REVIEWED BY: L.D. Wright 11-24-80

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

REGION	SITE NUMBER (to be assigned by HQ)
6	OKD01589

GENERAL INSTRUCTIONS: Complete Sections I and III through XV of this form as completely as possible. Then use the information on this form to develop a Tentative Disposition (Section II). File this form in its entirety in the regional Hazardous Waste Log File. Be sure to include all appropriate Supplemental Reports in the file. Submit a copy of the forms to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force (EN-335); 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

P.O. Box 188

A. SITE NAME	B. STREET (or other identifier)		
Vickers Petroleum Disposal Ponds	S/2, N/2, NW/4 Sec 16, T4S, R2E		
C. CITY	**D. STATE**	**E. ZIP CODE**	**F. COUNTY NAME**
Ardmore	OK	73401	Carter

G. SITE OPERATOR INFORMATION

1. NAME		2. TELEPHONE NUMBER
Vickers Petroleum Corp. - Bell Refinery		(405) 223-0534
3. STREET	**4. CITY**	**5. STATE / 6. ZIP CODE**
142 By Pass	Ardmore	OK 73401

H. REALTY OWNER INFORMATION (if different from operator of site)

1. NAME		2. TELEPHONE NUMBER
Same Vickers Petroleum Co.		unknown
3. CITY	**4. STATE**	**5. ZIP CODE**
P.O. Box 8240 Wichita	KS	6720

I. SITE DESCRIPTION
2 clay base neutralization & biodegradation disposal ponds

J. TYPE OF OWNERSHIP
☐ 1. FEDERAL ☐ 2. STATE ☐ 3. COUNTY ☐ 4. MUNICIPAL ☒ 5. PRIVATE

II. TENTATIVE DISPOSITION (complete this section last)

A. ESTIMATE DATE OF TENTATIVE DISPOSITION (mo., day, & yr.)	B. APPARENT SERIOUSNESS OF PROBLEM
9/30/80	☐ 1. HIGH ☒ 2. MEDIUM ☐ 3. LOW ☐ 4. NONE

C. PREPARER INFORMATION

1. NAME	2. TELEPHONE NUMBER	3. DATE (mo., day, & yr.)
Gary McDonald	(405) 271-5338	9/15/80

III. INSPECTION INFORMATION

A. PRINCIPAL INSPECTOR INFORMATION

1. NAME	2. TITLE	
Gary McDonald	Field Inspector	
3. ORGANIZATION		**4. TELEPHONE NO. (area code & no.)**
OSDH		(405) 271-5338

B. INSPECTION PARTICIPANTS

1. NAME	2. ORGANIZATION	3. TELEPHONE NO.
[redacted]		
Andy Monson	Carter County Health Dept.	(405) 223-9705
Randy Gay	OSDH	(405) 271-7060

C. SITE REPRESENTATIVES INTERVIEWED (corporate officials, workers, residents)

1. NAME	2. TITLE & TELEPHONE NO.	3. ADDRESS
W. E. George	Env. Supervisor	Same as above Total Petroleum Corp (Vickers Petroleum) OKD057705972
		SUPERFUND FILE
		OCT 21 1992
		REORGANIZED

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9532461

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III. INSPECTION INFORMATION (continued)

D. GENERATOR INFORMATION (sources of waste)

1. NAME	2. TELEPHONE NO.	3. ADDRESS	4. WASTE TYPE GENERATED
Vickers Corp - Ball Refinery	"	"	Alkaline Solutions

E. TRANSPORTER/HAULER INFORMATION

1. NAME	2. TELEPHONE NO.	3. ADDRESS	4. WASTE TYPE TRANSPORTED
Taylor Const. Co.	(405) 223-2331	26 Broadlawn Ardmore	Alkaline Sol.

F. IF WASTE IS PROCESSED ON SITE AND ALSO SHIPPED TO OTHER SITES, IDENTIFY OFF-SITE FACILITIES USED FOR DISPOSAL.

1. NAME	2. TELEPHONE NO.	3. ADDRESS
N/A		

G. DATE OF INSPECTION (mo., day, & yr.)	H. TIME OF INSPECTION	I. ACCESS GAINED BY: (credentials must be shown in all cases)
9/11/80	1300	[X] 1. PERMISSION [ ] 2. WARRANT

J. WEATHER (describe) Clear to Partly Cloudy, Hot in 90's °F

IV. SAMPLING INFORMATION

A. Mark 'X' for the types of samples taken and indicate where they have been sent e.g., regional lab, other EPA lab, contractor, etc. and estimate when the results will be available.

1. SAMPLE TYPE	2. SAMPLE TAKEN (mark 'X')	3. SAMPLE SENT TO:	4. DATE RESULTS AVAILABLE
a. GROUNDWATER			
b. SURFACE WATER			
c. WASTE		N/A	
d. AIR			
e. RUNOFF			
f. SPILL			
g. SOIL			
h. VEGETATION			
i. OTHER (specify)			

B. FIELD MEASUREMENTS TAKEN (e.g., radioactivity, explosivity, PH, etc.)

1. TYPE	2. LOCATION OF MEASUREMENTS	3. RESULTS
	N/A	

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IV. SAMPLING INFORMATION (continued)

C. PHOTOS

1. TYPE OF PHOTOS: [X] a. GROUND [X] b. AERIAL

2. PHOTOS IN CUSTODY OF: a. CIW Files-OSDH b. Vickers

D. SITE MAPPED?

[X] YES. SPECIFY LOCATION OF MAPS: I & SW Files OSDH Permit & Incomplete disposal plan Files

E. COORDINATES

1. LATITUDE (deg.-min.-sec.): 34° 12' 30"

2. LONGITUDE (deg.-min.-sec.): 97° 05' 59"

V. SITE INFORMATION

A. SITE STATUS

[X] 1. ACTIVE (Those industrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.)

[ ] 2. INACTIVE (Those sites which no longer receive wastes.)

[ ] 3. OTHER (specify): (Those sites that include such incidents like "midnight dumping" where no regular or continuing use of the site for waste disposal has occurred.)

B. IS GENERATOR ON SITE?

[ ] 1. NO [X] 2. YES (specify generator's four-digit SIC Code): 2911

C. AREA OF SITE (in acres): 2

D. ARE THERE BUILDINGS ON THE SITE? [ ] 1. NO [X] 2. YES (specify): Bell Refinery offices & bldgs

VI. CHARACTERIZATION OF SITE ACTIVITY

Indicate the major site activity(ies) and details relating to each activity by marking 'X' in the appropriate boxes.

X	A. TRANSPORTER	X	B. STORER	X	C. TREATER	X	D. DISPOSER
	1. RAIL		1. PILE		1. FILTRATION		1. LANDFILL
	2. SHIP		2. SURFACE IMPOUNDMENT		2. INCINERATION		2. LANDFARM
	3. BARGE		3. DRUMS		3. VOLUME REDUCTION		3. OPEN DUMP
	4. TRUCK		4. TANK, ABOVE GROUND		4. RECYCLING/RECOVERY	X	4. SURFACE IMPOUNDMENT
X	5. PIPELINE		5. TANK, BELOW GROUND	X	5. CHEM./PHYS./TREATMENT		5. MIDNIGHT DUMPING
	6. OTHER (specify):		6. OTHER (specify):		6. BIOLOGICAL TREATMENT		6. INCINERATION
					7. WASTE OIL REPROCESSING		7. UNDERGROUND INJECTION
					8. SOLVENT RECOVERY		8. OTHER (specify):
					9. OTHER (specify):		

E. SUPPLEMENTAL REPORTS: If the site falls within any of the categories listed below, Supplemental Reports must be completed. Indicate which Supplemental Reports you have filled out and attached to this for..

[ ] 1. STORAGE [ ] 2. INCINERATION [ ] 3. LANDFILL [X] 4. SURFACE IMPOUNDMENT [ ] 5. DEEP WELL

[X] 6. CHEM/BIO/PHYS TREATMENT [ ] 7. LANDFARM [ ] 8. OPEN DUMP [ ] 9. TRANSPORTER [ ] 10. RECYCLOR/RECLAIMER

VII. WASTE RELATED INFORMATION

A. WASTE TYPE

[X] 1. LIQUID [ ] 2. SOLID [X] 3. SLUDGE [ ] 4. GAS

B. WASTE CHARACTERISTICS

[X] 1. CORROSIVE [X] 2. IGNITABLE [ ] 3. RADIOACTIVE [ ] 4. HIGHLY VOLATILE

[X] 5. TOXIC [ ] 6. REACTIVE [ ] 7. INERT [X] 8. FLAMMABLE

[ ] 9. OTHER (specify):

C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.

yes.- disposal plan for 1978

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. WASTE RELATED INFORMATION *(continued)*

2. Estimate the amount *(specify unit of measure)* of waste by category; mark 'X' to indicate which wastes are present.

a. SLUDGE	b. OIL	c. SOLVENTS	d. CHEMICALS	e. SOLIDS	f. OTHER
AMOUNT: unknown	AMOUNT: unknown	AMOUNT:	AMOUNT: 150,000	AMOUNT:	AMOUNT:
UNIT OF MEASURE: unknown	UNIT OF MEASURE: unknown	UNIT OF MEASURE:	UNIT OF MEASURE: gal/yr	UNIT OF MEASURE:	UNIT OF MEASURE:
X (1) PAINT, PIGMENTS	X (1) OILY WASTES	X (1) HALOGENATED SOLVENTS	X (1) ACIDS	X (1) FLYASH	X (1) LABORATORY, PHARMACEUT.
(2) METALS SLUDGES	(2) OTHER *(specify)*:	(2) NON-HALOGNTD. SOLVENTS	(2) PICKLING LIQUORS	(2) ASBESTOS	(2) HOSPITAL
(3) POTW		(3) OTHER *(specify)*:	X (3) CAUSTICS	(3) MILLING/MINE TAILINGS	(3) RADIOACTIVE
(4) ALUMINUM SLUDGE			(4) PESTICIDES	(4) FERROUS SMELTING WASTES	(4) MUNICIPAL
X (5) OTHER *(specify)*: oily sludges			(5) DYES/INKS	(5) NON-FERROUS SMLTG. WASTES	(5) OTHER *(specify)*:
			(6) CYANIDE	(6) OTHER *(specify)*:	
			(7) PHENOLS		
			(8) HALOGENS		
			(9) PCB		
			(10) METALS		
			(11) OTHER *(specify)*: alkaline solutions & oily residues		

D. LIST SUBSTANCES OF GREATEST CONCERN WHICH ARE ON THE SITE *(place in descending order of hazard)*

1. SUBSTANCE	2. FORM *(mark 'X')* a. SOLID	b. LIQ.	c. VAPOR	3. TOXICITY *(mark 'X')* a. HIGH	b. MED.	c. LOW	d. NONE	4. CAS NUMBER	5. AMOUNT	6. UNIT
CaF_2	X	X		X				[redacted]	unknown	—
NaOH	X	X			X			001310732	—"	—
CaO	X	X			X			001305788	"	—
KOH	X	X			X			001310583	"	—

VIII. HAZARD DESCRIPTION

FIELD EVALUATION HAZARD DESCRIPTION: Place an 'X' in the box to indicate that the listed hazard exists. Describe the hazard in the space provided.

☐ A. HUMAN HEALTH HAZARDS

N/A

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VIII. HAZARD DESCRIPTION (continued)

☐ B. NON-WORKER INJURY/EXPOSURE

N/A

☐ C. WORKER INJURY/EXPOSURE

N/A

☒ D. CONTAMINATION OF WATER SUPPLY

possible from leachate

☐ E. CONTAMINATION OF FOOD CHAIN

☒ F. CONTAMINATION OF GROUND WATER

possible from leachate reaching shallow groundwater

☒ G. CONTAMINATION OF SURFACE WATER

possible from overflow, which looks very likely in past

Continue On Reverse

Continued From Front

VIII. HAZARD DESCRIPTION (continued)

☐ H. DAMAGE TO FLORA/FAUNA

N/A

☐ I. FISH KILL

N/A

☐ J. CONTAMINATION OF AIR

N/A

☒ K. NOTICEABLE ODORS

hydrocarbon type

☒ L. CONTAMINATION OF SOIL

soil around ponds

☐ M. PROPERTY DAMAGE

N/A

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VIII. HAZARD DESCRIPTION (continued)

☐ N. FIRE OR EXPLOSION

N/A

☐ O. SPILLS/LEAKING CONTAINERS/RUNOFF/STANDING LIQUID

N/A

☐ P. SEWER, STORM DRAIN PROBLEMS

N/A

☐ Q. EROSION PROBLEMS

N/A

☐ R. INADEQUATE SECURITY

N/A

☐ S. INCOMPATIBLE WASTES

N/A

Continue On Reverse

VIII. HAZARD DESCRIPTION *(continued)*

☐ T. MIDNIGHT DUMPING

N/A

☐ U. OTHER *(specify)*:

N/A

IX. POPULATION DIRECTLY AFFECTED BY SITE

A. LOCATION OF POPULATION	B. APPROX. NO. OF PEOPLE AFFECTED	C. APPROX. NO. OF PEOPLE AFFECTED WITHIN UNIT AREA	D. APPROX. NO. OF BUILDINGS AFFECTED	E. DISTANCE TO SITE *(specify units)*
1. IN RESIDENTIAL AREAS	200	200	unknown	1 mile
2. IN COMMERCIAL OR INDUSTRIAL AREAS	251	251	"	"
3. IN PUBLICLY TRAVELLED AREAS	unknown	—	—	—
4. PUBLIC USE AREAS *(parks, schools, etc.)*	unknown	—	—	—

X. WATER AND HYDROLOGICAL DATA

A. DEPTH TO GROUNDWATER *(specify unit)*	B. DIRECTION OF FLOW	C. GROUNDWATER USE IN VICINITY
7-10 feet	South	Domestic
D. POTENTIAL YIELD OF AQUIFER	**E. DISTANCE TO DRINKING WATER SUPPLY** *(specify unit of measure)*	**F. DIRECTION TO DRINKING WATER SUPPLY**
<10 gpm	1/4-1/2 mile	SW

G. TYPE OF DRINKING WATER SUPPLY

☐ 1. NON-COMMUNITY < 15 CONNECTIONS*

☐ 2. COMMUNITY *(specify town)*: > 15 CONNECTIONS

☐ 3. SURFACE WATER

☒ 4. WELL

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X. WATER AND HYDROLOGICAL DATA (continued)

H. LIST ALL DRINKING WATER WELLS WITHIN A 1/4 MILE RADIUS OF SITE

1. WELL	2. DEPTH (specify units)	3. LOCATION (proximity to population/buildings)	4. NON-COMMUNITY (mark 'X')	5. COMMUNITY (mark 'X')
Epperson	87'	behind Residence 437 Truck By Pass	X	
Bacon Transport	100'	behind Bacon Transport Bldg on Truck By Pass	X	
		Mr. Epperson's phone # (405) 226-3102		

I. RECEIVING WATER if ~~there was a flow~~

1. NAME Sand

☐ 2. SEWERS ☒ 3. STREAMS/RIVERS

☐ 4. LAKES/RESERVOIRS ☐ 5. OTHER (specify):

6. SPECIFY USE AND CLASSIFICATION OF RECEIVING WATERS

Stock water (ephemeral stream) flows to Caddo Cr. to Red River

XI. SOIL AND VEGITATION DATA

LOCATION OF SITE IS IN:

☐ A. KNOWN FAULT ZONE ☐ B. KARST ZONE ☐ C. 100 YEAR FLOOD PLAIN ☐ D. WETLAND

☐ E. A REGULATED FLOODWAY ☐ F. CRITICAL HABITAT ☐ G. RECHARGE ZONE OR SOLE SOURCE AQUIFER

XII. TYPE OF GEOLOGICAL MATERIAL OBSERVED

Mark 'X' to indicate the type(s) of geological material observed and specify where necessary, the component parts.

'X'	A. OVERBURDEN	'X'	B. BEDROCK (specify below)	'X'	C. OTHER (specify below)
X	1. SAND	X	Sandstone interbedded with shale (>5')		
X	2. CLAY				
	3. GRAVEL	X	limestone - deep		

XIII. SOIL PERMEABILITY

☐ A. UNKNOWN ☐ B. VERY HIGH (100,000 to 1000 cm/sec.) ☐ C. HIGH (1000 to 10 cm/sec.)

☒ D. MODERATE (10 to .1 cm/sec.) ☐ E. LOW (.1 to .001 cm/sec.) ☐ F. VERY LOW (.001 to .00001 cm/sec.)

G. RECHARGE AREA

☐ 1. YES ☐ 2. NO 3. COMMENTS: undetermined

H. DISCHARGE AREA

☐ 1. YES ☐ 2. NO 3. COMMENTS: undetermined

I. SLOPE

1. ESTIMATE % OF SLOPE 2-5%

2. SPECIFY DIRECTION OF SLOPE, CONDITION OF SLOPE, ETC. E - SE

J. OTHER GEOLOGICAL DATA

Sandstone Ridges

Continued From Front

XIV. PERMIT INFORMATION

List all applicable permits held by the site and provide the related information.

A. PERMIT TYPE (e.g., RCRA, State, NPDES, etc.)	B. ISSUING AGENCY	C. PERMIT NUMBER	D. DATE ISSUED (mo., day, & yr.)	E. EXPIRATION DATE (mo., day, & yr.)	F. IN COMPLIANCE (mark 'X')		
					1. YES	2. NO	3. UNKNOWN
None have applied for soil farm permit							

XV. PAST REGULATORY OR ENFORCEMENT ACTIONS

☐ NONE ☐ YES *(summarize in this space)*

NOTE: Based on the information in Sections III through XV, fill out the Tentative Disposition *(Section II)* information on the first page of this form.

SURFACE IMPOUNDMENTS SITE INSPECTION REPORT
(Supplemental Report) Vickers - Bell Refinery

INSTRUCTION
Answer and Explain as Necessary.

1. TYPE OF IMPOUNDMENT
2 clay base neutralization & biodegradation disposal ponds

2. STABILITY/CONDITION OF EMBANKMENTS
poor

3. EVIDENCE OF SITE INSTABILITY (Erosion, Settling, Sink Holes, etc.)
[X] YES [ ] NO

4. EVIDENCE OF DISPOSAL OF IGNITABLE OR REACTIVE WASTE
[X] YES [ ] NO

5. ONLY COMPATIBLE WASTES ARE STORED OR DISPOSED OF IN THE IMPOUNDMENT
[ ] YES [ ] NO unknown

6. RECORDS CHECKED FOR CONTENTS AND LOCATION OF EACH SURFACE IMPOUNDMENT
[ ] YES [X] NO

7. IMPOUNDMENT HAS LINER SYSTEM
[ ] YES [X] NO

7a. INTEGRITY OF LINER SYSTEM CHECKED
[ ] YES [ ] NO

7b. FINDINGS

8. SOIL STRUCTURE AND SUBSTRUCTURE
Sandy clay - clay loam

9. MONITORING WELLS
[ ] YES [X] NO

10. LENGTH, WIDTH, AND DEPTH Both
LENGTH 150 WIDTH 100 DEPTH 6'-7'

11. CALCULATED VOLUMETRIC CAPACITY
Approximately 90,000 cubic feet — 675,000 gallons each (guestimate)

12. PERCENT OF CAPACITY REMAINING
16-25% however, dikes are too unstable

13. ESTIMATE FREEBOARD
1-2'

14. SOLIDS DEPOSITION
[X] YES [ ] NO

15. DREDGING DISPOSAL METHOD
none in the past - however a complete sludge and

16. OTHER EQUIPMENT
waste removal project report has been submitted to the main office. This project will (if granted by Vickers main office) completely drain and remove all wastes from the ponds for disposal at an approved Commercial / Controlled Industrial Waste Disposal Site. The removal will be done by a commercial contract according to approved practices. The area after clean up will be completely covered and re-vegetated. All this is contingent upon project approval and funding.

EPA Form T2070-3C (10-79)