	Level I	10	0
10	Tank 301 Area	Level II	10	0
11	Soils - Tks 302-03	Level II	10	0

Highest Attractiveness/Accessibility Value: 10
Sum of Eligible Areas Of Contamination (sq. feet): 0
Area of Contamination Value: 0

Likelihood of Exposure Factor Category: 0

Source No.	Hazardous Substance	Depth (ft.)	Concent.	Cancer	RFD	Units
1	Antimony	< 2	1.0E+00	0.0E+00	3.1E+01	ppm
1	Arsenic	< 2	1.8E+00	4.3E-01	2.3E+01	ppm
1	Barium	< 2	1.3E+01	0.0E+00	5.5E+03	ppm
1	Benzene	< 2	4.9E+00	2.2E+01	0.0E+00	ppm
1	Cadmium	< 2	1.8E+00	0.0E+00	3.9E+01	ppm
1	Chromium	< 2	2.9E+00	0.0E+00	3.9E+02	ppm
1	Copper	< 2	6.4E+01	0.0E+00	0.0E+00	ppm
1	Ethyl benzene	< 2	1.8E+01	0.0E+00	7.8E+03	ppm
1	Lead	< 2	7.1E+01	0.0E+00	0.0E+00	ppm
1	Manganese	< 2	4.3E+00	0.0E+00	1.1E+04	ppm
1	Methylnaphthalene, 2-	< 2	1.0E+02	0.0E+00	0.0E+00	ppm
1	Nickel	< 2	1.8E+00	0.0E+00	1.6E+03	ppm
1	Potassium	< 2	3.0E+01	0.0E+00	0.0E+00	ppm
1	Selenium	< 2	1.8E+00	0.0E+00	3.9E+02	ppm
1	Tetrachloroethylene	< 2	2.1E+00	1.2E+01	7.8E+02	ppm
1	Toluene	< 2	4.4E+01	0.0E+00	1.6E+04	ppm
1	Zinc	< 2	5.1E+02	0.0E+00	2.3E+04	ppm
2	Arsenic	< 2	1.9E+00	4.3E-01	2.3E+01	ppm
2	Barium	< 2	7.5E+00	0.0E+00	5.5E+03	ppm
2	Chromium	< 2	6.2E+00	0.0E+00	3.9E+02	ppm
2	Copper	< 2	5.4E+00	0.0E+00	0.0E+00	ppm
2	Lead	< 2	1.4E+01	0.0E+00	0.0E+00	ppm
2	Manganese	< 2	3.3E+00	0.0E+00	1.1E+04	ppm
2	Nickel	< 2	1.3E+00	0.0E+00	1.6E+03	ppm
2	Potassium	< 2	1.9E+00	0.0E+00	0.0E+00	ppm
2	Selenium	< 2	1.3E+00	0.0E+00	3.9E+02	ppm
2	Toluene	< 2	1.2E+00	0.0E+00	1.6E+04	ppm

2	Zinc	< 2	6.2E+01	0.0E+00	2.3E+04	ppm
3	Arsenic	< 2	1.8E+00	4.3E-01	2.3E+01	ppm
3	Selenium	< 2	2.0E+00	0.0E+00	3.9E+02	ppm
4	Aluminum	< 2	2.6E+03	0.0E+00	0.0E+00	ppm
4	Arsenic	< 2	2.3E+01	4.3E-01	2.3E+01	ppm
4	Barium	< 2	1.1E+03	0.0E+00	5.5E+03	ppm
4	Benz(a)anthracene	< 2	4.3E+00	8.8E-01	0.0E+00	ppm
4	Benzo(b)fluoranthene	< 2	4.3E+00	8.8E-01	0.0E+00	ppm
4	Cadmium	< 2	3.0E+00	0.0E+00	3.9E+01	ppm
4	Chromium	< 2	4.0E+01	0.0E+00	3.9E+02	ppm
4	Chrysene	< 2	4.3E+00	8.8E+01	0.0E+00	ppm
4	Cobalt	< 2	9.6E+01	0.0E+00	0.0E+00	ppm
4	Copper	< 2	1.5E+02	0.0E+00	0.0E+00	ppm
4	Cyanide	< 2	3.0E+00	0.0E+00	1.6E+03	ppm
4	Ethyl benzene	< 2	2.2E-02	0.0E+00	7.8E+03	ppm
4	Fluoranthene	< 2	4.3E+00	0.0E+00	3.1E+03	ppm
4	Lead	< 2	2.4E+02	0.0E+00	0.0E+00	ppm
4	Manganese	< 2	1.3E+02	0.0E+00	1.1E+04	ppm
4	Nickel	< 2	3.2E+01	0.0E+00	1.6E+03	ppm
4	Potassium	< 2	4.8E+02	0.0E+00	0.0E+00	ppm
4	Pyrene	< 2	4.3E+00	0.0E+00	2.3E+03	ppm
4	Selenium	< 2	3.0E+00	0.0E+00	3.9E+02	ppm
4	Tetrachloroethylene	< 2	5.9E-02	1.2E+01	7.8E+02	ppm
4	Toluene	< 2	9.7E-02	0.0E+00	1.6E+04	ppm
4	Zinc	< 2	1.2E+03	0.0E+00	2.3E+04	ppm
5	Arsenic	< 2	5.7E+00	4.3E-01	2.3E+01	ppm
5	Chromium	< 2	2.4E+01	0.0E+00	3.9E+02	ppm
5	Cobalt	< 2	4.5E+01	0.0E+00	0.0E+00	ppm
5	Copper	< 2	3.8E+01	0.0E+00	0.0E+00	ppm
5	Mercury	< 2	3.6E-01	0.0E+00	2.3E+01	ppm
5	Selenium	< 2	1.5E+00	0.0E+00	3.9E+02	ppm
5	Zinc	< 2	1.4E+02	0.0E+00	2.3E+04	ppm
6	Chromium	< 2	8.9E+00	0.0E+00	3.9E+02	ppm
6	Copper	< 2	9.8E+00	0.0E+00	0.0E+00	ppm
6	Mercury	< 2	2.6E-01	0.0E+00	2.3E+01	ppm
6	Zinc	< 2	1.1E+02	0.0E+00	2.3E+04	ppm
7	Cumene	< 2	2.4E-03	0.0E+00	3.1E+03	ppm
7	Ethyl benzene	< 2	6.9E-03	0.0E+00	7.8E+03	ppm
7	Naphthalene	< 2	4.8E-02	0.0E+00	3.1E+03	ppm
7	Toluene	< 2	8.IE-03	0.0E+00	1.6E+04	ppm
7	Xylene, –	< 2	6.8E-01	0.0E+00	1.6E+05	ppm
8	Naphthalene	< 2	4.5E-02	0.0E+00	3.1E+03	ppm
9	Arsenic	< 2	4.2E+01	4.3E-01	2.3E+01	ppm
9	Benzene	< 2	6.8E-01	2.2E+01	0.0E+00	ppm
9	Bis (2-ethylhexyl) phthalate	< 2	7.3E+01	4.6E+01	1.6E+03	ppm
9	Cobalt	< 2	4.1E+02	0.0E+00	0.0E+00	ppm
9	Copper	< 2	2.9E+01	0.0E+00	0.0E+00	ppm
9	Selenium	< 2	1.9E+00	0.0E+00	3.9E+02	ppm
9	Zinc	< 2	5.2E+02	0.0E+00	2.3E+04	ppm
10	Fluoranthene	< 2	1.4E+01	0.0E+00	3.1E+03	ppm
10	Mercury	< 2	2.6E-01	0.0E+00	2.3E+01	ppm
10	Pyrene	< 2	1.4E+01	0.0E+00	2.3E+03	ppm
11	Benzene	< 2	4.3E-01	2.2E+01	0.0E+00	ppm
11	Copper	< 2	2.7E+01	0.0E+00	0.0E+00	ppm
11	Naphthalene	< 2	8.7E-01	0.0E+00	3.1E+03	ppm

SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 1 AST

Source Hazardous Waste Quantity Value: 79.24

Hazardous Substance	Toxicity Value
Antimony	10000
Arsenic	r10000
Barium	10000
Benzene	100
Cadmium	10000
Chromium	10000
Copper	0
Ethyl benzene	10
Lead	10000
Manganese	10000
Methylnaphthalene, 2-	0
Nickel	10000
Potassium	0
Selenium	100
Tetrachloroethylene	100
Toluene	10
Zinc	10

SOIL EXPOSURE PATHWAY NEARBY/POPULATION THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 2 Drums

Source Hazardous Waste Quantity Value: 0.02

Hazardous Substance	Toxicity Value
Arsenic	10000
Barium	10000
Chromium	10000
Copper	0
Lead	10000
Manganese	10000
Nickel	10000
Potassium	0
Selenium	100
Toluene	10
Zinc	10

SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 3 AST (oil and acid)

Source Hazardous Waste Quantity Value: 189.60

Hazardous Substance	Toxicity Value
Arsenic	r10000
Selenium	100

SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 4 AST (oil and solid)

Source Hazardous Waste Quantity Value: 1.40

Hazardous Substance	Toxicity Value
Aluminum	0
Arsenic	10000
Barium	10000
Benz(a)anthracene	1000
Benzo(b)fluoranthene	1000
Cadmium	10000
Chromium	10000
Chrysene	10
Cobalt	1
Copper	0
Cyanide	100
Ethyl benzene	10
Fluoranthene	1 0 0
Lead	10000
Manganese	10000
Nickel	10000
Potassium	0
Pyrene	100
Selenium	100
Tetrachloroethylene	100
Toluene	10
Zinc	10

SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 5 API Separator

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value
Arsenic	10000
Chromium	-10000
Cobalt	* 1
Copper	* 0
Mercury	10000
Selenium	100
Zinc	10

SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 6 North Sump Area

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value
Chromium	10000
Copper	0
Mercury	10000
Zinc	10

SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 7 Soils - Truck Load

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value
Cumene	1000
Ethyl benzene	10
Naphthalene	100
Toluene	10
Xylene, –	1

SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 8 North Spill Area

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value
Naphthalene	100

SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT WASTE CHARACTERISTICS

R&H Oil Company - 06/21/00

Source: 9 Soils - Process Are

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value
Arsenic	10000
Benzene	100
Bis (2-ethylhexyl) phthalate	100
Cobalt	1
Copper	0
Selenium	100
Zinc	10

SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 10 Tank 301 Area

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value
Fluoranthene	100
Mercury	10000
Pyrene	100

SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Source: 11 Soils - Tks 302-03

Source Hazardous Waste Quantity Value: 0.00

Hazardous Substance	Toxicity Value
Benzene	100
Copper	0
Naphthalene	100

SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT WASTE CHARACTERISTICS

R&H Oil Gompany - 06/21/00

Toxicity Factor:	l.OOE+04
Sum of Source Hazardous Waste Quantity Values:	2.70E+02
Hazardous Waste Quantity Factor:	100
Waste Characteristics Factor Category:	32

SOIL EXPOSURE PATHWAY NEARBY POPULATION THREAT TARGETS
R&H Oil Company - 06/21/00

Nearby Individual

Population within 1/4 mile: 0.0

Nearby Individual Value: 0.0

Population Within 1 Mile

Travel Distance Category	Number of People	Value
> 0 to 1/4 mile	0.0	0.0
> 1/4 to ½ mile	0.0	0.0
> ½ -to 1 mile	0.0	0.0

Population Within 1 Mile Factor: 0.0

AIR PATHWAY;LIKELIHOOD OF RELEASE
R&H Oil 'Company - 06/21/00

OBSERVED RELEASE

No.	Sample ID	Distance (miles)	Level of Contamination

- N/A and/or data not specified

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Observed Release Factor: 0

AIR PATHWAY LIKELIHOOD OF RELEASE
R&H Oil Company - 06/21/00

Gas Migration Potential

GAS POTENTIAL TO RELEASE

Source ID	Source Type	Gas Contain. Value (A)	Gas Source Type Value (B)	Gas Migrtn. Potent. Value (C)	Sum (B+C)	Gas Potential to Rel. Value A(B+C)
- N/A and/or data not specified						

Gas Potential to Release Factor: 0

AIR PATHWAY-LIKELIHOOD OF RELEASE
R&H Oil Company - 06/21/00

Source: AST

Gaseous Hazardous Substance	Hazardous Substance Gas Migration Potential Value
Benzene	17
Ethyl benzene	17
Methylnaphthalene, 2-	11
Tetrachloroethylene	17
Toluene	17

Average of Gas Migration Potential Value for 3 Hazardous Substances: 17.000

Gas Migration Potential Value From Table 6-7: 17

AIR PATHWAY LIKELIHOOD OF RELEASE
R&H Oil Company - 06/21/00

Source: Drums

Gaseous Hazardous Substance	Hazardous Substance Gas Migration Potential Value
Toluene	17

Average of Gas Migration Potential Value for 3 Hazardous Substances: 17.000

Gas Migration Potential Value From Table 6-7: 17

AIR PATHWAY-LIKELIHOOD OF RELEASE
R&H Oil Company - 06/21/00

Source: AST (oil and acid)

Gaseous Hazardous Substance	Hazardous Substance Gas Migration Potential Value

Average of Gas Migration Potential Value for 3 Hazardous Substances: 0.000

Gas Migration Potential Value From Table 6-7: 0

AIR PATHWAY LIKELIHOOD OF RELEASE
R&H Oil Company - 06/21/00

Source: AST (oil and solid)

Gaseous Hazardous Substance	Hazardous Substance Gas Migration Potential Value
Benz(a)anthracene	6
Benzo(b)fluoranthene	6
Chrysene	6
Ethyl benzene	17
Fluoranthene	6
Pyrene	6
Tetrachloroethylene	17
Toluene	17

Average of Gas Migration Potential Value for 3 Hazardous Substances: 17.000

Gas Migration Potential Value From Table 6-7: 17

AIR PATHWAY LIKELIHOOD OF RELEASE

R&H Oil Company - 06/21/00

Source: API Separator

Gaseous Hazardous Substance	Hazardous Substance Gas Migration Potential Value
Mercury	17

Average of Gas Migration Potential Value for 3 Hazardous Substances: 17.000

Gas Migration Potential Value From Table 6-7: 17

AIR PATHWAY LIKELIHOOD OF RELEASE
R&H Oil Company - 06/21/00

Source: North Sump Area

Gaseous Hazardous Substance	Hazardous Substance Gas Migration Potential Value
Mercury	17

Average of Gas Migration Potential Value for 3 Hazardous Substances: 17.000

Gas Migration Potential Value From Table 6-7: 17

AIR PATHWAY-LIKELIHOOD OF RELEASE
R&H Oil Company - 06/21/00

Source: Soils - Truck Load

Gaseous Hazardous Substance	Hazardous Substance Gas Migration Potential Value
Cumene	17
Ethyl benzene	17
Naphthalene	11
Toluene	17
Xylene, –	17

Average of Gas Migration Potential Value for 3 Hazardous Substances: 17.000

Gas Migration Potential Value From Table 6-7: 17

AIR PATHWAY LIKELIHOOD OF RELEASE
R&H Oil Company - 06/21/00

Source: North Spill Area

Gaseous Hazardous Substance	Hazardous Substance Gas Migration Potential Value
Naphthalene	11

Average of Gas Migration Potential Value for 3 Hazardous Substances: 11.000

Gas Migration Potential Value From Table 6-7: 11

AIR PATHWAY-LIKELIHOOD OF RELEASE
R&H Oil Company - 06/21/00

Source: Soils - Process Are

Gaseous Hazardous Substance	Hazardous Substance Gas Migration Potential Value
Benzene	17
Bis (2-ethylhexyl) phthalate	6

Average of Gas Migration Potential Value for 3 Hazardous Substances: 11.500

Gas Migration Potential Value From Table 6-7: 11

AIR PATHWAY LIKELIHOOD OF RELEASE
R&H Oil Company - 06/21/00

Source: Tank 301 Area

Gaseous Hazardous Substance	Hazardous Substance Gas Migration Potential Value
Fluoranthene	6
Mercury	17
Pyrene	6

Average of Gas Migration Potential Value for 3 Hazardous Substances: 9.667

Gas Migration Potential Value From Table 6-7: 11

AIR PATHWAY-LIKELIHOOD OF RELEASE
R&H Oil Company - 06/21/00

Source: Soils - Tks 302-03

Gaseous Hazardous Substance	Hazardous Substance Gas Migration Potential Value
Benzene	17
Naphthalene	11

Average of Gas Migration Potential Value for 3 Hazardous Substances: 14.000

Gas Migration Potential Value From Table 6-7: 17

AIR PATHWAY LIKELIHOOD OF RELEASE
R&H Oil Company - 06/21/00

Particulate Migration Potential

PARTICULATE POTENTIAL TO RELEASE

Source ID	Source Type	Partic. Contain Value (A)	Partic, Source Type Value (B)	Partic. Migrtn. Potent. Value (C)	Sum (B+C)	Partic. Potential to Rel. Value A(B+C)
- N/A and/or data not specified						

Particulate Potential to Release Factor: 0

AIR PATHWAY LIKELIHOOD OF RELEASE
R&H Oil Company - 06/21/00

Source: AST

Particulate Hazardous Substance
Antimony
Arsenic
Barium
Cadmium
Chromium
Copper
Lead
Manganese
Methylnaphthalene, 2-
Nickel
Potassium
Selenium
Zinc

AIR PATHWAY LIKELIHOOD OF RELEASE
R&H Oil Company - 06/21/00

Source: Drums

Particulate Hazardous Substance
Arsenic
Barium
Chromium
Copper
Lead
Manganese
Nickel
Potassium
Selenium
Zinc

AIR PATHWAY LIKELIHOOD OF RELEASE

R&H Oil Company - 06/21/00

Source: AST (oil and acid)

Particulate Hazardous Substance
Arsenic
Selenium

Source: AST (oil and solid)

Particulate Hazardous Substance
Aluminum
Arsenic
Barium
Benz(a)anthracene
Benzo(b)fluoranthene
Cadmium
Chromium
Chrysene
Cobalt
Copper
Cyanide
Fluoranthene
Lead
Manganese
Nickel
Potassium
Pyrene
Selenium
Zinc

Source: API Separator

Particulate Hazardous Substance
Arsenic
Chromium
Cobalt
Copper
Mercury
Selenium
Zinc

AIR PATHWAY LIKELIHOOD OF RELEASE
R&H Oil Company - 06/21/00

Source: North Sump Area

Particulate Hazardous Substance
Chromium
Copper
Mercury
Zinc

Source: Soils - Truck Load

Particulate Hazardous Substance
Naphthalene

Source: North Spill Area

Particulate Hazardous Substance
Naphthalene

AIR PATHWAY LIKELIHOOD OF RELEASE
R&H Oil Company - 06/21/00

Source: Soils - Process Are

Particulate Hazardous Substance
Arsenic
Bis (2-ethylhexyl) phthalate
Cobalt
Copper
Selenium
Zinc

AIR PATHWAY LIKELIHOOD OF RELEASE
R&H Oil Company - 06/21/00

Source: Tank 301 Area

Particulate Hazardous Substance
Fluoranthene
Mercury
Pyrene

AIR PATHWAY LIKELIHOOD OF RELEASE
R&H Oil Company - 06/21/00

Source: Soils - Tks 302-03

Particulate Hazardous Substance
Copper
Naphthalene

AIR PATHWAY WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Hazardous Substance	Toxicity Value	Gas Mobility Value	Particulate Mobility Value	Toxicity/ Mobility Value

AIR PATHWAY WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Hazardous Substances Found in an Observed Release

Sample ID	Observed Release Hazardous Substance	Particulate Toxicity/ Mobility Value	Gas Toxicity/ Mobility Value

- N/A and/or data not specified

- N/A and/or data not specified

AIR PATHWAY WASTE CHARACTERISTICS
R&H Oil Company - 06/21/00

Toxicity/Mobility Value from Observed Release Hazardous Substances:	0.00E+00
Toxicity/Mobility Factor:	0.00E+00
Sum of Source Hazardous Waste Quantity Values:	0.00E+00
Hazardous Waste Quantity Factor:	0
Waste Characteristics Factor Category:	0

AIR PATHWAY TARGETS

R&H Oil Company - 06/21/00

Actual Contamination

No.	Sample ID	Distance (miles)	Level of Contamination

- N/A and/or data not specified

Potential Contamination

Distance Categories Subject to Potential Contamination	Population	Value
	fbtential Contaminant ion Factor:	0.0000
	Potential Contaminant ion Factor:	0.0000
	Potential Contaminant ion Factor:	0.0000
	Potential Contaminant ion Factor:	0.0000
	Potential Contaminant ion Factor:	0.0000
	Potential Contaminant ion Factor:	0.0000
	Potential Contaminant ion Factor:	0.0000

Nearest Individual Factor

Distance in miles: Potential

- N/A and/or data not specified

Resources

Resource Value: 4.9353861890239449000000000000000000000000e+257

Actual Contamination, Sensitive Environments

Sensitive Environment	Distance (miles)	Sensitive Environment Value

- N/A and/or data not specified

Actual Contamination, Wetlands

Distance Category	Wetland Acreage	Wetland Acreage Value

- N/A and/or data not specified

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(Sum of Sensitive Environments + Wetlands Values)

Potential Contamination, Sensitive Environments

Sensitive Environment		Distance (miles)	Sensitive Environment Value	Distance Weight	Weighted Value/10
		4,935385843404746150000000000000000000000e+257			
24940	0.0000	6.966985983755210970000000000000000000000e+199			

Sum of Sensitive Environments Weighted Values/10: 0.000

Potential Contamination, Wetlands

Distance Category	Wetland Acreage	Wetland Acreage Value	Distance Weight	Weighted Value/10

- N/A and/or data not specified

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9837552109700000000000000000000000e+199

..REFERENCES

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