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HRS DOCUMENTATION RECORD

for

Voda Petroleum, Inc (Ultra Oil) Waste Oil Recycling

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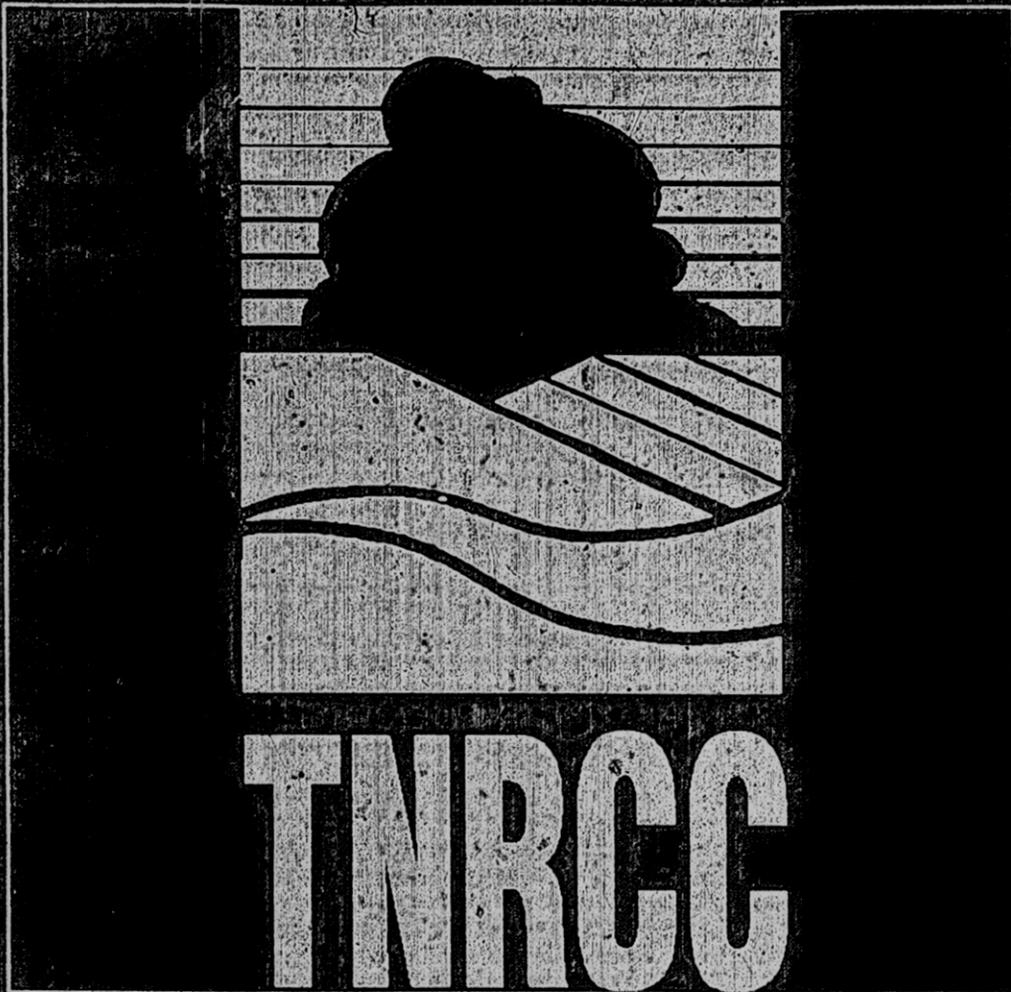
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August 15, 1995

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STATE SUPERFUND PROGRAM

HAZARD RANKING SYSTEM ASSESSMENT

***Voda Petroleum, Inc. Site
Clarksville City, Texas
Gregg County***

Volume I of IV

***Texas Natural Resource Conservation Commission
Austin, Texas***

August, 1995



HRS

***Voda Petroleum, Inc. Site
Clarksville City, Texas
Gregg County
Volume I of IV***

August 1995

VODA PETROLEUM, INC. SITE
HAZARDOUS RANKING PACKAGE

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**HAZARDOUS RANKING PACKAGE
SITE SUMMARY**

Facility Name: Voda Petroleum, Inc. Site

Location: The Voda Petroleum, Inc. (a.k.a. Ultra Oil, Inc.) is located at the northeast corner of the Clarksville City limits at 209 Duncan Road, Clarksville City, Texas 75693. The site lies one mile west of the intersection of Farm-to-Market Road (FM) 3272 and FM 2275, in Gregg County, Texas.

Site Legal Description: All that certain lot, tract, or parcel of land situated in Gregg County, Texas, on the David Ferguson Survey and being a part of a 6.120 acre tract of land described in Volume 206, Page 83 of the Gregg County deed records and being more particularly described by metes and bounds as follows: (Attachment 6.4)

BEGINNING at a 5/8" iron rod found at the northwest corner of this tract, also being the southwest corner of a 50.0 acre tract and the northwest corner of the above mentioned 6.120 acre tract; same being located on the East right-of-way of Charise Drive;

THENCE NORTH 89 degrees three minutes East, along the common property line between said 50.0 acre and 6.120 acre tract, a distance of 578.45 feet to a 1/2" iron rod for this northeast corner; also being the northeast corner of said 6.120 acre tract;

THENCE SOUTH 0 degrees four minutes 55 seconds East, along the East boundary line of said 6.120 acre tract, a distance of 452.78 feet to a 12" corner post for this southeast corner and being located on the north right-of-way of Duncan Road, also being the southeast corner of the above mentioned 6.120 acre tract.

THENCE along the said 6.120 acre tract North 89 degrees 47 minutes and six seconds West, a distance of 18\99.02 feet;

THENCE along the said 6.120 acre tract South 63 degrees 18 minutes and 26 seconds West, a distance of 57.72 feet;

THENCE along the said 6.120 acre tract South 89 degrees 55 minutes and 54 seconds West, a distance of 120.65 feet to a 1/2" iron rod for this southwest corner; same being North 89 degrees 55 minutes 54 seconds East, 200 feet from the southwest corner of said 120 acre tract;

THENCE north 0 degrees 56 minutes 53 seconds West, a distance of 200 feet to a 1/2" iron rod for corner;

THENCE SOUTH 89 degrees 14 minutes seven seconds West, a distance of 200 feet to a 1/2 iron rod for corner, same being located on the East right-of-way of Charise Drive and the West boundary line of said 6.120 acre tract and being North 0 degrees 56 minutes 53 seconds West, 200 feet from the southwest corner of same;

THENCE NORTH 0 degrees 56 minutes 56 seconds West along said East right-of-way of Charise Drive, a distance of 271.25 feet to the Place of BEGINNING of the herein described tract and containing 5.201 acres of land.

Also obtained by Voda Petroleum, Inc. (a.k.a. Ultra Oil, Inc.) is a contiguous 0.92 acre tract of land recorded as follows: All that certain lot, tract, or parcel of land situated in Gregg County, Texas, on the David Ferguson Survey and being a part of a 6.120 acre tract of land described in Volume 1212, Page 252 of the Gregg County deed records and being more particularly described by metes and bounds as follows: (Attachment 6.6)

BEGINNING at a 5/8" iron rod found at the northwest corner of this tract, also being the southwest corner of a 50.0 acre tract and the northwest corner of the above mentioned 6.120 acre tract; same being located on the East right-of-way of Charise Drive;

THENCE NORTH 89 degrees 14 minutes and 7 seconds East, 200 feet to a 1/2" iron rod for corner;

THENCE SOUTH 56 minutes and 53 seconds East, a distance of 200 feet to a 1/2" iron rod for corner;

THENCE SOUTH 89 degrees 55 minutes and 54 seconds West with the said right-of-way of Charise Drive, a distance of 200 feet to the Place of BEGINNING of the herein described tract and containing 6.201 acres of land.

Person(s) in charge of the facility:

Ronald L. Voda, Owner
Voda Petroleum, Inc.
P.O. Box 262
Longview, Tx 75606
Home: (903) 759-6534
Work: (903) 531-6000, Ext. 6032

Name of Preparer: DeAnna L. Epperson Date: 8/21/95
DeAnna L. Epperson, Site Investigation Manager
Superfund Site Discovery
and Assessment Team

Name of Reviewers: Wesley G. Newberry Date: 8/28/95
Wesley G. Newberry, Supervisor
Superfund Site Discovery
and Assessment Team

Stennie C. Meadows Date: 9/7/95
Stennie Meadows, Manager
Emergency Response and
Assessment Section

(The State predecessor agencies, Texas Water Quality Board, Texas Department of Water Resources, and Texas Water Commission, referred to throughout this report are to be known as the Texas Natural Resource Conservation Commission (TNRCC). The new agency, TNRCC became effective September 1, 1993, as mandated under State Senate Bill 2 of the 73rd Regular Legislative Session)

General Description of the Facility: Voda Petroleum, Inc. (a.k.a. Ultra Oil) operated as a waste oil recycling facility located at 209 Duncan Road in Clarksville City, Gregg County, Texas beginning in October, 1981. The site is located at Latitude 32° 33' 57" North, Longitude 94° 52' 15" West (Attachment 1.3).

The Voda Petroleum, Inc. facility "the Site" consists of an irregularly shaped 5.201 acre tract and a contiguous 0.92 acre tract of land. On November 15, 1994, DeAnna Epperson and Kelly Cook of the TNRCC Superfund Site Discovery and Assessment Team (SSDAT) conducted an on-site reconnaissance to document current site conditions and identify potential sources of hazardous substances at the site. The site was found to contain the following units:

- 1) Northeast Surface Impoundment. This impoundment is approximately 100' x 95' and is the designated site storm water run-off pond. The impoundment consists of spill-contaminated storm water and is reportedly polyethylene-lined. Run-off into the surface impoundment originates from the East Tank Farm and run-on from the west and south. No diversion structures are present (Attachment 3.60; and Ref. 4, Appendix B).
- 2) East Tank Farm. This area is the primary waste management area, comprised of eleven tanks with wastes consisting mainly of gasolines, tank bottoms, used oil, crude oil, and spent solvents. The total capacity of the tanks is approximately 240,000 gallons. The amount of waste actually stored in the tanks is unknown at this time. The East Tank Farm is surrounded by a firewall containment berm approximately 100' x 112' and contains approximately six to twelve inches of liquid wastes mixed with rainwater. The containment area for the tanks has only an earthen bottom (Attachment 3.60; and Ref. 4, Appendix B).
- 3) Petroleum refinery. The refinery consists of two distillation towers, heat exchangers, pumps, piping, a cooling tower and a furnace. The amount of waste stored in these structures is unknown (Attachment 3.60; and Ref. 4, Appendix B).
- 4) West Tank Farm. This area consists of two waste tanks of unknown capacity reportedly storing waste paraffin and may also store polychlorinated biphenyl wastes from transformer oils. The tanks have been cut-off approximately four feet from the base. These tanks are located in a firewall containment berm approximately 100' x 60', which is filled in with the hardened waste paraffin material. This waste appears to have migrated downhill to the north causing approximately 12,000 to 15,000 square feet of observed soil contamination between the East and West Tank Farm areas and north of the

West Tank Farm. Temporary berms have been constructed to obstruct leakage, but further discharge continues to be of concern at this time (Attachment 3.60; and Ref. 4, Appendix B).

- 5) Southwest Tank Farm. This area was reportedly used as part of an unauthorized oil recycling operation. The Southwest Tank Farm is situated on a 0.92 acre tract located outside of the original fenced portion of the facility which had always been open to the public, but has recently been fenced. Access to this area is now limited to the original fenced property. Three storage tanks of unknown capacity are located in this area with oily stained soils surrounding them. Stained soil encompassed approximately 130' x 60' of area. The tanks are bermed on the north and east sides, only. Five drums are located in the area (Attachment 3.60; and Ref. 4, Appendix B).
- 6) Abandoned drums. Approximately four-hundred fifty-nine (459) drums are located across the facility. Many of the drums are stored within the bermed area of the East Tank Farm. About 300 of the drums are stored in a open unlined, uncontained, unauthorized container storage area (Attachment 3.60; and Ref. 4, Appendix B).

Also observed on-site is an abandoned laboratory/office building, and an oil well lease with three operating pumps located on-site (Attachment 3.60; and Ref. 4, Appendix B).

On March 21, 1995 through March 23, 1995, DeAnna Epperson, Kelly Cook and Wesley Newberry, Technical Director of the TNRCC Preliminary Assessment/Screening Inspection Program conducted a screening site inspection to document releases of hazardous substances attributable to the site. Groundwater, soil and sediment samples were collected during the screening site inspection. A complete set of sample results from this sampling event are presented in Appendix C of the Screening Site Inspection Report. On-site hazardous substances found in contaminated soil adjacent to waste processing/storage areas, or in tanks/drums include: inorganics arsenic, barium, cadmium, copper, chromium, lead, mercury, nickel, selenium, and zinc; and organics toluene, trichloroethylene, naphthalene and tetrachloroethene (Ref. 11, Appendix C).

Visual observations of the Voda Petroleum, Inc. (a.k.a. Ultra Oil, Inc.) site during Texas Water Commission (TWC) site assessment visits on July 9, 1982, July 22, 1983, July 18, 1984, January 26, 1987, June 22, 1989, November 28, 1989, March 7, 1990, March 12, 1991, April 16, 1992, and August 5, 1992 noted the following areas of concern:

July 9, 1982

an inspection of the Ultra Oil, Inc. facility by TDWR District 5 representative, Robert L. Sedgwick, documented an unauthorized discharge of storm water runoff from the on-site surface impoundments. No samples were collected (Attachment 3.12).

July 22, 1983

an inspection of Voda Petroleum, Inc. by TDWR District 5 Office documented three unauthorized waste trenches containing perforated pipe approximately five feet deep serving as drainfields that received waste from the second surface impoundment. Feedstock material was observed in a firewalled area surrounding product tanks and was being piped to the on-site surface impoundments. Soil samples were collected from the site drainage pathways leading off-site. Organics detected in the samples include phenol, fluorene, and naphthalene. Results are attached to the inspection report (Attachment 3.21).

July 18, 1984

an inspection of the Voda Petroleum, Inc. by TDWR representatives, Jim Feely and Ann McGinnley documented a number of spills and overflows in the refinery unloading area. There was also evidence of spillage around the tanks. On the southern portion of the property there were approximately 250 drums stored. These drums reportedly contained grease and lube oil. There were signs of spillage around the drums. No samples were collected (Attachment 3.26).

January 26, 1987

a compliance inspection at the Voda Petroleum Inc. facility by TWC District 5 representative Kevin Phillips observed spent toluene being routed by pipe from a sink drain in the facility laboratory to the earthen containment of the East Tank Farm. Soil samples were collected from the site drainage pathways leading off-site. Analytes detected in the samples include phenol, toluene, and cadmium. Results are attached to the inspection report (Attachment 3.32).

June 22, 1989

a compliance inspection at the Voda Petroleum, Inc. facility by TWC District 5 representatives Scott Harris and Thomas Weber documented releases of waste oil around the container storage area and lubricants from a 55-gallon drum. Paraffin type waste materials were observed in the area currently designated as the West Tank Farm. Samples were collected from

tanks on-site. Organics detected in a sample collected from Tank No. 502 include naphthalene, fluorene, phenanthrene, benzene, toluene, and trichloroethane. Results are included as an attachment to the inspection report (Attachment 3.39).

December 15, 1989

a complaint inspection was conducted at the Voda Petroleum, Inc. facility by TWC District 5 Office. Foul smelling wastes were reported being discharged from the site onto a neighbor's property. The TWC District 5 Office documented the discharge and calculated approximately 962 gallons of wastewater from the surface impoundment had been released onto the property immediately downstream of the facility. No samples were collected (Attachment 3.41).

March 7, 1990

an compliance inspection of the Voda Petroleum, Inc. facility by the TWC District 5 Office documented an oil stained channel leading from the north side of the east tank farm to the south surface impoundment of the larger bifurcated impoundment. On March 8, 1990, Frank Barnes, Plant Manager, stated that the stained surface was due to his placing a hose from the tank containment of the east tank farm to the northeast surface impoundment to release a spill from a tank in the east tank farm. No samples were collected (Attachment 3.42).

March 12, 1991

a compliance inspection of the Voda Petroleum, Inc. facility conducted by the TWC District 5 Office documented oily stained soil in the area between the southeast corner of the east tank farm and the laboratory building. Wastewater and oily waste was pooled inside the east tank farm. Soil contamination was noted adjacent to the vehicle unloading area from leaks in transfer hoses, drippage, and leaks in the in-line filtration equipment. Soil contamination was found beneath product containers in the west side of the east tank farm. Oily stained soil was located south of the facility in the parking lot. Spilled paraffin was documented within containment of West Tank Farm, Tank Nos. 59 and 60. Samples were collected of incoming wastes. Organics detected in the samples include benzene, toluene, ethyl benzene, and naphthalene. Results are attached to the inspection report (Attachment 3.52).

April 16, 1992

a compliance inspection of the Voda Petroleum, Inc. facility by the TWC District 5 Office documented that the site appeared inactive. Adjacent land owners confirmed the lack of

operations at the facility since late 1991. No samples were collected (Attachment 3.56).

Background/Operating History: Voda Petroleum, Inc. operated as a six hundred barrel per day maximum design capacity, vacuum distillation waste oil recycling facility located at 209 Duncan Road in Clarksville City, Gregg County, Texas. The facility known as Voda Petroleum, Inc., received, stored, and processed lubricating oils, transmission oils, hydraulic oils, diesel oils, kerosene, gasoline, aromatic and paraffinic solvents and marketed the heavy residual oil and lubricating oil. Wastes from this process were accumulated in 55-gallon drums for on-site storage and/or in storage tanks prior to refining and blending (Attachments 3.15, 3.43 and 3.53).

This property was originally a part of a 61.39 acre tract of undeveloped land not used for industrial purposes and having a homestead owned by Charles McBride. Fifty (50) acres of the property was separated and deed recorded to Chaco, Inc. on September 21, 1979. On October 30, 1979, Chaco, Inc. conveyed and deed recorded 6.120 acres of the 50 acre tract to Ultra Oil, Inc. with Charles McBride serving as agent and attorney in fact. On May 1, 1981, Ultra Oil, Inc., with Charles McBride serving as President of Ultra Oil, Inc., recorded the sale of this same property to Voda Petroleum, Inc. A renegotiated sale of the property with \$5,000 being due from Ron Voda on May 12, 1982, instead of November 12, 1982, was deeded in the Gregg County court records on May 7, 1982 (Attachments 6.1, 6.2, 6.3, and 6.4).

Approximately 0.92 acre of the property was granted to Andrew McBride on September 5, 1984, with Charles McBride serving as President of Ultra Oil, Inc. and agent and attorney-in-fact. This one acre tract corresponds to that part of the current Voda Petroleum, Inc. site that was not originally fenced. This one acre portion of the property was conveyed and deeded to Voda Petroleum, Inc. on April 9, 1985, by Andrew McBride (Attachments 6.5 and 6.6).

On February 1, 1993, in the Northern District of Texas, Ronald L. Voda, Sr., owner of Voda Petroleum, Inc., was sentenced for NPDES violations by a U.S. District Judge. Mr. Voda entered into an agreement with the U.S. Government whereby he pled to a Clean Water Act misdemeanor in return for his cooperation. Mr. Voda was sentenced to 60 days incarceration at a State of Texas penal facility, 120 days at a halfway house, 400 hours of community service, a \$3,000 fine, and five years probation. The following case information was highlighted by EPA's Criminal Investigation Division during the sentencing summary:

In 1987, Ronald L. Voda entered into an agreement with waste hauler, Herman Goldfaden, owner of Control Disposal Company in Dallas, Texas. Mr. Voda agreed to sign trip tickets and

hazardous waste manifests certifying that Voda Petroleum Inc. was paid \$0.10 for each gallon of waste listed on paperwork regardless of whether or not it came to the Voda Petroleum, Inc. facility. Much of the waste listed on these trip tickets and manifests was illegally disposed of into the sewer systems in the Dallas area by Control Disposal Company (Attachment 3.57).

On February 10, 1989, during execution of a search warrant at the Voda Petroleum, Inc. facility, federal agents observed a ditch cut through a levee surrounding the process area. Wastewater being discharged from this ditch exceeded limits set for the Voda Petroleum, Inc. NPDES permit. The investigation was conducted by EPA's Criminal Investigation Division with assistance from the FBI (Attachment 3.57).

On December 10, 1993, the Enforcement Screening Committee (ESC) determined that Voda Petroleum should be referred to the Pollution Cleanup Division in a TNRCC Memorandum from Robert G. Rodgers, Enforcement Coordinator, Enforcement Section, Industrial and Hazardous Waste Division, to Stennie Meadours, Manager, Emergency Response & Assessment Section, Pollution Cleanup Division (Attachment 3.59).

On December 13, 1994, in a letter from David Davis, Director, Pollution Cleanup Division, to Russel Rhoades, USEPA, Region VI, the TNRCC requested referral of the Voda Petroleum site to EPA for Emergency Response Branch (ERB) actions involving site security and immediate removal of abandoned drums and tank materials (Attachment 3.61).

In response to the request, the EPA ERB installed a fence to ensure site security during the TNRCC site investigation on March 23, 1995 (Ref. 4, Appendix B).

TWC District 5 Office representatives documented in inspection reports the following manifests which showed that Voda Petroleum, Inc. accepted hazardous wastes:

- | | |
|------------------|---|
| January 27, 1983 | 2,300 gallons of waste lube from Witco Chemical Company, Marshall, Texas. This waste oil was contaminated with thirty (30) percent discarded commercial chemical product consisting of methyl ethyl ketone (Attachment 3.21). |
| February 2, 1983 | 5,000 gallons of used solvent from Delta Solvents, Shreveport, Louisiana (Attachment 3.21). |
| February 9, 1983 | 4,000 gallons of spent solvents from Delta Solvents, Longview, Texas. The waste had been |

characterized by Delta Solvents to contain methyl ethyl ketones, ethylene chloride, acetone, cyclohexane, 1,1,1-trichloroethane, and trichloroethylene (Attachment 3.21).

- May 2, 1986 1,485 gallons of flammable waste liquid from Martin Decker, Cedar Park, Texas. Manifest No. 00056901 (Attachment 3.31).
- March 19, 1987 150 gallons of waste flammable liquid from United Press Int., Dallas, Tx 75234, Manifest No. 00296407 (Attachment 3.40).
- January 28, 1988 3,444 gallons of tank bottoms/still bottoms from Mobil Oil Corp. located at Farm Road 9 South, in Waskom, Texas 75692, Manifest No. 00286413 (Attachment 3.40).
- February 15, 1989 1,500 gallons of gasoline, varsol, water, soil from Long Mile Rubber Co. at 6820 Forest Park Rd, Dallas, Texas 75235 Manifest No. 00508000 (Attachment 3.40).
- March 1, 1989 440 gallons of waste oil, combustible liquid (cutting oil) containing 1,1,1-trichloroethane from Highland Pump Company, in Judson, Texas 75660. Manifest No. 00483342 (Attachment 3.54).
- May 30, 1989 55 gallons of gasoline sludge from Mobil Oil Corp., Rt. 1, Box 749 Hearne Texas 77859, Manifest No. 00027583 (Attachment 3.31).
- May, 1992 -
September, 1992 Five dates for a total of 28,100 gallons of spent solvents from Stroh Brewery Company, Longview,, Texas. The waste solvent was composed of toluene, methyl ethyl ketone, and hexane with a flashpoint of 88 degrees Fahrenheit (Attachment 3.21).

Voda Petroleum, Inc. used waste lubricant oils and greases mixed with waste gasoline to fuel a small on-site industrial furnace. Spent toluene generated from on-site laboratory operations was also mixed with other waste oil or feedstock to produce fuel or lubricant oil. (Attachment 3.15, 3.43 and 3.53)

Voda Petroleum, Inc. Site		
MIGRATION HAZARD MODE COMPUTATION		
	S	S ²
GROUNDWATER ROUTE SCORE	40.82	1666.27
SURFACE WATER ROUTE SCORE	2.33	5.42
AIR ROUTE SCORE	0.00	0.00
$S_{gw}^2 + S_{sw}^2 + S_a^2$		1671.70
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		40.89
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73$		23.63

The Hazard Ranking System (HRS) Package Score is 23.63.

Ground Water Route Work Sheet

Rating factor	Assigned Value (circle one)	Multi-plier	Score	Calc Value	Max. Score	Ref. (section)
1 Observed Release	0 45		1	0	0 45	3.1

If observed release is given a score of 45, proceed to line 4.
 If observed release is given a score of 0, proceed to line 2.

2 Route Characteristics						
Depth to Aquifer of Concern	0 1 2 3		2	3	6	6 3.2
Net precipitation	0 1 2 3		1	1	1	3
Permeability of the Unsaturated Zone Physical State	0 1 2 3		1	2	2	3
	0 1 2 3		1	3	3	3
Total Route Characteristics Score					12	15

3 Containment	0 1 2 3		1	3	3	3 3.3
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4 Waste Characteristics						
Toxicity/Persistence	0 3 6 9 12 15 18		1	18	18	18 3.4
Hazardous Waste Quantity	0 1 2 3 4 5 6		1	7	7	8
	7 8					
Total Route Characteristics Score					25	26

5 Targets						
Ground Water Use	0 1 2 3		3	2	6	9 3.5
Distance to Nearest Well/Population Served	0 4 6 8 10		1	20	20	40
	12 16 18 20 24					
	24 30 32 35 40					
Total Targets Score					26	49

6 If line 1 is 45, multiply 1 X 4 X 5
 If line 1 is 0, multiply 2 X 3 X 4 X 5

23400 57,330

7 Divide line 6 by 57,330 and multiply by 100 = S =

40.82

Surface Water Route Work Sheet

Rating Factor	Assigned Value (circle one)	Multi-plier	Score	Calc Value	Max. Score	Ref. (section)
1 Observed Release	0 45		1	0	0 45	4.1

If observed release is given a score of 45, proceed to line 4.
 If observed release is given a score of 0, proceed to line 2.

2 Route Characteristics						
Facility Slope and Intervening Terrain	0 1 2 3		1	0	0 3	4.2
1 yr. 24 hr. rainfall	0 1 2 3		1	3	3 3	
Distance to nearest Surface Water	0 1 2 3		2	2	4 6	
Physical State	0 1 2 3		1	3	3 3	
Total Route Characteristics Score					10 15	

3 Containment	0 1 2 3		1	3	3 3	4.3
---------------	---------	--	---	---	-----	-----

4 Waste Characteristics						
Toxicity/Persistence	0 3 6 9 12 15 18		1	18	18 18	4.4
Hazardous Waste	0 1 2 3 4 5 6		1	7	7 8	
Quantity	7 8					
Total Route Characteristics Score					25 26	

5 Targets						
Surface Water Use	0 1 2 3		3	0	0 9	4.5
Distance to a Sensitive Environment	0 1 2 3		2	1	2 6	
Population Served/ Distance to Water Intake Downstream	0 4 6 8 10 12 16 18 20 20 24 30 32 35 40		1	0	0 40	
Total Targets Score					2 55	

6 If line 1 is 45, multiply 1 X 4 X 5
 If line 1 is 0, multiply 2 X 3 X 4 X 5

1500 64350

7 Divide line 6 by 57,330 64350 and multiply by 100 S =

2.331002

Air Route Work Sheet

Rating Factor	Assigned Value (circle one)	Multiplier	Score	Calc Value	Max. Score	Ref. (section)
1 Observed Release	0 45		1	0	0 45	5.1

Date and Location:
Sampling Protocol:

If line 1 is 0, the S = 0. Enter on line 5.
If line 1 is 45, then proceed to line 2 and to line 2.

2 Waste Characteristic						5.2
Reactivity and Incompatibility	0 1 2 3		1	0	0 3	
Toxicity	0 1 2 3		3	0	0 9	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8		1	0	0 8	

Total Waste Characteristics Score 0 20

3 Targets						5.3
Population within 4 mile radius	0 9 12 15 18 21 24 27 30		1	0	0 30	
Distance to Sensitive Environment	0 1 2 3		2	0	0 6	
Land use	0 1 2 3		1	0	0 3	

Total Targets Score 0 39

4 Multiply 1 X 2 X 3 0 35,100
5 Divide line 4 by 35,100 64' 30 and multiply by 100 S = 0

DOCUMENTATION RECORDS
FOR
HAZARD RANKING SYSTEM

INSTRUCTION: The purpose of these records is to provide a convenient way to prepare an auditable record of the data and documentation used to apply the Hazard Ranking System to a given facility. As briefly as possible summarize the information you used to assign the score for each factor (e.g., "Waste quantity = 4,230 drums plus 800 cubic yards of sludge"). The source of information should be provided for each entry and should be a bibliographic-type reference that will make the document used for a given data point easier to find. Include the location of the document and consider appending a copy of the relevant page(s) for ease in review.

Facility Name: Voda Petroleum, Inc. Site

Location: The Voda Petroleum, Inc. Site ("the site") is located at the northeast corner of the Clarksville City limits at 209 Duncan Road, Clarksville City, Texas 75693. The site lies one mile west of the intersection of Farm-to-Market Road (FM) 3272 and FM 2275, in Gregg County, Texas (Ref. 10). The site is located at Latitude 32° 33' 57" North, Longitude 94° 52' 15" West (Attachment 1.3).

GROUND WATER ROUTE

1. OBSERVED RELEASE

Contaminants detected (5 maximum):

There is no analytical evidence of groundwater contamination documented within the uppermost aquifer beneath the Voda Petroleum, Inc. site.

Assigned Value = 0

Rationale for attributing the contaminants to the facility:
N/A

2. ROUTE CHARACTERISTICS

Depth to Aquifer of Concern

Name/description of aquifer(s) of concern:

The Voda Petroleum, Inc. site is located in the Gulf Coastal Plain of Northeastern Texas. The principal sources of groundwater in Gregg County comes from the geologic units of the Eocene age. The Queen City Sand, a member of the Clairborne Group which is divided in ascending order into the Carrizo Sand, Reklaw Formation, and Queen City Sand, forms the most extensive outcrop in the area. This outcrop consists of massive to cross-bedded sediments. The sediments generally consist of about eighty (80) percent medium to fine sand and about twenty (20) percent silt and clay, with minor amounts of lignite. Though not considered a principal water-bearing unit, the Queen City Formation, the aquifer of concern, produces a limited source of groundwater to shallow wells in the area.

Approximately forty-seven (47) domestic wells and three industrial wells are identified through State water well reports as drawing from this aquifer within three miles of the site.

(Ref. 9)

Depth(s) from the ground surface to the highest seasonal level of the saturated zone [water table(s)] of the aquifer of concern:

Depth to groundwater in this area is approximately 19 feet (Attachment 7.1). = 3

Depth from the ground surface to the lowest point of waste disposal/storage:

Depth to the reportedly polyethylene lined surface impoundment is approximately four feet. The depth of the drainfield with the perforated pipe was approximately five feet deep (Attachment 7).

Net Precipitation

Mean annual or seasonal precipitation (list months for seasonal):

The annual precipitation for this area is 46.5 inches.
(Ref. 6)

Mean annual lake or seasonal evaporation (list months for seasonal):

The annual evaporation for this area is fifty-three (53) inches.
(Ref. 3)

Net precipitation (subtract the above figures):

46.5 inches minus 53 inches = -6.5 = 1

Permeability of Unsaturated Zone

Soil type in unsaturated zone:

The soil type in unsaturated zone is sand.
(Ref. 9)

Permeability associated with soil type:

$10^{-3} - 10^{-5}$ cm/sec = 2
(Ref. 9)

Physical state

Physical state of substances at time of disposal (or at present time for generated gases):

liquid, sludge = 3

3. CONTAINMENT

Method(s) of waste or leachate containment evaluated:

The Northeast surface impoundment on-site is reportedly polyethylene lined. Run-off into the impoundment originates from the East Tank Farm and run-on from the west and south. No diversion structures are present (Attachment 3.61).

Approximately four-hundred fifty-nine (459), 55-gallon drums of unknown substances were observed at the facility. Many of these containers have been observed as leaking, are badly deteriorated or bulging (Attachments 3.60, 3.61; and Ref. 4, Appendix B).

The East, West, and Southwest tank farms contain abandoned storage tanks and drums. There are berms surrounding the East and West tank farms and a partial berm around the Southwest tank farm. No run-on diversion structures have been constructed (Attachments 3.60, 3.61; and Ref. 4, Appendix B).

Method with highest score:

containers = 3

4. WASTE CHARACTERISTICS

Toxicity and persistence

Compounds evaluated:

toluene, trichloroethylene, cadmium, lead and arsenic

(Attachment 3.21; Ref.4, Appendix H, Document 10, and Ref. 11)

Compound with highest score:

	<u>Toxicity</u>	<u>Persistence</u>
cadmium	3	3
arsenic	3	3
lead	3	3
trichloroethylene	2	2
toluene	3	1

(Ref. 2)

Assigned Value = 18

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum).

West Tank Farm. This area consists of two waste tanks of unknown capacity reportedly storing waste paraffin and may also store polychlorinated biphenyl wastes from transformer oils. The tanks have been cut-off approximately four (4) feet from the base. These tanks are located in a firewall containment berm approximately 100' x 60', which is filled in with the hardened waste paraffin material. This waste appears to have migrated downhill to the north causing approximately 12,000 to 15,000 square feet of observed soil contamination between the East and West Tank Farm areas and north of the West Tank Farm. Temporary berms have been constructed to obstruct leakage, but further discharge continues to be of concern at this time (Attachment 3.61).

Southwest Tank Farm. This area was reportedly used as part of an unauthorized oil recycling operation. The Southwest Tank Farm is situated on a 0.92 acre tract located outside of the original fenced portion of the facility which had always been open to the public, but has recently been fenced. Access to this area is now limited to the original fenced property. Three storage tanks of unknown capacity are located in this area with oily stained soils surrounding them. Stained soil encompassed approximately 130' x 60' of area. The tanks are bermed on the north and east sides, only. Five drums containing unknown materials are located in the area (Attachment 3.61).

Abandoned drums. Approximately four-hundred fifty-nine (459) drums are located across the facility. Many of the drums are stored within the bermed area of the East Tank Farm. About 300 of the drums are stored in a open unlined, uncontained, unauthorized container storage area (Attachment 3.61).

Petroleum refinery. The refinery consists of two distillation towers, heat exchangers, pumps, piping, a cooling tower and a furnace. The amount of waste stored in these structures is unknown (Attachment 3.61).

Northeast Surface Impoundment. This impoundment is approximately 100' x 95'. The impoundment consists of spill-contaminated storm water and is reportedly polyethylene-lined. Run-off into the surface impoundment originates from the East Tank Farm and run-on from the west and south. No diversion structures are present (Attachment 3.61).

East Tank Farm. This area is the primary waste management area, comprised of eleven tanks with wastes consisting mainly of gasolines, tank bottoms, used oil, crude oil, and spent solvents. Also, Tank 200 was reported to have contained polychlorinated biphenyl waste confirmed by chemical analysis on January 23, 1983 (Attachment 3.21; Ref. 4, Appendix H, Document 10). The total capacity of the tanks is approximately 240,000 gallons. The amount of waste actually stored in the tanks is unknown at this time. The East Tank Farm is surrounded by a firewall containment berm approximately 100' x 112' and contains approximately six to twelve inches of liquid wastes mixed with rainwater. The containment area for the tanks has only an earthen bottom (Attachments 3.61).

Basis of estimating and/or computing waste quantity:

- 5 drums (Southwest Tank Farm)
- 240,000 gallons x 0.5 full = 120,000 gallons = 2,400 drums (50 gallons = 1 drum) (East Tank Farm)
- 100' x 95' x 4' x 0.5 full = 38,000 ft³ = 1,055 drums (Northeast Surface Impoundment)
- 100' x 112' x 6" = 67,200 ft³ = 1,976 drums (containment East Tank Farm)
- 100' x 60' x 6" = 36,000 ft³ = 1,000 drums (West Tank Farm)

Total estimated waste quantity = 6,431 drums (Ref. 1)

Assigned Value = 7

5. TARGETS

Ground Water Use

Use(s) of aquifer(s) of concern within a 3 mile radius of the facility:

Domestic and Industrial

(Ref. 9 and 10)

Assigned Value = 2

Distance to Nearest Well.

Location of nearest well drawing from aquifer of concern or occupied building not served by a public water supply:

The nearest well is domestic and is used for irrigating a garden. The well is located within 200 yards directly east of the site at Mr. Sam Pate residence. The water level of the well has been measured at 19 feet (Attachment 4.1 and 7).

The nearest drinking water well not connected to a public water supply is located approximately 1,000 feet northeast of the site. No well records were available (Ref. 4, Appendix B).

Distance to above well or building:

Approximately 1,000 feet.

(Ref. 5)

Assigned Value = 3

Population Served by Ground Water Wells Within a 3 mile Radius

Identified water supply well(s) drawing from aquifer(s) of concern within a 3 mile radius and populations served by each:

58 Domestic wells, and seven industrial wells within a three mile radius of the site are identified as drawing from the aquifer of concern (Attachment 7.0).

The population ratio per house in Gregg County is 2.56 persons per household.

(Ref. 6)

58 Domestic wells = 58 x 2.56 (population ratio) = 148.48 persons served

(Ref. 1)

Computation of land area irrigated by supply well(s) drawing from aquifer(s) of concern within a 3 mile radius, and conversion to population (1.5 people per acre):

No record of irrigated acres within a three (3) mile radius of the site was found (Attachment 4.4).

Average slope of terrain between facility and above-cited surface water body in percent:

≤3%

Assigned Value = 0
Assigned Matrix Value = 0

(Ref. 5)

Is the facility located either totally or partially in surface water?

No

Is the facility completely surrounded by areas of higher elevation?

No

1 Year 24 hour Rainfall in Inches

3.5 inches

Assigned Value = 3

(Ref. 3 and 1)

Distance to Nearest Downslope Surface Water

The nearest surface water body defined as perennial is Cambells Creek, approximately 0.75 miles downstream of the site.

(Attachments 1.5 and 4.3)

Assigned Value = 2

Physical State of Waste

Liquid

Assigned Value = 3

(Ref. 1)

3. CONTAINMENT

Method(s) of waste or leachate containment evaluated:

The Northeast surface impoundment on-site is reportedly polyethylene lined. Run-off into the impoundment originates from the East Tank Farm and run-on from the west and south. No diversion structures are present (Attachment 3.61).

Approximately four-hundred fifty-nine (459), 55-gallon drums of unknown substances were observed at the facility. Many of these containers have been observed as leaking, are badly deteriorated or bulging (Attachments 3.60, 3.61; and Ref. 4, Appendix B).

The East, West, and Southwest tank farms contain abandoned storage tanks and drums. There are berms surrounding the East and West tank farms and a partial berm around the Southwest tank farm. No run-on diversion structures have been constructed (Attachments 3.60, 3.61; and Ref. 4, Appendix B).

Method with highest score:

Containers

Assigned Value = 3

4. WASTE CHARACTERISTICS

Toxicity and Persistence

Compounds evaluated:

toluene, trichloroethylene, cadmium, lead and arsenic

(Attachment 3.21; Ref.4, Appendix H, Document 10, and Ref. 11)

Compound with highest score:

	<u>Toxicity</u>	<u>Persistence</u>
cadmium	3	3
arsenic	3	3
lead	3	3
trichloroethylene	2	2
toluene	3	1

(Ref. 2)

Assigned Value = 18

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

West Tank Farm. This area consists of two waste tanks of unknown capacity reportedly storing waste paraffin and may also store polychlorinated biphenyl wastes from transformer oils. The tanks have been cut-off approximately four (4) feet from the base. These tanks are located in a firewall containment berm approximately 100' x 60', which is filled in with the hardened waste paraffin material. This waste appears to have migrated downhill to the north causing approximately 12,000 to 15,000 square feet of observed soil contamination between the East and West Tank Farm areas and north of the West Tank Farm. Temporary berms have been constructed to obstruct leakage, but further discharge continues to be of concern at this time (Attachment 3.61).

complaint with TACB stating that odor associated with the runoff from the site had made him nauseous (Ref. 4, Appendix H, Document 25).

On March 22, 1990, Mr. and Mrs. Randy Pate, residents located directly east of Voda Petroleum, Inc. site filed a report with TACB stating that for the past two days smoke and odor from the boiler stack at the site has been causing their eyes to burn and giving them headaches (Ref. 4, Appendix H, Document 28).

There is no available analytical evidence of documented air releases from the site, therefore, the air pathway was given a score of zero.

Alligator Snapping Turtle, Eastern Big-eared Bat, and the American Swallow-tailed Kite are threatened and or endangered if the appropriate habitat becomes available.

(Attachments 4.5 and 5.2)

Assigned Value = 1

Population Served by Surface Water

Location(s) of water supply intake(s) within 3 mile (free-flowing bodies) or 1 mile (static water bodies) downstream of the hazardous substance and population served by each intake:

No surface water supply intakes exist within 3 miles downstream of the site.

(Attachments 4.2 and 4.3)

Assigned Value = 0

Computation of land area irrigated by above-cited intake(s) and conversion to population (1.5 people per acre):

None

Total population served:

None

Name/description of nearest of above water bodies:

N/A

Distance to above-cited intakes, measured in stream miles:

N/A

Assigned Value = 0
Assigned Matrix Value = 0

AIR ROUTE

On June 17, 1988, an anonymous complaint from residents along Duncan road was filed with the Texas Air Control Board (TACB), alleging that odor from Voda Petroleum, Inc. is very bad at times and causes headaches and throat burning (Ref. 4, Appendix H, Document 20 and 21)

On November 28, 1989, Mr. Don Williams, a resident that lives north of the Voda Petroleum, Inc. site filed a

- 100' x 112' x 6" = 67,200 ft³ = 1,976 drums (containment East Tank Farm)
- 100' x 60' x 6" = 36,000 ft³ = 1,000 drums (West Tank Farm)

Total estimated waste quantity = 6,431 drums (Ref. 1)

Assigned Value = 7

5. TARGETS

Surface Water Use

Use(s) of surface water within 3 miles downstream of the hazardous substance:

No known surface water uses or permits are recorded along Cambells Creek within 3 miles downstream of the site.

(Attachments 4.3)

Assigned Value = 0

Is there tidal influence?

No

Distance to a Sensitive Environment

Distance to 5 acre (minimum) coastal wetland, if 2 miles or less:

None within 2 miles.

Distance to 5 acre (minimum) fresh water wetland, if 1 mile or less:

Fresh water wetlands are designated along Cambells Creek within one (1) mile downstream of the site, according to the National Wetlands Inventory Maps.

(Ref. 2 and Attachments 1.5, 4.5, 5.2)

Distance to critical habitat of an endangered species or national wildlife refuge, if 1 mile or less:

A search of the Texas Natural Heritage Program Information System revealed no special or critical habitat for federal endangered species within 1 mile of the site. However, the Bald Eagle, Louisiana Pine Snake, Louisiana Black Bear, Cachman's Sparrow,

Total population served by ground water within 3 mile radius:

Total population served by ground water for
aquifer of concern = 148.48

Assigned Value = 2
Assigned Matrix Value = 20

SURFACE WATER ROUTE

1. OBSERVED RELEASE

Contaminants detected in surface water at the facility or
downhill from it (5 maximum):

None

Rationale for attributing the contaminants to the facility:

N/A

2. ROUTE CHARACTERISTICS

Facility Slope and Intervening Terrain

Average slope of facility in percent:

≤3%

Assigned Value = 0

(Ref. 5)

Name/description of nearest downslope surface water:

The Voda Petroleum site is located in Segment 0505 of the Sabine River Basin. The Segment Classification is Water Quality Limited, with designated water uses: Contact Recreation; High Quality Aquatic Habitat; and Public Water Supply (Ref. 10). The total basin drainage area is 2,791 mi² and the annual mean discharge is 1,811 cfs (Ref. 5). The site is located in an area of >500 year floodplain (Attachment 1.7).

Lake Devernia is a private lake located approximately three miles downstream along the intermittent Cambells Creek. The lake is permitted for recreational uses and includes facilities for swimming, fishing, and boating (Attachment 1.1 and 4.3).