Imperial Refining Company
Site Inspection Sampling and Work Plan
Carter County, Oklahoma
CERCLIS Id. Number OK0002024099

June 10, 1998

State of Oklahoma
Department of Environmental Quality
Waste Management Division
Site Remediation Section
Site Assessment Unit

APPROVAL:

DEQ Project Manager
Imperial Refining Company

DEQ Site Assessment Unit Supervisor

EPA-Region 6 Site Assessment Manager

Teresa A. Stephens
Date

Hal Cantwell
Date

Philip Ofasu
Date

172772
1 Introduction
The State of Oklahoma Department of Environmental Quality (DEQ) is tasked by the U.S. Environmental Protection Agency (EPA), as authorized by CERCLA and as amended by SARA, under the Multi-Site Cooperative Agreement (CA# V-006465-01) to conduct a site inspection (SI) of the Imperial Refining Company site (CERCLIS# OK0002024099) located in Carter County, Oklahoma.

The purpose of this investigation is to collect information concerning conditions at the site sufficient to assess any threat posed to human health and/or the environment. The investigation will also determine if additional investigation under CERCLA/SARA is necessary, and, if appropriate, support site evaluation using the Hazard Ranking System (HRS) for proposal to the National Priorities List (NPL).

This investigation builds upon the body of information compiled during the preliminary assessment (PA) phase by collecting physical environmental samples for analysis to determine the presence and extent of hazardous substance(s) onsite and the possible migration of these substances from the site.

2 Site Description
2.1 Location
The former Imperial Refining Company is located east of Refinery Road, north and west of the Gulf, Colorado, and Santa Fe (GC&SF) railroad tracks (Reference 1, Figure 1). The geographic coordinates are 34°11'30.022" North latitude and 97°06'30.315" West longitude (Reference 1). Legal description is SE¼, NE¼, Sec. 20, and SW¼, NW¼, Sec. 21, T4S, R2E, IM, Carter County, Oklahoma (Figure 2). To reach the site from southbound Highway 142, stop about 50 yards north of the overpass and the site will be on both sides of the highway (Figure 2).

Hot summers and fairly mild winters characterize Carter County (Reference 1). The average temperature in the summer is 83°F with an average daily maximum temperature of 94°F (Reference 1). In winter, the average temperature is 46°F with the average daily minimum temperature dropping to 34°F (Reference 1). Normal annual precipitation is 34.3 inches (Reference 1).

2.2 Site Description/History
Total area of property for this investigation is approximately 55 acres (Figure 1). However, the Imperial Refining Company did own additional land in the SW¼, NW¼, Sec. 21, T4S, R2E, IM to the south and east of the GC&SF railroad, bringing the total amount of property owned by Imperial Refining Company to approximately 80 acres (Reference 1). The grounds in the western portion of the site are mainly flat, but, in the eastern section, there are rolling slopes to the south and east (Reference 1). Undeveloped land to the south and east with a small residential area to the north in section 20 and industry in section 21 border the property. To the west, a group of lagoons from a local active refinery are viewed (Figure 2).

The site is well vegetated except for patches of what appears to be contaminated soil throughout the property along with several portions of land with significant amounts of a tarry, sludgy material (Reference 1). One dilapidated building and remains of other refinery rubble are present onsite (Reference 1).

2.3 Operational History and Waste Characteristics
The Imperial Refining Company was a refining facility that is now inactive (Reference 1). According to county records, C.W. and Miriam Hogan presently own the land where the Imperial Refining Company once operated (Reference 1). However, consent for access to property was never granted due to letters from the DEQ being returned (Reference 1). Land use for the property is unknown due to no intact building existing onsite, nor is any activity conducted onsite (Reference 1).

The deed search indicates refining operations began on this property with the Imperial Refining Company purchasing the eastern portion of the site in April 1917 (Reference 1). In July 1917, the Imperial Refining Company bought land on the western portion of the site (Reference 1). After going...
bankrupt in late 1934, the Imperial Refining Company turned over all land to Mr. Harry Abels of Abels and Singer Supply Company in Ardmore, Oklahoma (Reference 1). In 1924, the Sanborn Fire Insurance Map shows the tanks and buildings were removed (Reference 1). The land in Section 20 was later leased to the Ben Franklin Refining Company in 1954 (Reference 1). In 1967, Singer Supply turned the property over to Joseline Production Company (Reference 1).

Wastes generated in conjunction with refining operations include contaminated soil from tank bottoms, coke piles, reservoir sediments, and remaining rubble from the active refinery structures (Reference 1). No waste removals are apparent, except that the tanks and majority of the buildings are gone (Reference 1). Regulatory activities were not in effect at the time of operation; therefore, no permits, violations, or inspections by local, state, or federal authorities were discovered (Reference 1).

3 Collection of Non-Sampling Data

Non-sampling data collection will include verifying population and environmental information as well as collection of new information. Field activities will include a cursory investigation of whether endangered species identified within Carter County are located onsite. Informal interviews may be conducted during SI activities.

Other non-measurement data to be gathered during this investigation will be a windshield survey of the types of resources that are within the study area (i.e., commercial or forage crops grown nearby, commercial livestock in the area, etc.) The PA will be used for background information; however, additional information may be discovered from the public records during the study. All unsubstantiated remembrances will be presented as such and not as fact in the final report.

4 Sampling Activities

The objectives of the SI are to collect analytical data to identify hazardous substances at the site, investigate whether these substances have been released into the environment, and determine whether these substances have the potential to impact human health and the environment. The sampling agenda (Table 1) calls for waste source, surface water sediment, surface water liquid, and soil samples. The State Environmental Laboratory (SEL) in Oklahoma City, Oklahoma will perform analysis of all samples.

All samples collected will be analyzed for total metals, volatile and semi-volatile organic contaminants. To support data integrity, DEQ staff will take quality assurance (QA) and quality control (QC) measures during the SI. Specific details are provided in the Quality Assurance Project Plan (QAPP) of this work plan (Appendix A).

DEQ field staff will document all sampling activities in a logbook using permanent waterproof ink. Each page of the logbook will be dated, numbered, and signed by each person who makes an entry. The time of the sampling and a physical description of the properties of the sample will also be entered in the site logbook. Errors will be corrected by drawing a single line through the error, initialing, and dating the correction.

4.1 Source Sampling

Waste sources included in the sampling agenda are tank sediment, coke piles, reservoir sediment, acidic like sludge and debris from refinery structures. These locations were chosen to better characterize the hazardous nature of the site.

4.2 Ground Water Sampling

Ground water samples will not be collected during this sampling event. Ground wells are over 1.5 miles from the site making migration of contaminants to the wells unlikely (Reference 2).

4.3 Surface Water Sampling

Surface water samples will be taken to determine whether a release to surface water has occurred and whether the release has impacted wetlands onsite. In addition, due to possible overflow of the ponds during heavy rain, migration of contaminants via overland flow may have occurred. Intermittent stream samples will also be collected in order to characterize impact from the overland flow.
4.4 Soil Sampling
Due to the presence of scattered waste areas and stressed vegetation, soil contamination is highly probable. No barrier exists to prevent access to the site for workers and residents within 200 feet of the site and others who become curious to wander the grounds (Reference 2).

4.5 Quality Assurance
A combination of field blanks and duplicates will provide quality assurance and quality control (QA/QC) for this sampling event. One aqueous field blank will be taken during surface water sampling to test for contamination possibly introduced by sample containers and preservatives. Duplicate samples will test the reliability of sampling procedures and results.

4.6 Field Activities
Field Personnel are scheduled to travel to the site on May 13 and 20, 1998. All environmental samples and non-sampling information will be collected on those days. Fieldwork will begin with a site reconnaissance in the morning to verify that planned sample locations are appropriate and accessible. A drive-by survey will verify the location of wetlands, the closest resident, and the population within approximately 1/4 mile of the site. If necessary, original plans will be modified and noted in a logbook. Upon collection, all samples will be prepared and packaged for delivery.

Two person teams will be deployed. Sampling will start after the original sample plan and any necessary modifications are confirmed and noted. Proposed sample locations are shown in Figure 3.

The surface water sampling will be collected with the most upstream sample first then proceed downstream. Containers used will be specific to type of analysis and recommendations from the SEL. Sediment samples will be collected with a spoon from an area of slow flow; then placed in the appropriate sampling container. Soil and waste samples will be taken in the same manner, without regard to slow flow.

4.7 Quality Control Procedures
Sampling equipment will be location specific making decontamination between samples unnecessary. All samples will be stored in coolers on ice until they reach the laboratory that evening. Field personnel will maintain the chain of custody until samples are delivered to the SEL.

5 Investigation-Derived Wastes Plan
Investigation-derived wastes include sediments and soil not collected as samples, used disposable sampling equipment, and any used disposable personal protective equipment (e.g. Tyvek). Any non-disposable personal protective equipment and disposable sampling equipment contaminated by waste will be decontaminated and rendered non-hazardous. All dry personal protective equipment and disposable sampling equipment will be bagged and stored at the DEQ office. Soils that are not collected as samples will be returned to the sample location.

6 Project Management
The project manager for the Imperial Oil Refinery SI, Teresa Stephens, will schedule field activities and personnel requirements, direct and oversee all onsite and offsite activities associated with the investigation. The project manager also will document and manage all collected samples. The project safety officer is Karen Khalafian. All field team members will collect and prepare samples and support all other field operations as required. The samples are summarized in Table 1. A complete list of project personnel is found in Table 2.

6.1 Field Equipment/Health and Safety
The project health and safety officer will brief the field team on any apparent location specific health and safety concerns. Level D protective clothing and equipment will be used for all on and offsite activities. However, if conditions warrant, the health and safety officer may require the sampling team to upgrade the level of protective gear. The site command center will be located in an area upwind of any exposed waste. The SI Health and Safety Plan (HSP) will be reviewed by all DEQ sampling
personnel, and all HSP guidelines will be followed during sampling activities. Health and safety issues are discussed more specifically in the HSP (Appendix B).

6.2 Community Relations

With the landowner unknown, no actual community relations have been established at this time. However, the project manager welcomes all inquiries regarding this site to all that are interested. The Carter County DEQ office has been notified about this investigation.

6.3 Project Schedule

The project began in January 1998 and is expected to end in July 1998. Non-sampling data collection will occur throughout, and fieldwork commenced in February 1998. Upon completion of field duties and receipt of lab analysis, preparation of the SI narrative report and, if necessary, HRS score will begin.

References


Reference 1
PRELIMINARY ASSESSMENT
IMPERIAL REFINING COMPANY
CARTER COUNTY; ARDMORE, OKLAHOMA
CERCLIS# NOT YET ASSIGNED

September 24, 1997

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
WASTE MANAGEMENT DIVISION
SITE ASSESSMENT UNIT

PREPARED BY
TERESA A. STEPHENS, PROJECT MANAGER

REVIEWED AND APPROVED BY
HAL CANTWELL, SITE ASSESSMENT SUPERVISOR

114044
Reference 2
Site Name: Imperial Refining Company
CERCLIS ID#: OK0002024099
Address: East of Refinery Road and South Hwy. 142
City/County or Parish/State/Zip Code: Ardmore, Carter, Oklahoma 73401
Report Type, Date, and Author: Preliminary Assessment (PA), September 1997, ODEQ

RECOMMENDATION
1. No Further Remedial Action Planned under Superfund (NFRAP)
2. Further Investigation Needed Under Superfund
   (X) PA
   (X) HRS
   (X) SSI
   (X) RA
   (X) ESI
   (X) RI/FS
   (X) Medium
   (X) Low
   Other: ______________________________

3. Action Deferred to:
   ( ) RCRA
   ( ) NRC

NOTIFY AUTHORITY:
( ) Removal
( ) Remedial
( ) CERCLA Enforcement
( ) State
( ) Federal Facility
( ) RCRA
( ) State
( ) NPDES
( ) NRC
( ) Resource Trustee:
( ) TSCA
( ) CAA
( ) SMAC
( ) UIC
( ) SPCC
( ) Other:
SEND SSSR COPIES TO: (X) 6SF-AC
( ) 5WQ-SP
( ) ATSDR
( ) State Agency
( ) Other

DISCUSSION:
The Imperial Refining Company is an inactive oil refinery that operated from 1917 to 1987. The site consists of one building and the remains of other refinery debris. Waste associated with the refinery operations included contaminated soil from tank sediments, coke piles, reservoir sediments and debris from the refinery structures.

The Preliminary Assessment (PA) indicated the presence of stressed vegetation and a suspected release from the ponds. There are workers and residents within 200 feet of the site and presently there is no barrier to prevent access to the site. Therefore, the possibility of exposure to contaminated soil is present. Since the ponds overflow during heavy rain, migration of contaminants via overland flow is likely to have occurred.

The Probable Point of Entry (PPE) into the wetland, fishery, and possible endangered species habitat, is less than a 1/4 of a mile from the site. The PA does not adequately define the overland flow route from the area. The ground water migration pathway is of less concern. Ground water wells are over 1.5 miles from the site making migration of contaminants to the wells unlikely.

Upon review of the PA, it has been determined that a site investigation is necessary to determine the extent of soil contamination, source characterization, and possible migration of contamination by overland flow.
<table>
<thead>
<tr>
<th>Approval Stage</th>
<th>Name</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
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<td>Report Reviewed by</td>
<td>Philip Oforu</td>
<td></td>
<td>Oct 07/97</td>
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<tr>
<td>Disposition Recommended by</td>
<td>Susan Webster</td>
<td></td>
<td>11/28/98</td>
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<tr>
<td>Disposition Approved by</td>
<td>Ragan Broyles</td>
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<tr>
<td>Disposition Recommended by</td>
<td>Charles A. Gazda</td>
<td></td>
<td>11/28/98</td>
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</table>

Site Name: Imperial Refining Company
CERCLIS ID #: ________
## Table One

**Proposed Samples, Media, Location and Justification.**

<table>
<thead>
<tr>
<th>MEDIA</th>
<th>SAMPLE NUMBER</th>
<th>LOCATION</th>
<th>OBJECTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Water</td>
<td>IRC-SW-1</td>
<td>Industrial addition to the Northwest of the Site.</td>
<td>To provide background.</td>
</tr>
<tr>
<td></td>
<td>IRC-SW-2</td>
<td>Former tank berm area (ponded berm) on west side of Hwy 142</td>
<td>To determine presence/absence of hazardous substance(s).</td>
</tr>
<tr>
<td></td>
<td>IRC-SW-3</td>
<td>Western point of wetland on east side of Hwy 142</td>
<td>To determine presence/absence of hazardous substance(s).</td>
</tr>
<tr>
<td></td>
<td>IRC-SW-4</td>
<td>Eastern point of wetland on east side of Hwy 142 where water enters intermittent stream.</td>
<td>To determine presence/absence of hazardous substance(s).</td>
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<tr>
<td>Surface Water QA/QC</td>
<td>IRC-SW-5</td>
<td>Duplicate of IRC-SW-3</td>
<td>Quality Assurance and Quality Control</td>
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<tr>
<td></td>
<td>IRC-SW-6</td>
<td>Field Blank</td>
<td>Detection of contaminated vials or errors in sampling protocol.</td>
</tr>
<tr>
<td>Surface Water Sediments</td>
<td>IRC-SD-1</td>
<td>Industrial addition to the Northwest of the Site.</td>
<td>To provide background.</td>
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<td></td>
<td>IRC-SD-2</td>
<td>Southwest portion of Wetland on West side of Hwy 142</td>
<td>To determine presence/absence of hazardous substance(s).</td>
</tr>
<tr>
<td></td>
<td>IRC-SD-3</td>
<td>Western portion of Wetland on West side of Hwy 142</td>
<td>To determine presence/absence of hazardous substance(s).</td>
</tr>
<tr>
<td></td>
<td>IRC-SD-4</td>
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<td>IRC-SD-5</td>
<td>Former tank berm area (ponded berm) on west side of Hwy 142</td>
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<td>Area of Natural Seep</td>
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<td>IRC-SD-7</td>
<td>Western point of wetland on east side of Hwy 142</td>
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<td>IRC-SD-8</td>
<td>Eastern point of wetland on east side of Hwy 142 where water enters intermittent stream.</td>
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<td>IRC-SD-9</td>
<td>Northwestern portion of intermittent stream on north side of site (East side of Hwy 142)</td>
<td>To determine presence/absence of hazardous substance(s).</td>
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<tr>
<td></td>
<td>IRC-SD-10</td>
<td>Center of Wetland/Cat tail area</td>
<td>To determine presence/absence of hazardous substance(s).</td>
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<td>IRC-SD-11</td>
<td>Water sediments exiting the site</td>
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<td>IRC-SD-13</td>
<td>Duplicate of IRC-SD-3</td>
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**Imperial Refining Company**

**June 10, 1998**
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<tr>
<td>Surface Water</td>
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<td>Center of Wetland/Cat tail area</td>
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<td>In west tank berm under power line</td>
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<td>IRC-WS-4</td>
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<td>Far northeast portion of site near railroad tracks</td>
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<td>IRC-WS-8</td>
<td>Far northeast portion of site near railroad tracks</td>
<td>Waste sample to determine types and concentrations of hazardous substances onsite</td>
</tr>
<tr>
<td></td>
<td>IRC-WS-9</td>
<td>South of &quot;cat tail&quot; area</td>
<td>Waste sample to determine types and concentrations of hazardous substances onsite</td>
</tr>
<tr>
<td></td>
<td>IRC-WS-10</td>
<td>&quot;split level&quot; waste</td>
<td>Waste sample to determine types and concentrations of hazardous substances onsite</td>
</tr>
<tr>
<td>QA/QC</td>
<td>IRC-WS-11</td>
<td>Duplicate of IRC-WS-3</td>
<td>Quality Assurance and Quality Control</td>
</tr>
</tbody>
</table>

August 27, 1998
Table Two
Project Personnel

Philip Ofasu
Site Assessment Manager
Region VI EPA

Teresa Stephens
Senior Environmental Specialist
Site Project Manager

Hal Cantwell
Site Assessment Supervisor
Sampling Team Member

Terry Joyner
Hydrologist II
Sampling Team Member

Karen Khalafian
Senior Environmental Specialist
Sampling Team Member
Health and Safety Officer

Scott Stegmann
Senior Environmental Specialist
Sampling Team Member

George Thomas
Senior Environmental Specialist
Sampling Team Member

June 10, 1998
Imperial Refining Company
Sampling Event Work Plan
Figures
Figure One

Site Location
Figure Two
Site Sketch
Figure Three
Sample Locations
Attachments
Attachment One

QAPP
QUALITY ASSURANCE PROJECT PLAN

For
Site Assessment Unit

Scope of Work
FFY 98

STATE OF OKLAHOMA
DEPARTMENT OF ENVIRONMENTAL QUALITY
WASTE MANAGEMENT DIVISION
SITE ASSESSMENT UNIT

Quality Management Plan EPA QTRAK # Q-97-179
December 18, 1997
Attachment Two

Health and Safety Plan
Health and Safety Plan
Imperial Refining Company
Carter County, Oklahoma
CERCLIS Id. Number OK0002024099

April 29, 1998

State of Oklahoma
Department of Environmental Quality
Waste Management Division
Site Remediation Section
Site Assessment Unit

Prepared by

Teresa Stephens
Senior Environmental Specialist
Project Manager, Imperial Refilling Company

Reviewed and Approved by

Hal Cantwell
Site Assessment Supervisor
General Information

Site name: Imperial Refining Company
CERCLIS Id. Number OK0002024099

Location: East of Refinery Road, north and west of the Gulf, Colorado and Santa Fe (GC&SF) railroad tracks

Plan Objective: The Health and Safety Plan is intended to establish requirements and procedures to be followed during the sampling event to protect the health and safety of investigative personnel and the nearby public.

Project Objective: The objective of the Site Inspection (SI) is to collect environmental samples for laboratory analysis, to determine if the site poses a threat to human health or the environment.

Proposed Date of Sampling Activities: May 20, 1998

Background Review: Complete ✓ Preliminary

Overall Hazard: Serious Moderate Low ✓ Unknown

Waste Characteristics

Waste Type(s): Liquid ✓ Solid ✓ Sludge ✓ Gas

Characteristic(s): Corrosive ✓ Ignitable ✓ Radioactive Volatile ✓ Toxic ✓ Reactive ✓ Unknown

Site Description: Former refinery, which covers approximately 50 acres and is well vegetated with grasses, sumac, trees, and other brushes; however, there are barren areas, contaminated soil, and areas of stressed vegetation on the site, which are believed to be associated with former refinery activities, especially in the area formerly occupied by the refinery plant and tanks.

Principal Disposal Method: Presumably, onsite surface disposal and the possibility of buried waste onsite.

Hazard Evaluation

The primary hazards anticipated with field activities are not associated with the onsite wastes. They include heat and cold stress (hyperthermia and hypothermia), physical and mechanical hazards, and severe weather. However, the site health and safety officer will monitor site conditions for possible blowing waste hazards. If necessary, sample team members will upgrade personal protection to include respiratory protection.

Heat and cold stress

Due to the time of year in which the sampling event will occur, cold and heat stresses are not a major concern. Nevertheless, all field members will be monitored for heat and cold stresses and fatigue by the site health and safety officer. Work periods will be timed and breaks will focus on fluid replenishment and removal from direct sun exposure, if deemed necessary. Work periods will be scheduled for forty-five minutes to one hour if temperatures warrant. The exact work periods will be determined, if needed due to weather conditions, by the health and safety officer. Heat stress and fatigue are anticipated to be of low concern, due to the likelihood of moderate temperatures usually encountered in Oklahoma during the month of March. Field personnel will also be monitored for possible effects resulting from cold exposure. The time of year in which the sampling event is scheduled is subject to remarkable changes in weather conditions. Therefore, field personnel will be monitored for both cold and heat stress.

Physical and mechanical hazards

Prior to entry, field members will be briefed on the physical and mechanical hazards known to exist on site and will work in teams of two, at a minimum. Possible physical and mechanical hazards are fallen power lines, buried service lines, steep gradients, trenches, holes, ditches, slippery surfaces, sharp objects, such as nails, metal shards, and broken glass, improper material handling, which includes lifting and moving any material at the site. Animals,
snakes, insects, and poisonous plants are also of concern during all field activities. Hand signals will be necessary when respirators are used while sampling. The field team prior to sampling will decide the types of signals if their use becomes necessary.

**Severe weather**
Severe thunderstorms and tornadoes are the types of severe weather that can be anticipated. Weather forecasts will be monitored beginning 4 days before field activities are planned to occur and during onsite activities.

**Site Safety Work Plan**

*Perimeter Establishment*
- Map/sketch attached: YES
- Site secured: NO

*Zone(s) of Contamination Identified*: YES

**Personal Protection**

<table>
<thead>
<tr>
<th>Level of Protection</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
</table>
| Level D equipment that will be required includes safety glasses, disposable latex gloves, and steel-toed boots. The addition of respiratory protection may be necessary if dusty conditions exist. The health and safety officer will make the determination whether the use of respirators is necessary.

The following are not allowed onsite: smoking, eating, drinking, gum and/or tobacco chewing, or horseplay. Fluid replenishment will be allowed, but only at the site command center. Individual sampling team personnel, while in the work zone, must remain within eyesight of their "buddy". All personnel entering the work zone are required to have the OSHA 40-Hour Hazardous Waste Operations (HAZWOPER) training and Medical Baseline Monitoring.

**Decontamination Procedures**
Decontamination of personal protective equipment (PPE) in the field will be performed to the extent practical. A deconning area will be established near the command post for decontamination of personal protective equipment (PPE) and sampling equipment. While in the decon area, disposable PPE and disposable sampling tools will be collected, double bagged, and stored for final disposal at DEQ facilities in Oklahoma City. While in the decon area, exposed skin will be washed with soap and water. In an emergency, the primary concern is to prevent the loss of life or severe injury to site personnel. If immediate medical treatment is required to save a life, decontamination will be delayed until the victim is stabilized. Due to the nature of the waste, which is chiefly composed of contaminated soil, removal of the boots, gloves, and perhaps the clothing of the victim in route to the hospital will ensure that emergency room will not be contaminated from wastes at the site.

**Special Equipment, Facilities, or Procedures**
None are anticipated, but if field conditions warrant, any modifications made in the field will be recorded in the site logbook and explained in the final report.

**Site Control**
Access to the site is not restricted. DEQ field team members will continually monitor for unauthorized persons entering the site during SI activities. Trespassers will be confronted and asked to leave the site. Local police will be notified if the unauthorized persons are uncooperative. If the property owners are located, they will be permitted to view all sampling activities from a safe distance.

**Work Limitations**
Limitations of site activity are: (1) length of day - sampling will take place only during daylight hours; (2) severe weather - samples will not be collected if adverse weather conditions exist; (3) heavy precipitation - samples will not be collected if sample integrity is questioned (rain may affect the sample quality). If heavy precipitation is encountered, the sampling event will be postponed until weather conditions permit.

**Investigative-Derived Waste Disposal**
Excess sample material will be returned to the area collected. Contaminated sample equipment and personal protective equipment will be double bagged and returned to DEQ headquarters in Oklahoma City for proper decontamination. Disposable PPE and other waste generated during the sampling event will be double bagged and returned to DEQ headquarters for proper disposal.
Site Personnel

<table>
<thead>
<tr>
<th>Team Member</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teresa Stephens</td>
<td>Project Manager, Sampling Team Leader</td>
</tr>
<tr>
<td>Karen Khalafian</td>
<td>Health and Safety Officer, Sampling Team Member</td>
</tr>
<tr>
<td>Hal Cantwell</td>
<td>Sampling Team Member</td>
</tr>
<tr>
<td>Terry Joyner</td>
<td>Sampling Team Member</td>
</tr>
<tr>
<td>Scott Stegmann</td>
<td>Sampling Team Member</td>
</tr>
<tr>
<td>George Thomas</td>
<td>Sampling Team Member</td>
</tr>
</tbody>
</table>

Emergency Information

<p>| | |</p>
<table>
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<tr>
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<tbody>
<tr>
<td>Ambulance</td>
<td>911</td>
</tr>
<tr>
<td>Fire Department</td>
<td>911</td>
</tr>
<tr>
<td>Police</td>
<td>911</td>
</tr>
<tr>
<td>Hospital</td>
<td>(580) 223-5400</td>
</tr>
<tr>
<td>Carter County Sheriff</td>
<td>(580) 223-6014</td>
</tr>
<tr>
<td>OK Poison Control</td>
<td>1-800-522-4611</td>
</tr>
</tbody>
</table>

Carter County Sheriff: (580) 223-6014

Mercy Memorial Health Center: Ardmore, OK

All injuries or illness will be immediately reported to the project manager and the health and safety officer. These conditions will then be recorded into the site's logbook. A cellular phone will be at the onsite command post. A first aid kit will be located at the command center, enabling temporary first aid to be administered until necessary medical treatment can be obtained.

Chain of command in case of emergency:

- Mark Coleman - DEQ Executive Director
- H. A. Caves - Waste Management Division Director
- Catherine Sharp - Assistant Division Director
- Scott Thompson – Site Remediation Section Director
- Hal Cantwell - Site Assessment Unit Supervisor
- Karen Khalafian - Health & Safety Officer
- Field Team Members

Emergency Route to Hospital:

From the site travel north then west on Highway 142. Turn left (south) on Commerce Street to the hospital. Turn left (east) at the hospital. It is located on Commerce Street south of Highway 142.
ODEQ CERCLIS UNIVERSE INVESTIGATIONS PROJECT CHECKLIST

Site Name: Imperial Refining Co.

Site Location: Address ________________________________
City Ardmore
County Carter
Legal ________________________________

Site Status: Active __ (if active, enter number of workers seen __)
Inactive ✓

Site Description: Is waste evident (y/n) ✓, if so circle type(s) below -
pile(s) surface water impoundment(s)
contaminated soil(s) drum(s) tank(s)
other ________________________________

What other important structures not associated with the above waste(s) are seen onsite? abandoned buildings ✓
structures ________________________________

Setting: (check all that apply) Rural ✓ or Urban __
Industrial/Commercial ✓
Agricultural __
Residential __
ODEQ CERCLIS UNIVERSE INVESTIGATIONS PROJECT CHECKLIST -cont-

Targets: (circle all that are nearby the site, i.e. within a ¼ mile)

Residence(s)  
Daycare center(s)  
School(s)  

Wetland(s)  
Stream(s)  
Lake(s)  

Pond(s)  
Municipal well(s)  
Private well(s)  

Endangered and/or threatened species  
Park(s)  

Other ________________________________

______________________________

Additional Comments: Large areas of sludge waste observed. Businesses located to the north. Access uncontrolled.

Attachments: Photodocumentation

Other ________________________________