Attachment 1 - 2005 Operations and Post Closure Permit

STEVEN A. THOMPSON
Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

BRAD HENRY
Governor

May 30, 2007

CERTIFIED MAIL

Mr. Chris Hawley, Environmental Manager
Wynnewood Refining Company
P.O. Box 305
906 South Powell
Wynnewood, Oklahoma 73098

Re: Operations and Post-Closure Draft Permit # 000396549
(Formerly Permit #000396549-OP and Permit # 000396549-PC)
EPA ID#OKD000396549

Dear Mr. Hawley:

The 45-day public comment period for Wynnewood Refining Company's (WRC) draft hazardous waste operations and post-closure permit renewal has ended. No comments were received. Therefore, as of May 30, 2007, the renewal of Permit #000396549 (Permit) is effective.

All regulated activities shall be conducted in accordance with the terms and conditions of the Permit and all standards and rules promulgated pursuant to the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 USC 6901 *et seq.*, commonly known as RCRA), including the Hazardous and Solid Waste Amendments of 1984 (HSWA), and regulations promulgated there under by the U.S. Environmental Protection Agency (EPA) (codified and to be codified in Title 40 of the Code of Federal Regulations) and the Oklahoma Hazardous Waste Management Act (27A O.S. §2-7-101, *et seq.*, as amended) and regulations promulgated thereunder.

Please find the Permit enclosed. Also enclosed is a DEQ permit satisfaction survey. Please take a moment to fill out the survey and return it to the Customer Service Division of the DEQ. If you have any questions, please contact Hillary Young of my staff at (405) 702-5106.

Sincerely,

Saba Tahmassebi, Ph.D., P.E.
Chief Engineer
Land Protection Division

ST/hy

Enclosure

STEVEN A. THOMPSON
Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

BRAD HENRY
Governor

March 1, 2007

CERTIFIED MAIL

Mr. Chris Hawley, Environmental Manager
Wynnewood Refining Company
P.O. Box 305
906 South Powell
Wynnewood, Oklahoma 73098

Re: Operations and Post-Closure Draft Permit # 000396549
(Formerly Permit #000396549-OP and Permit # 000396549-PC)
EPA ID#OKD000396549

Dear Mr. Hawley:

The Oklahoma Department of Environmental Quality (DEQ) has concluded the technical review of Wynnewood Refining Company's (WRC) Operations and Post-Closure Permit Renewal Application. It is deemed technically complete in accordance with the requirements of the Oklahoma Hazardous Waste Management Act, 27A O.S. Supp. 2000, Sec. 2-7-101 et seq., as amended, Oklahoma Administrative Code (OAC) 252:205, the Federal Resource Conservation and Recovery Act, and the Hazardous and Solid Waste Amendments of 1984.

Enclosed is a copy of the draft permit. Please provide DEQ with a copy of the draft notice of publication as required by OAC 252:4-7-13(c), along with any comments WRC may have regarding the draft permit within 45 days of receipt of this letter.

If you have any questions, please contact Hillary Young of my staff at (405) 702-5106.

Sincerely,

Saba Tahmassebi, Ph.D., P.E.
Chief Engineer
Land Protection Division

ST/hy

enclosure

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
OPERATIONS PERMIT
FOR A HAZARDOUS WASTE MANAGEMENT FACILITY

EPA ID#: OKD000396549
Permittee: Wynnewood Refining Co.
906 South Powell
P.O. Box 305
Wynnewood, Oklahoma 73098

Permit Number: 000396549

Effective Date: May 30, 2007
Expiration Date: May 30, 2017

Pursuant to the Solid Waste Disposal Act (as amended by the Resource Conservation and Recovery Act of 1976, and the Hazardous and Solid Waste Amendments of 1984 (HSWA)) at U.S.C. § 6901 *et seq.*, and regulations promulgated thereunder by the U.S. Environmental Protection Agency (EPA) codified in Title 40 of the Code of Federal Regulations, the Oklahoma Hazardous Waste Management Act (OHWMA) at 27A O.S. 1994, §2-7-101, *et seq.*, and rules promulgated thereunder in the Oklahoma Administrative Code (OAC 252:205, the Oklahoma Uniform Environmental Permitting Act at 27A O.S. § 2-14-101 *et seq.*, and rules promulgated thereunder in OAC 252:4-7, a Permit to operate a hazardous waste storage tank and to conduct post-closure care on a closed surface impoundment is issued by the Oklahoma Department of Environmental Quality (DEQ) to Wynnewood Refining Company (Permittee). The facility is located in Wynnewood, on 906 South Powell, on 473 acres in Section 23, Township 2 North, Range 1 East, Indian Meridian, Garvin County, Oklahoma (latitude 34°37′53″ and longitude 97°10′05″), summarily described as follows:

The Permittee operates a petroleum refinery with the capacity to process approximately 56,000 barrels of oil daily. The Permittee refines crude petroleum into a range of petroleum products that include various grades of gasoline; distillates such as kerosene, #2 diesel, and jet fuel; solvents; several grades of asphalt; residual fuel oils; propane; propylene; and butane. The facility will have a RCRA Storage Permit for Hazardous Waste Storage Tank 2007 permitted to store waste code K051. The facility will also have a Post-Closure Permit for post-closure care of a closed surface impoundment.

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein (including those in any attachments), the applicable regulations contained in 40 CFR Parts 124, 260 through 264, 266, 268, and 270, as specified in the permit, and other applicable State and Federal Statutes and regulations. Applicable regulations are those which are in effect on the date of issuance of the permit, in accordance with 40 CFR 270.32(c). Primary responsibility for the enforcement of the provisions of this permit lies with the DEQ.

This permit is based on the assumption that all the information submitted in the Part B permit application attached to the Permittee's letter received July 20, 2005, as modified by subsequent amendments dated January 27, 2006 and March 24, 2006 (hereafter

referred to as the application) is accurate and that the facility will be operated as specified in the application.

Any inaccuracies found in the submitted information may be grounds for the termination, revocation and reissuance, or modification of this permit in accordance with 40 CFR 270.41, 270.42, and 270.43 and for enforcement action.

This permit is effective as of May 30, 2007 and shall remain in effect until May 30, 2017 unless revoked and reissued under 40 CFR 270.41, terminated under 40 CFR 270.43, or continued in accordance with 40 CFR 270.51(a).

Issued this 30 day of May 2007.

Saba Tahmassebi, Ph.D., P.E.
Chief Engineer
Land Protection Division

Scott Thompson
Director
Land Protection Division

WYNNEWOOD REFINING COMPANY

OPERATIONS AND POST-CLOSURE PERMIT
PERMIT # 000396549

May 30, 2007

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Section 1

SECTION I. GENERAL PERMIT CONDITIONS

A. GENERAL

The Permittee shall operate, monitor, and maintain the facility in compliance with the provisions of the Oklahoma Hazardous Waste Management Act (OHWMA), 27A O.S. Sec. 2-7-101 *et. seq.*, as amended, the Oklahoma Administrative Code (OAC 252:205), the Federal Resource Conservation and Recovery Act (RCRA), including the Hazardous and Solid Waste Amendments of 1984 (HSWA), and the approved permit application as further modified through permit conditions set herein.

B. BASIS OF PERMIT

This permit is granted based on the information submitted and the design criteria presented in the application. Any inaccuracies found in this information could provide cause for the termination or modification of this permit, and for enforcement action. The Permittee is to inform the Oklahoma Department of Environmental Quality (DEQ) of any deviation from or changes in the design or operation of the facility which could affect the Permittee's ability to comply with the applicable regulations or permit conditions.

This permit shall be reviewed by the DEQ five years after the date of permit issuance and shall be modified as necessary, as provided in 40 CFR 270.41 and OHWMA § 2-7-127(B). Except as provided in condition I.F.3 (40 CFR 270.51), the term of this permit shall not be extended by modification beyond the expiration date appearing on the face of this permit (40 CFR 270.50(b)).

C. INCORPORATION BY REFERENCE

All the referenced Code of Federal Regulations (40 CFR) Parts 124, 260 through 266, 268, and 270 as specified in the permit are, unless otherwise stated, incorporated in their entirety by OAC 252:205-3-1 through OAC 252:205-3-6.

D. DEFINITIONS

Except for the terms defined below, for purposes of this permit , terms used herein shall have the same meaning as those in 40 CFR Parts 124, 260, 261, 264, 266, 268, and 270; and OAC 252:205-1-2 through OAC 252;205-3-6; unless this permit specifically provides otherwise. Where terms are not defined in OAC, RCRA regulations, or the permit, the meaning associated with such terms shall be defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

"Action Levels" means health and environmental-based levels of constituent concentrations determined by the DEQ to be indicators for protection of human health and the environment.

"Area of Concern" (AOC) means any discernable unit or area which, in the opinion of the DEQ, may have received solid or hazardous waste or waste containing hazardous constituents at any time. The DEQ may require investigation of the unit as if it were a SWMU. If shown to be a SWMU by the investigation, the AOC must be reported by the Permittee as a newly-identified SWMU. If the AOC is shown not to be a SWMU by the investigation, the DEQ may determine that no further action is necessary and notify the Permittee in writing.

"CMS" means Corrective Measures Study.

"DEQ" means the Oklahoma Department of Environmental Quality

"Director" means the Executive Director of the Oklahoma Department of Environmental Quality, or his/her designee or authorized representative.

"Division Director" means the Director of the Land Protection Division of the Oklahoma Department of Environmental Quality, or his/her designee or authorized representative.

"EPA" means the United States Environmental Protection Agency.

"Facility" means all contiguous property under the control of the owner or operator seeking a permit under Subtitle C of RCRA.

"HSWA" means the 1984 Hazardous and Solid Waste Amendments to RCRA.

"Hazardous constituent" means any constituent identified in Appendix VIII of 40 CFR Part 261, or any constituent identified in Appendix IX of 40 CFR Part 264.

"Hazardous waste" means a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or pose a substantial present or potential hazard to human otherwise managed. The term hazardous waste includes hazardous constituent.

"Permit" means the full permit, Resources Conservation and Recovery Act and special conditions pursuant to the 1984 Hazardous and Solid Waste Amendments to RCRA.

"Permittee" means Wynnewood Refining Company, 906 South Powell, Wynnewood, Oklahoma, 73098. EPA ID#OKD000396549

"RCRA" means the Resource Conservation and Recovery Act of 1980 as amended by HSWA in 1984.

"RFA" means RCRA Facility Assessment.

"RFI" means RCRA Facility Investigation.

"Release" means any spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping, or disposing of hazardous wastes (including hazardous constituents) into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing hazardous wastes or hazardous constituents). RCRA section 3004(u) corrective action authority does not routinely reevaluate permitted releases.

"Solid Waste Management" means the systematic administration of activities which provide for the collection, source separation, storage, transportation, transfer, processing, treatment, and disposal of solid waste.

"Solid Waste Management Unit" (SWMU) means any discernible unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at a facility at which solid wastes have been routinely and systematically released. The definition includes regulated units (i.e., landfills, surface impoundments, waste piles and land treatment units) but does not include passive leakage or one-time spills from production areas and units in which wastes have not been managed (e.g., product storage areas).

"Land Protection Division" (LPD) means the Land Protection Division of the DEQ.

If, subsequent to the issuance of this permit, regulations are promulgated which redefine any of the above terms, the DEQ may, at its discretion, apply the new definition to this permit by modifying the permit in accordance with 40 CFR Section 270.41.

E. EFFECT OF PERMIT

The Permittee is required to conduct post-closure monitoring and maintenance activities for the Surface Impoundment Area (also known as the Storm Water Retention Pond - SWRP) and to operate one Hazardous Waste Storage Tank (Tank 2007) in accordance with the conditions of this permit. Any storage, treatment, or disposal of hazardous waste not authorized in this permit is prohibited, unless exempted from permit requirements. Subject to 40 CFR 270.4, compliance with this permit generally constitutes compliance, for purposes of enforcement, with Subtitle C of RCRA. Issuance of this permit does not convey any property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of state or local laws or regulations. Compliance with the terms of this permit does not constitute a defense to any order issued or any action brought under the OHWMA; Sections 3008(a), 3008(h), 3013, or 7003 of RCRA; Sections 104, 106(a) or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601 et seq., commonly known as CERCLA), or any other law providing for protection of public health or the environment from an imminent or substantial endangerment. [40 CFR 270.4, 270.30(g)]

F. PERMIT ACTIONS

1. Permit Modification, Revocation and Reissuance, and Termination

This permit may be modified, revoked and reissued, or terminated for cause, as specified in 40 CFR 270.41, 270.42, and 270.43. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee, does not stay the applicability or enforceability of any permit condition. [40 CFR 270.4(a) and 270.30(f)]

2. Permit Renewal

This permit may be renewed as specified in 40 CFR 270.30(b) and permit condition I.H.2. Review of any application for a permit renewal shall consider improvements in the state of control and measurement technology, as well as changes in applicable regulations. [40 CFR 270.30(b) and HSWA Sec. 212]

3. Permit Expiration

Pursuant to 40 CFR 270.50, this permit shall be effective for a fixed term not to exceed ten years. This permit and all conditions herein will remain in effect beyond the permit's expiration date, if the Permittee has submitted a timely, complete application (see 40 CFR 270.10, 270.13 through 270.29) and, through no fault of the Permittee, the DEQ has not issued a new permit, as set forth in 40 CFR 270.51. Permits continued under this section remain fully effective and enforceable. When the Permittee is not in compliance with the conditions of the expiring or expired permit, the DEQ may choose to do any one or more of the following:

a. Initiate enforcement action based upon the permit which has been continued;
b. Issue a notice of intent to deny the new permit under 40 CFR 124.6. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;
c. Issue a new permit under Part 124 with appropriate conditions; or
d. Take other actions authorized by these regulations.

4. Transfer of Permits

This permit is not transferable to any person, except after notice to the DEQ. The DEQ may require modification or revocation and reissuance of the permit pursuant to 40 CFR 270.40. Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner or operator in writing of the requirements of 40 CFR Parts 264 and 270 and this permit. [40 CFR 270.30(l)(3), 264.12(c)]

G. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

H. DUTIES AND REQUIREMENTS

1. Duty to Comply

The Permittee shall comply with the approved permit application and all conditions of this permit, except to the extent and for the duration that noncompliance is authorized by an emergency permit. Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of OHWMA and RCRA and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; for denial of a permit renewal application. [40 CFR 270.30(a)]

2. Duty to Reapply

If the Permittee intends to continue an activity allowed or required by this permit after the expiration date of this permit, the Permittee shall submit a complete application for a new permit at least 180 days prior to permit expiration. [40 CFR 270.30(b)]

3. Monthly Reports

The Permittee shall submit monthly reports.

4. Biennial Report

The Permittee shall comply with the biennial reporting requirements of 40 CFR 264.75.

5. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [40 CFR 270.30(c)]

6. Duty to Mitigate

In the event of noncompliance with this permit, the Permittee shall take all reasonable steps to minimize releases to the environment and shall carry out such

measures as are reasonable to prevent significant adverse impacts on human health or the environment. [40 CFR 270.30(d)]

7. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance/quality control procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this permit. [40 CFR 270.30(e)]

8. Duty to Provide Information

The Permittee shall furnish to the DEQ, within a reasonable time, any relevant information which the DEQ may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the DEQ, upon request, copies of records required to be kept by this permit. [40 CFR 270.30(h)]

9. Inspection and Entry

Pursuant to 40 CFR 270.30(i), the Permittee shall allow the DEQ, upon the presentation of credentials and other documents, as may be required by law, to:

a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

d. Sample or monitor, at reasonable times, any substances or parameters at any location for the purposes of assuring permit compliance or as otherwise authorized by RCRA.

10. Monitoring and Records

a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste and/or contaminated media to be analyzed must be the appropriate method from Appendix I of 40 CFR Part 261 or an equivalent method approved

by the DEQ. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, EPA Method SW-846, or an equivalent method approved by DEQ. [40 CFR 270.30(j)(1)]

b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this permit, the certification required by 40 CFR 264.73(b)(9), and records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report, record, certification, or application. These periods may be extended by request of the DEQ at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility. For the SWRP, the Permittee shall maintain records from all groundwater monitoring wells and associated groundwater surface elevations for the life of the post-closure period. [40 CFR 270.30(j)(2)]

c. Pursuant to 40 CFR 270.30(j)(3), records of monitoring information shall specify:

1) The date(s), exact place, and times of sampling or measurements;
2) The individual(s) who performed the sampling or measurements;
3) The date(s) analyses were performed;
4) The individual(s) who performed the analyses;
5) The analytical techniques or methods used; and
6) The results of such analyses.

11. Reporting Planned Changes

The Permittee shall give notice to the DEQ, as soon as possible, of any planned physical alterations or additions to the permitted facility. [40 CFR 270.30(l)(1)]

12. Reporting Anticipated Noncompliance

The Permittee shall give advance notice to the DEQ of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. [40 CFR 270.30(l)(2)]

13. Twenty-Four Hour Reporting [40 CFR 270.30(l)(6)]

a. The Permittee shall report to the DEQ any noncompliance which may endanger health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the circumstances. The report shall include the following:

1) Information concerning release of any hazardous waste that may cause an endangerment to public drinking water supplies;
2) Any information of a release or discharge of hazardous waste, or of a fire or explosion from the hazardous waste management facility which could threaten the environment or human health outside the facility.

b. The description of the occurrence and its cause shall include:

1) Name, address, and telephone number of the owner or operator;
2) Name, address, and telephone number of the facility;
3) Date, time, and type of incident;
4) Name and quantity of materials involved;
5) The extent of injuries, if any;
6) An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and
7) Estimated quantity and disposition of recovered material that resulted from the incident.

c. A written submission shall also be provided within five days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period(s) of noncompliance (including exact dates and times); whether the noncompliance has been corrected; and, if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The DEQ may waive the five-day written notice requirement in favor of a written report within 15 days.

14. Other Noncompliance

The Permittee shall report all other instances of noncompliance not otherwise required to be reported above at the time monitoring reports are submitted. [40 CFR 270.30(l)(10)]

15. Other Information

Whenever the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the DEQ, the Permittee shall promptly submit such facts or information. [40 CFR 270.30(l)(11)]

I. SIGNATORY REQUIREMENT

All applications, reports, or information submitted to the DEQ, shall be signed and certified in accordance with 40 CFR 270.11 and 270.30(k).

J. REPORTS, NOTIFICATIONS, AND SUBMISSIONS TO THE DEQ

All reports, notifications, or other submissions which are required by this permit to be sent or given to the DEQ should be sent by certified mail or given to:

Land Protection Division
Oklahoma Department of Environmental Quality
707 N. Robinson, P.O. Box 1677
Oklahoma City, Oklahoma 73101-1677
Telephone Number (405) 702-5100

K. CONFIDENTIAL INFORMATION

In accordance with 40 CFR 270.12, OAC 252:4-1-5(d), and OAC 252:205-1-4, the Permittee may claim confidential any information required to be submitted by this permit. Any such claim must be asserted at the time of submission in the manner prescribed on the application form or instructions, or in the case of other submissions, by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of the submission, DEQ may make the information available to the public without further notice. If a claim is asserted, the information will be treated in accordance with the procedures in 40 CFR Part 2 (Public Information). Claims of confidentiality for the name and address of any permit applicant or permittee will be denied.

L. DOCUMENTS TO BE MAINTAINED AT THE FACILITY

The Permittee shall maintain at the facility, until closure is completed and certified by an independent, registered professional engineer, the following documents and all amendments, revisions and modifications to these documents:

1. Waste Analysis Plan, as required by 40 CFR 264.13 and this permit (See Permit Attachment 1);

2. Inspection schedules, as required by 40 CFR 264.15(b)(2) and this permit (See Permit Attachment 2);

3. Personnel training documents and records, as required by 40 CFR 264.16(d) and this permit (See Permit Attachment 3);

4. Contingency Plan, as required by 40 CFR 264.53(a) and this permit (See Permit Attachment 4);

5. Operating record, as required by 40 CFR 264.73 and this permit;

6. Closure Plan, as required by 40 CFR 264.112(a) and this permit (See Permit Attachment 5);

7. Post-Closure Plan, as required by 40 CFR 264.118(a) and this permit (See Permit Attachment 6);

8. Annually-adjusted cost estimate for facility closure and post-closure, as required by 40 CFR 264.142(d), 264.144(d) and this permit (See Permit Attachment 7)

Section 2

SECTION II GENERAL FACILITY CONDITIONS

A. DESIGN AND OPERATION OF FACILITY

The Permittee shall maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned, sudden or nonsudden release of hazardous waste constituents to air, soil, ground water, or surface water which could threaten human health or the environment, as required by 40 CFR 264.31.

B. REQUIRED NOTICES

1. Hazardous Waste Imports

The Permittee may not receive hazardous waste from a foreign source.

2. Hazardous Waste from Off-Site Sources

The Permittee may not receive hazardous waste from off-site sources.[40 CFR 264.12(b)]

C. GENERAL WASTE ANALYSIS

The Permittee shall follow the waste analysis procedures required by 40 CFR 264.13, as described in the attached Waste Analysis Plan, Permit Attachment 1.

The Permittee shall verify the analysis of each waste stream annually as part of its quality assurance program, in accordance with Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, EPA Publication SW-846, or equivalent methods approved by the DEQ. At a minimum, the Permittee shall maintain proper functional instruments, use approved sampling and analytical methods, verify the validity of sampling and analytical procedures, and perform correct calculations. If the Permittee uses a contract laboratory to perform analyses, then the Permittee shall inform the laboratory in writing that it must operate under the waste analysis conditions set forth in this permit.

The Permittee shall repeat the analysis when it is notified or has reason to believe that the process or operation generating the waste has changed.

D. SECURITY

The Permittee shall comply with the security provisions of 40 CFR 264.14(b)(2) and (c) and the Security Plan, Permit Attachment 8.

E. GENERAL INSPECTION REQUIREMENTS

The Permittee shall follow the inspection schedule in Permit Attachment 2. The Permittee shall remedy any deterioration or malfunction discovered by an inspection, as required by 40 CFR 264.15(c). Records of inspections shall be kept, as required by 40 CFR 264.15(d).

F. PERSONNEL TRAINING

The Permittee shall conduct personnel training, as required by 40 CFR 264.16. This training program shall follow the attached outline, Permit Attachment 3. The Permittee shall maintain training documents and records, as required by 40 CFR 264.16(d) and (e).

G. SPECIAL PROVISIONS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE

The Permittee shall comply with the requirements of 40 CFR 264.17(a).

H. PREPAREDNESS AND PREVENTION

1. Required Equipment

At a minimum, the Permittee shall maintain at the facility the equipment set forth in the Contingency Plan, Permit Attachment 4, as required by 40 CFR 264.32.

2. Testing and Maintenance of Equipment

The Permittee shall test and maintain the equipment specified in Permit Condition II.H.1, as necessary, to assure its proper operation in time of emergency, as required by 40 CFR 264.33.

3. Access to Communications or Alarm System

The Permittee shall maintain access to the communications or alarm system, as required by 40 CFR 264.34.

4. Arrangements with Local Authorities

The Permittee shall maintain arrangements with state and local authorities, as required by 40 CFR 264.37. If state or local officials refuse to enter into preparedness and prevention arrangements with the Permittee, the Permittee must document this refusal in the operating record.

I. CONTINGENCY PLAN

1. Implementation of Plan

The Permittee shall immediately carry out the provisions of the Contingency Plan, Permit Attachment 4, whenever there is a fire, explosion, or release of hazardous waste or constituents which could threaten human health or the environment.

2. Copies of Plan

The Permittee shall comply with the requirements of 40 CFR 264.53.

3. Amendments to Plan

The Permittee shall review and immediately amend, if necessary, the Contingency Plan, as required by 40 CFR 264.54. Such amendment may require permit modification in accordance with 40 CFR 270.42.

4. Emergency Coordinator

A trained emergency coordinator shall be available at all times in case of an emergency, as required by 40 CFR 264.55.

J. MANIFEST SYSTEM

The Permittee shall comply with the manifest requirements of 40 CFR 264.71, 264.72, 264.76.

K. GENERAL CLOSURE REQUIREMENTS

1. Performance Standard

The Permittee shall close the facility, as required by 40 CFR 264.111 and in accordance with the Closure Plan, Permit Attachment 5.

2. Amendment to Closure Plan

The Permittee shall amend the Closure Plan, in accordance with 40 CFR 264.112(c), whenever necessary. Such amendment may require permit modification in accordance with 40 CFR 270.42.

3. Notification of Closure

The Permittee shall notify the DEQ in writing at least 45 days prior to the date on which he expects to begin final closure of the facility, as required by 40 CFR 264.112(d).

4. Time Allowed For Closure

The Permittee shall dispose of all on site hazardous waste and shall complete closure activities, in accordance with 40 CFR 264.113 and the schedules specified in the Closure Plan, Permit Attachment 5.

5. Disposal or Decontamination of Equipment, Structures, and Soils

The Permittee shall decontaminate and/or dispose of all contaminated equipment, structures, and soils, as required by 40 CFR 264.114 and the Closure Plan, Permit Attachment 5.

6. Certification of Closure

The Permittee shall certify that the facility has been closed in accordance with the specifications in the Closure Plan, as required by 40 CFR 264.115.

L. COST ESTIMATE FOR FACILITY CLOSURE

1. The Permittee's most recent closure and post-closure cost estimates, prepared in accordance with 40 CFR 264.142, 264.144, 264.197(c)(3) and (5), 264.228(c)(2), and 264.258(c)(2)], is specified in Permit Attachment 7.

2. The Permittee must adjust the closure and post-closure cost estimates for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with 40 CFR 264.143 and permit condition II.M or when using an approved state-required mechanism, upon such date as required by the state. [40 CFR 264.142(b)]

3. The Permittee must revise the closure and post-closure cost estimates whenever there is a change in the facility's Closure or Post-Closure Plan, as required by 40 CFR 264.142(c).

M. FINANCIAL ASSURANCE FOR FACILITY CLOSURE

The Permittee shall demonstrate continuous compliance with 40 CFR 264.143 by providing documentation of financial assurance, as required by 40 CFR 264.151 or 264.149, in at least the amount of the cost estimates. Changes in financial assurance mechanisms must be approved by the DEQ pursuant to 40 CFR 264.143 or 264.149.

N. LIABILITY REQUIREMENTS

The Permittee shall demonstrate continuous compliance with the requirement of 40 CFR 264.147(a) to have and maintain liability coverage for sudden accidental occurrences in

the amount of at least $1 million per occurrence, with an annual aggregate of at least $2 million, exclusive of legal defense costs.

O. INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS

The Permittee shall comply with 40 CFR 264.148, whenever necessary.

Section 3

SECTION III TANK 2007

A. SECTION HIGHLIGHTS

The Hazardous Waste Storage Tank 2007 is a steel, above-grade, enclosed tank with a full capacity of 214,200 gallons. Tank 2007 stores API separator sludge (hazardous waste code K051). Pumps, located at each of two API separators, are manually operated to pump the sludge from the collection sumps located in the bottom of the APIs to the tank. The pipeline to Tank 2007 is a 3-inch diameter carrier pipe inside a 6-inch diameter sleeve for secondary control. The tank has a secondary containment, concrete slab (4.5 inches thick) that is designed to hold 100 percent of the capacity of Tank 2007 and additional rainfall.

B. PERMITTED AND PROHIBITED WASTE IDENTIFICATION

1. The Permittee may store a total volume of 214,000 gallons of hazardous waste in Tank 2007, subject to the terms of this permit and as follows:

Tank No.	Capacity (Gallons)	Dimensions of Tank	Secondary Containment Required	Description of Hazardous Waste	Hazardous Waste No.
2007	**214,200**	**34 ft(diam) x 30 ft**	**yes-in place**	**API Separator Sludge**	**K051**

2. The Permittee is prohibited from storing or treating hazardous waste that is not identified in Permit Condition V.B.1.

C. OPERATING REQUIREMENTS

1. The Permittee shall not place hazardous wastes or treatment reagents in the tank system if they can cause the tank, its ancillary equipment, or a containment system to rupture, leak, corrode, or otherwise fail. [40 CFR 264.194(a)]

2. The Permittee shall prevent spills and overflows from the tank or containment systems using the methods described in Permit Attachment 9. [40 CFR 264.194(b)]

D. RESPONSE TO LEAKS OR SPILLS

In the event of a leak or a spill from the tank system, from a secondary containment system, or if a system becomes unfit for continued use, the Permittee shall remove the system from service immediately and complete the following actions: [40 CFR 264.196(a)-(f)]

1. Stop the flow of hazardous waste into the system and inspect the system to determine the cause of the release.

2. Remove waste and accumulated precipitation from the system within 24 hours of the detection of the leak to prevent further release and to allow inspection and repair of the system. If the Permittee finds that it will be impossible to meet this time period, the Permittee shall notify the DEQ and demonstrate that the longer time period is required.

   If the collected material is a RCRA hazardous waste, it must be managed in accordance with all applicable requirements of 40 CFR Parts 262-264. The Permittee shall note that if the collected material is discharged through a point source to U.S. waters or to a POTW, it is subject to requirements of the Clean Water Act. If the collected material is released to the environment, it may be subject to reporting under 40 CFR Part 302.

3. Contain visible releases to the environment. The Permittee shall immediately conduct a visual inspection of all releases to the environment and based on that inspection: (1) prevent further migration of the leak or spill to soils or surface water and (2) remove and properly dispose of any visible contamination of the soil or surface water.

4. Close the system in accordance with the Closure Plan, Permit Attachment 5, unless the following actions are taken:

   a. For a release caused by a spill that has not damaged the integrity of the system, the Permittee shall remove the released waste and make any necessary repairs to fully restore the integrity of the system before returning the tank system to service.

   b. For a release caused by a leak from the primary tank system to the secondary containment system, the Permittee shall repair the primary system prior to returning it to service.

5. For all major repairs to eliminate leaks or restore the integrity of the tank system, the Permittee must obtain a certification by an independent, qualified, registered professional engineer that the repaired system is capable of handling hazardous wastes without release for the intended life of the system before returning the system to service. Examples of major

repairs are: installation of an internal liner, repair of a ruptured tank, or repair or replacement of a secondary containment vault.

E. INSPECTION SCHEDULES AND PROCEDURES

1. The Permittee shall inspect the tank systems, in accordance with the Inspection Schedule, Permit Attachment 2.

2. The Permittee shall inspect the overfill controls, in accordance with the schedule in Permit Attachment 2. [40 CFR 264.195(a)]

3. The Permittee shall inspect the following components of the tank system once each operating day: [40 CFR 264.195(b)]

   a. Aboveground portions of the tank system, if any, to detect corrosion or releases of waste;

   b. Data gathered from monitoring and leak detection equipment (e.g., pressure or temperature gauges, monitoring wells) to ensure that the tank system is being operated according to its design;

   c. The area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system and ancillary equipment, to detect erosion or signs of releases of hazardous waste.

4. The Permittee shall document compliance with the inspection requirements and place this documentation in the operating record for the facility. [40 CFR 264.195(d)]

F. AIR EMISSION STANDARDS

The Permittee shall follow the 40 CFR Subpart CC requirements for a Level 1 tank.

For the Level 1 tank:

1. The Permitee shall perform a new determination of the maximum organic vapor pressure whenever changes to the hazardous waste managed in the tank could potentially cause the maximum organic vapor pressure to increase to a level that is equal to or greater than the maximum organic vapor pressure limit for the tank design capacity category specified in 40 CFR 264.1084(b)(1)(i). [40 CFR 264.1084(c)(1)]

2. The fixed roof and its closure devices shall be designed to form a continuous barrier over the entire surface area of the hazardous waste in the tank. [40 CFR 264.1084(c)(2)(i)]

3. The fixed roof shall be installed in a manner such that there are no visible cracks, holes, gaps, or other open spaces between roof section joints or between the interface of the roof edge and the tank wall. [40 CFR 1084(c)(2)(ii)]

4. Whenever a hazardous waste is in the tank, the fixed roof shall be installed with each closure device secured in the closed position except as follows:

    a. Opening of closure devices or removal of the fixed roof is allowed at the following times:

        i. To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations; [40 CFR 264.1084(c)(3)(i)(A)]

        ii. To remove accumulated sludge or other residues from the bottom of the tank. [40 CFR 264.1084(c)(3)(i)(B)]

    b. Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the tank internal pressures in accordance with the tank design specifications; [40 CFR 264.1084(c)(3)(ii)]

    c. Opening a safety device, as defined in 40 CFR 265.1081, is allowed at any time conditions require doing so to avoid an unsafe condition. [40 CFR 264.1084(c)(3)(iii)]

5. The Permittee shall inspect the air emission control equipment semi-annually in accordance with the following requirements.

    a. The fixed roof and its closure devices shall be visually inspected by the Permittee to check for defects that could result in air pollutant emissions; [40 CFR 264.1084(c)(4)(i)]

    b. In the event that a defect is detected, the owner or operator shall repair the defect as follows: [40 CFR 1084(c)(4)(iii)]

        i. The Permittee shall make the first effort at repair of the defect no later than 5 calendar days after detection, and repair shall be completed as soon as possible but no later than 45 calendar days after detection except as provided in 5(b)(ii) of this section. [40 CFR 264.1084(k)(1)]

        ii. Repair of a defect may be delayed beyond 45 calendar days if the owner or operator determines that repair of the defect

requires emptying or temporary removal from service of the tank and no alternative tan capacity is available at the site to accept the hazardous waste normally managed in the tank. [40 CFR 1084(k)(2)]

c. The Permittee shall maintain a record of the inspection in accordance with the requirements specified in 40 CFR 264.1089(b). [40 CFR.1084(c)(4)(iv)]

6. Inspection and monitoring of the tanks cover may be performed at intervals longer than 1 year in the case when inspecting or monitoring the cover would expose a worker to dangerous, hazardous, or other unsafe conditions, then the owner or operator may designate a cover as an "unsafe to inspect and monitor cover" and comply with all of the following requirements:

   a. Prepare a written explanation for the cover stating the reasons why the cover is unsafe to visually inspect or to monitor, if required; 40 CFR 264.1084(l)(i)]

   b. Develop and implement a written plan and schedule to inspect and monitor the cover as frequently as practicable during those times when a worker can safely access the cover. [40 CFR 264.1084(l)(ii)]

G. RECORDKEEPING AND REPORTING

1. The Permittee shall report to the DEQ, within 24 hours of detection, when a leak or spill occurs from the tank system or secondary containment system to the environment. [40 CFR 264.196(d)(1)] (A leak or spill of one pound or less of hazardous waste, that is immediately contained and cleaned-up, need not be reported.) [40 CFR 264.196(d)(2)] (Releases that are contained within a secondary containment system need not be reported). If the Permittee has reported the release pursuant to 40 CFR Part 302, this report satisfies the requirements of this permit condition. [40 CFR 264.196(d)(1)]

2. Within 30 days of detecting a release to the environment from the tank system or secondary containment system, the Permittee shall report the following information to the DEQ: [40 CFR 264.196(d)(3)]

   a. Likely route of migration of the release;

   b. Characteristics of the surrounding soil (including soil composition, geology, hydrogeology, and climate);

   c. Results of any monitoring or sampling conducted in connection with the release. If the Permittee finds it will be impossible to

meet this time period, the Permittee should provide the DEQ with a schedule of when the results will be available. This schedule must be provided before the required 30-day submittal period expires;

d. Proximity of downgradient drinking water, surface water, and populated areas; and

e. Description of response actions taken or planned.

3. The Permittee shall submit to the DEQ all certifications of major repairs to correct leaks within seven days from returning the tank system to use. [40 CFR 264.196(f)]

4. The Permittee shall maintain at the facility a record of the results of leak tests and integrity tests conducted.

H. CLOSURE AND POST-CLOSURE CARE

1. At closure of the tank system(s), the Permittee shall follow the procedures in the Closure Plan, Permit Attachment 5. [40 CFR 264.197(a)]

2. If the Permittee demonstrates that not all contaminated soils can be practically removed or decontaminated, in accordance with the Closure Plan, then the Permittee shall close the tank system(s) and perform post-closure care following the contingent procedures in the Closure Plan and in the Post-Closure Plan, Permit Attachment 6. [40 CFR 264.197(b) and (c)]

Section 4

SECTION IV POST-CLOSURE CARE – SURFACE IMPOUNDMENT

A. SECTION HIGHLIGHTS

The Hazardous Waste Surface Impoundment (Storm Water Retention Pond – SWRP) was originally a 0.52-acre surface impoundment used to receive refinery storm water. During heavy rain events, some refinery primary sludge may have been carried into the SWRP. When primary sludge was listed as a hazardous waste on May 2, 1991, the SWRP subsequently became a hazardous waste management unit. The SWRP was certified closed on June 21, 1994, with approximately 860 cubic yards of sludge and affected soils stabilized in place.

B. UNIT IDENTIFICATION

The Permittee shall provide post-closure care for the following hazardous waste management units, subject to the terms and conditions of this permit, and as described as follows:

Type of Waste Unit	Unit No. or other Designation	Maximum Waste Inventory	Description of Wastes Contained	Hazardous Waste No.
Surface Impoundment	Storm Water Retention Pond (SWRP)	860 yd^3	Primary Sludge	F037

C. POST-CLOSURE PROCEDURES AND USE OF PROPERTY

1. The Permittee shall conduct post-closure care for the SWRP, to begin after completion of closure of the unit which occurred on June 21, 1994 and continue for 30 years after that date, except that the 30-year post-closure care period may be shortened upon application and demonstration approved by the DEQ that the facility is secure, or may be extended by the DEQ if necessary to protect human health and the environment. [40 CFR 264.117(a)]

2. The Permittee shall maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of 40 CFR Part 264 Subpart F during the post-closure period. [40 CFR 264.117(a)(i)]

3. The Permittee shall comply with the requirements for surface impoundments as follows: [40 CFR 264.228(b)(1),(2)]

a. Maintain the integrity and effectiveness of the final cover, including making repairs to the cap, as necessary, to correct the effects of settling, subsidence, erosion, and other events; and

b. Maintain and monitor the leak detection system in accordance with 40 CFR 264.221(c)(2)(iv) and (3) and 264.226(d), and comply with all other applicable leak detection system requirements of 40 CFR 264 Subpart K.

c. Prevent run-on and run-off from eroding or otherwise damaging the final cover.

4. The Permittee shall comply with all security requirements, as specified in Permit Attachment 8. [40 CFR 264.117(b)]

5. The Permittee shall not allow any use of the SWRP which will disturb the integrity of the final cover, liners, any components of the containment system, or the function of the facility's monitoring systems during the post-closure care period. [40 CFR 264.117(c)]

6. The Permittee shall continue to implement the Post-Closure Plan, Permit Attachment 6. All post-closure care activities must be conducted in accordance with the provisions of the Post-Closure Plan. [40 CFR 264.117(d) and 264.118(b)]

D. INSPECTIONS

The Permittee shall inspect the components, structures, and equipment at the site in accordance with the Inspection Schedule, Permit Attachment 2. [40 CFR 264.117(a)(1)(ii)]

E. NOTICES AND CERTIFICATIONS

1. If the Permittee or any subsequent owner or operator of the land upon which the hazardous waste disposal unit is located, wishes to remove hazardous wastes and hazardous waste residues, the liner, if any; or contaminated soils, then he shall request a modification to this post closure permit in accordance with the applicable requirements in 40 CFR Parts 124 and 270. The Permittee or any subsequent owner or operator of the land shall demonstrate that the removal of hazardous wastes will satisfy the criteria of 40 CFR 264.117(c). [40 CFR 264.119(c)]

2. No later than 60 days after completion of the established post-closure care period for each hazardous waste disposal unit, the Permittee shall submit to the DEQ, by registered mail, a certification that the post-closure care for the hazardous waste disposal unit was performed in accordance with the

specifications in the approved Post-Closure Plan. The certification must be signed by the Permittee and an independent, registered professional engineer. Documentation supporting the independent, registered professional engineer's certification must be furnished to the DEQ upon request until the DEQ releases the Permittee from the financial assurance requirements for post-closure care under 40 CFR 264.145(i). [40 CFR 264.120]

F. FINANCIAL ASSURANCE

The Permittee shall maintain financial assurance during the post-closure period and comply with all applicable requirements of 40 CFR Part 264 Subpart H. [40 CFR 264.145]

G. POST-CLOSURE PERMIT MODIFICATIONS

The Permittee must request a permit modification to authorize a change in the approved Post-Closure Plan. This request must be in accordance with applicable requirements of 40 CFR Parts 124 and 270, and must include a copy of the proposed amended Post-Closure Plan for approval by the DEQ. The Permittee shall request a permit modification whenever changes in operating plans or facility design affect the approved Post-Closure Plan, there is a change in the expected year of final closure, or other events occur during the active life of the facility that affect the approved Post-Closure Plan. The Permittee must submit a written request for a permit modification at least 60 days prior to the proposed change in facility design or operation, or no later than 60 days after an unexpected event has occurred which has affected the Post-Closure Plan. [40 CFR 264.118(d)]

Section 5

SECTION V GROUNDWATER DETECTION MONITORING - SWRP

A. SECTION HIGHLIGHTS

The Permittee shall maintain the groundwater monitoring program for the SWRP to comply with the requirements of 40 CFR 264.97 and 264.98.

The permitted groundwater monitor wells consist of SMW5 and SMW5-D as upgradient wells and downgradient wells SMW9, SMW9-D, SMW11, SMW11-D, SMW21, and SMW21-D.

B. WELL LOCATION, INSTALLATION AND CONSTRUCTION

The Permittee shall install and maintain a groundwater monitoring system as specified below: [40 CFR 264.97]

1. The Permittee shall maintain the groundwater monitoring wells at the locations specified on the map in Permit Attachment 10:

2. The Permittee shall maintain the monitoring wells in accordance with the detailed plans and specifications presented in Permit Attachment 11.

3. The Permittee must apply for a Class 2 permit modification to request a change in the number, location, depth, or design of upgradient or downgradient wells of the groundwater monitoring system as required under 40 CFR 270.42 Appendix I(C)(1).

C. INDICATOR PARAMETERS AND MONITORING CONSTITUENTS

The Permittee shall monitor the groundwater monitoring wells for the indicator parameters found in Table V-1.

D. SAMPLING AND ANALYSIS PROCEDURES

The Permittee shall use the following techniques and procedures when obtaining and analyzing samples from the groundwater monitoring wells: [40 CFR 264.97(d) and (e)]

1. Samples shall be collected using the techniques described in Permit Attachment 12.

2. Samples shall be preserved and shipped, in accordance with the procedures specified in Permit Attachment 12.

3. Samples shall be analyzed in accordance with the procedures specified in Permit Attachment 12.

4. Samples shall be tracked and controlled using the chain-of-custody procedures specified in Permit Attachment 12.

E. ELEVATION OF THE GROUNDWATER SURFACE

1. The Permittee shall determine the elevation of the groundwater surface at each well each time the ground water is sampled. [40 CFR 264.97(f)]

2. The Permittee shall record the surveyed elevation of new monitoring well(s) when installed (with as-built drawings) and resurvey an existing monitoring well if damaged or modified.

F. STATISTICAL PROCEDURES

When evaluating the monitoring results in accordance with Permit Condition V.G., the Permittee shall use the following statistical method for each hazardous constituent specified in Table V-1:

1. The Mann Kendall Trend Evaluation method as outlined in Attachment 13.

G. MONITORING PROGRAM AND DATA EVALUATION

1. The Permittee shall collect, preserve, and analyze samples pursuant to Permit Attachment 12.

2. The Permittee shall determine groundwater quality at each monitoring well semi-annually during the post-closure care period. [40 CFR 264.98(d)] The Permittee shall express the groundwater quality at each monitoring well in a form necessary for the determination of statistically significant increases (i.e., means and variances). [40 CFR 264.97(h)]

3. The Permittee shall determine the groundwater flow rate and direction in the uppermost aquifer at least annually. [40 CFR 264.98(e)]

4. The Permittee shall determine whether there is a statistically significant increase over the background values for each parameter identified in Permit Condition V.C each time groundwater quality is determined at the

compliance point. In determining whether such an increase has occurred, the Permittee must analyze the groundwater quality at each monitoring well in accordance with the statistical procedures specified in Permit Condition V.F. [40 CFR 264.98(f)]

5. The Permittee shall perform the statistical evaluations described in Permit Condition V.F within forty-five (45) days after completion of sampling analysis. [40 CFR 264.98(f)(2)]

H. RECORDKEEPING AND REPORTING

1. The Permittee shall enter all monitoring, testing, and analytical data obtained in accordance with Permit Condition V.G. in the operating record. [40 CFR 264.97(j)] The data must include all computations and information from the Mann Kendall Trend Evaluation Method.

2. The Permittee shall submit the analytical results and the results of the initial statistical analyses in accordance with the following schedule:

Samples to be Collected During the Preceding Months of	Results Due to the Agency By
June	September 1
December	March 1

3. If the Permittee determines there is a statistically significant increase above the concentration limits for any constituent, indicating that the groundwater protection standard is being exceeded, the Permittee shall:

   a. Notify the DEQ in writing within seven days. The notification must indicate which parameters or constituents have shown statistically significant increases. [40 CFR 264.98(g)(1)]

   b. Immediately sample the ground water in all wells and determine the concentration of all constituents identified in Appendix IX of 40 CFR 264. [40 CFR 264.98(g)(2)]

   c. For any Appendix IX compounds found in the analysis, the Permittee may resample within one month and repeat the analysis for those compounds detected. If the results from this second analysis confirm the initial results, then these constituents will form the basis for compliance monitoring. If the Permittee does not resample for the compounds identified in 3.b above, the

hazardous constituents found during the initial Appendix IX analysis will form the basis for compliance monitoring. [40 CFR 264.98(g)(3)]

d. Within 90 days, submit to the DEQ an application for a permit modification to establish a compliance monitoring program. [40 CFR 264.98(g)(4)] The application must include the following information:

1) An identification of the concentration of each Appendix IX constituent found in the groundwater at each monitoring well at the compliance point; [40 CFR 264.98(g)(4)(i)]

2) Any proposed changes to the groundwater monitoring system at the facility necessary to meet the requirements of compliance monitoring as described in 40 CFR 264.99; [40 CFR 264.98(g)(4)(ii)]

3) Any proposed changes to the monitoring frequency, sampling and analysis procedures, or methods or statistical procedures used at the facility necessary to meet the requirements of compliance monitoring as described in 40 CFR 264.99; [40 CFR 264.98(g)(4)(iii)]

4) For each hazardous constituent found at the compliance point, a proposed concentration limit, or a notice of intent to seek an alternate concentration limit for a hazardous constituent. [40 CFR 264.98(g)(4)(iv)]

e. Within 180 days, submit to the DEQ the following items: [40 CFR 264.98(g)(5)]

1) All of the data necessary to justify an alternate concentration limit (ACL) and;

2) An engineering feasibility plan for a corrective action program necessary to meet the requirements of 40 CFR 264.100.

4. If the Permittee determines there is a statistically significant increase for the parameters specified in Permit Condition V.C, he may demonstrate that a source other than a regulated unit caused the increase or that the increase resulted from error in sampling, analysis, or evaluation. In such cases, the Permittee shall:

a. Notify the DEQ in writing within seven (7) days that the facility intends to make a demonstration. [40 CFR 264.98(g)(6)(i)]

b. Within 90 days, submit a report to the DEQ which demonstrates that a source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation. [40 CFR 264.98(g)(6)(ii)]

c. Within 90 days, submit to the DEQ an application for a permit modification to make any appropriate changes to the detection monitoring program at the facility. [40 CFR 264.98(g)(6)(iii)]

d. Continue to monitor in accordance with the detection monitoring program at the facility. [40 CFR 264.98(g)(6)(iv)]

I. REQUEST FOR PERMIT MODIFICATION

If the Permittee or the DEQ determines the detection monitoring program no longer satisfies the requirements of the regulations, the Permittee must, within 90 days of the determination, submit an application for a permit modification to make any appropriate changes to the program which will satisfy the regulations. [40 CFR 264.98(h)]

TABLE V-1

GROUNDWATER MONITORING PARAMETERS FOR SWRP

Metals:

Arsenic
Barium
Cadmium
Chromium
Lead
Selenium
Vanadium

Volatile Organics:

Benzene
Toluene
Ethylbenzene
Total Xylenes
Total Petroleum Hydrocarbons

Groundwater Quality Parameters

pH
Specific Conductance

Section 6

SECTION VI GROUNDWATER COMPLIANCE MONITORING - SWRP

A. SECTION HIGHLIGHTS

If the Permittee determines that there has been a statistically significant release of hazardous constituents detected at the compliance point, the Permittee is required to establish a compliance monitoring program.

B. WELL LOCATION, INSTALLATION AND CONSTRUCTION

The Permittee shall (install and) maintain a groundwater monitoring system, as specified below: [40 CFR 264.99(b)]

1. The Permittee shall maintain the groundwater monitoring wells at the locations specified on the map presented in Permit Attachment 10.

2. The Permittee shall maintain the monitoring wells in accordance with the plans and specifications presented in Permit Attachment 12.

3. The Permittee must apply for a Class 2 permit modification to request a change in the number, location, depth, or design of upgradient or downgradient wells of the groundwater monitoring system as required under 40 CFR 270.42 Appendix I(C)(1).

C. GROUNDWATER PROTECTION STANDARD

The Permittee shall monitor the ground water to determine whether regulated units are in compliance with the groundwater protection standard under 40 CFR 264.92.

1. The Permittee shall monitor the groundwater to determine whether regulated units are in compliance with the groundwater protection standard under 40 CFR 264.92.

2. The compliance period, during which the groundwater protection standard applies, shall extend from the date the Permittee begins a compliance-monitoring program until the end of the post-closure care period. [40 CFR 264.96(b)] If the Permittee is conducting corrective action at the end of the compliance period specified, then the compliance period shall be extended until the Permittee demonstrates that the groundwater protection standard has not been exceeded for three consecutive years. [40 CFR 264.96(c)]

D. SAMPLING AND ANALYSIS PROCEDURES

The Permittee shall use the following techniques and procedures when obtaining and analyzing samples from the groundwater monitoring wells described in Permit Condition VI.B.: [40 CFR 264.97(d) and (e)]

1. Samples shall be collected using the techniques described in Permit Attachment 12.

2. Samples shall be preserved and shipped, in accordance with the procedures specified in Permit Attachment 12.

3. Samples shall be analyzed in accordance with the procedures specified in Permit Attachment 12.

4. Samples shall be tracked and controlled using the chain-of-custody procedures specified in Permit Attachment 12.

5. The Permittee must determine the concentration of the hazardous constituents found in Table V-1, in the ground water in a sequence of at least four samples from each well (background and compliance wells) at least semi-annually during the compliance period that was specified in Permit Condition C.2. [40 CFR 264.99(f)]

6. The Permittee must annually analyze samples from all monitoring wells, at the compliance point, for all constituents listed in Appendix IX, 40 CFR 264, during the compliance period. [40 CFR 264.99(g)]

E. STATISTICAL PROCEDURES

When evaluating the monitoring results in accordance with Permit Condition VI.F., the Permittee shall use the following statistical method for each hazardous constituent specified in Table V-1 or Appendix IX:

1. The Mann Kendall Trend Evaluation method as outlined in Attachment 13.

F. MONITORING PROGRAM AND DATA EVALUATION

The Permittee shall determine groundwater quality as follows:

1. The Permittee shall collect, preserve, and analyze groundwater samples pursuant to Permit Condition VI.D.

2. The Permittee shall determine the concentration of hazardous constituents in ground water at each monitoring well, at the compliance point, during

the compliance period. These determinations shall be made in a sequence of at least four samples from each well (background and compliance) and must be collected at least semi annually during the compliance period. [40 CFR 264.99(d) and (f)]

3. The Permittee shall determine the groundwater flow rate and direction in the uppermost aquifer at least annually. [40 CFR 264.99(e)]

4. The Permittee shall analyze samples from all monitoring wells, at the compliance point, for all constituents contained in 40 CFR 261, Appendix IX , at least annually, to determine whether additional hazardous constituents are present in the uppermost aquifer. If the Permittee finds additional constituents present, they may resample within one month after the analysis and repeat the Appendix IX analysis. If the second analysis confirms the presence of additional constituents their concentrations shall be reported to the DEQ in writing within seven (7) days from completion of the second analysis and add these to the monitoring list. [40 CFR 264.99(g)]

5. For each hazardous constituent identified, the Permittee shall determine whether there is a statistically significant increase over the concentration limit for that parameter or constituent each time the concentration of hazardous constituents is monitored in ground water at the compliance point. In determining whether such an increase has occurred, the Permittee shall compare the groundwater quality at each monitoring well to the concentration limit for that constituent, in accordance with the procedures specified in Permit Condition VI.F. [40 CFR 264.99(d)(1) and (d)(2)]

6. The Permittee shall perform the statistical evaluation required by Permit Condition VI.E within forty-five (45) days from completion of the sampling analysis. [40 CFR 264.99(d)(2)]

G. REPORTING AND RECORDKEEPING

1. The Permittee shall enter all monitoring, testing, and analytical data obtained into the operating record. The data must include all computations, calculated means, variances, and results of statistical tests. [40 CFR 264.97(j)]

2. The Permittee shall submit the analytical results required in accordance with the following schedule:

Samples to be Collected During the Preceding Months of	Results Due to the Agency By
January - February	April 15
April - May	July 15
July - August	October 15
October - November	January 15

3. If the Permittee determines there is a statistically significant increase above the concentration limits for the constituents specified in VI.D (indicating that the groundwater protection standard is being exceeded), the Permittee shall:

   a. Notify the DEQ in writing within seven (7) days. The notification must indicate what concentration limits have been exceeded. [(40 CFR 264.99(h)(l)]

   b. Submit to the DEQ, within 180 days, or within 90 days if an engineering feasibility has been previously submitted to the DEQ, an application for permit modification to establish a corrective action program meeting the requirements of 40 CFR 264.100. The application shall included at a minimum: [40 CFR 264.99(h)(2)]

      1) Detailed description of corrective actions that will achieve compliance with the groundwater protection standard specified in Permit Condition VI.C;

      2) A plan for a groundwater monitoring program that will demonstrate the effectiveness of the corrective action.

4. The Permittee shall report concentrations of any additional Appendix IX constituents to the DEQ within seven (7) days from completion of the analysis. [40 CFR 264.99(g)]

5. The Permittee may make a demonstration that the groundwater protection standard was exceeded due to sources other than a regulated unit or errors in sampling, analysis or evaluation. [40 CFR 264.99(i)]

   a. The Permittee must notify the DEQ in writing, within seven (7) days, that a demonstration will be made. [40 CFR 264.99(i)(1)]

   b. The Permittee must submit a report to the DEQ, within 90 days, that demonstrates that a source other than a regulated unit caused the groundwater protection standard to be exceeded or that the

apparent non-compliance was a result of an error in sampling, analysis or evaluation. [40 CFR 264.99(i)(2)]

c. The Permittee must submit to the DEQ within 90 days an application for a permit modification to make any appropriate changes in the compliance monitoring program at the facility. [40 CFR 264.99(i)(3)]

d. The Permittee must continue the compliance monitoring program in accordance with 40 CFR 264.99. [40 CFR 264.99(i)(4)]

H. REQUEST FOR PERMIT MODIFICATION

1. If the Permittee or the DEQ determine the groundwater protection standard is being exceeded, the Permittee shall submit to the DEQ an application for a permit modification to establish a corrective action program. [40 CFR 264.99(h)(2)]

2. If the Permittee or the DEQ determines the compliance monitoring program no longer satisfies the requirements of 40 CFR 264.99, then, within 90 days, the Permittee must submit an application for a permit modification to make any appropriate changes to the program. [40 CFR 264.99(j)]

Section 7

SECTION VII SPECIAL CONDITIONS PURSUANT TO THE 1984 HAZARDOUS AND SOLID WASTE AMENDMENTS (HSWA)

A. STANDARD CONDITIONS

1. Waste Minimization

Annually, by December 1, for the previous year ending September 30, the Permittee shall enter into the operating record as required by 40 CFR 264.73(b)(9), a statement certified according to 40 CFR 270.11(d) specifying that the Permittee has a program in place to reduce the volume and toxicity of hazardous wastes generated by the facility's operation to the degree determined by the Permittee to be economically practicable; and the proposed method of treatment, storage, or disposal is that practicable method currently available to the Permittee which minimizes the present and future threat to human health and the environment. A current description of the program shall be maintained in the operating record and a copy of the annual certified statement shall be submitted to the DEQ. The following are suggested criteria for the program:

a. Any written policy or statement that outlines goals, objectives, and/or methods for source reduction and recycling of hazardous waste at the facility;

b. Any employee training or incentive programs designed to identify and implement source reduction and recycling opportunities;

c. Any source reduction and/or recycling measures implemented in the last five years or planned for the near future;

d. An itemized list of the dollar amounts of capital expenditures (plant and equipment) and operating costs devoted to source reduction and recycling of hazardous waste;

e. Factors that have prevented implementation of source reduction and/or recycling;

f. Sources of information on source reduction and/or recycling received at the facility (e.g., local government, trade associations, suppliers, etc.);

g. An investigation of additional waste minimization efforts which could be implemented at the facility. This investigation would analyze the potential for reducing the quantity and toxicity of each waste stream through production reformulation, recycling, and all other appropriate means. The analysis would include an

assessment of the technical feasibility, cost, and potential waste reduction for each option;

h. A flow chart or matrix detailing all hazardous wastes it produces by quantity, type, and building/area;

i. A demonstration of the need to use those processes which produce a particular hazardous waste due to a lack of alternative processes or available technology that would produce less hazardous waste.

j. A description of the waste minimization methodology employed for each related process at the facility. The description should show whether source reduction or recycling is being employed.

k. A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years.

2. Dust Suppression

a. Pursuant to 40 CFR 266.23(b), and the Toxic Substances Control Act, the Permittee shall not use waste or used oil or any other material which is contaminated with dioxin, polychlorinated biphenyls (PCBs), or any other hazardous waste (other than a waste identified solely on the basis of ignitability), for dust suppression or road treatment.

3. Permit Modification

a. DEQ Initiated Modifications

If at any time for any of the reasons specified in 40 CFR 270.41, the DEQ determines that modification of this Permit is necessary, the DEQ may initiate permit modification proceedings in accordance with the regulations set forth at 40 CFR 270.41.

b. Permittee Initiated Modifications

The Permittee may, where appropriate, initiate permit modifications in accordance with the regulations set forth at 40 CFR 270.42. All applicable requirements and procedures as specified in 40 CFR 270.42 shall be followed by Permittee in initiating such proceedings.

c. Modification of Corrective Action Schedules of Compliance (CASC)

1) The Permittee shall adhere to CASCs contained in the permit. If at any time the Permittee determines that such schedules cannot be met, the Permittee shall, within fifteen (15) days of such determination, notify the DEQ and submit a request for a permit modification under 40 CFR 270.42, with a justification as to why the current CASC cannot be met.

2) If the DEQ determines that a modification of the CASC is required, the following procedure will apply. CASC Modifications made under this procedure are not subject to administrative appeal.

3) The DEQ will notify the Permittee in writing of the proposed modification. Such notice will:

a) Describe the exact changes to be made to the permit conditions;

b) Provide an explanation of why the modification is needed; and

c) Provide notification of the date by which comments on the proposed modification must be received. Such date will not be less than twenty days from the date the notice of proposed modification is received by the Permittee, or after the public notice is published;

d) Provide notification that supporting documentation or data may be available for inspection at the DEQ; and

e) Include the name and address of a representative of the DEQ to whom comments may be sent.

4) The DEQ shall:

a) Publish a notice of the proposed modification in a newspaper distributed in the locality of the facility;

b) Mail a notice of the proposed modification to all persons on the facility mailing list maintained according to 40 CFR 124.10(c)(1);

c) For facilities which have established an information repository, the DEQ shall place a notification of the proposed modification in the information repository concurrently with actions taken under those items.

5) DEQ's Decision Regarding Modification

a) If the DEQ receives no written comment on the proposed modification, the modification shall become effective five (5) calendar days after the close of the comment period. The DEQ shall:

i Notify the Permittee in writing of the final decision.

ii Notify individuals on the facility mailing list in writing that the modification has become effective and shall place a copy of the modified permit in the information repository, if a repository is required for the facility.

b) If the DEQ receives written comment on the proposed modification, the DEQ shall make a final determination concerning the modification after the end of the comment period. The DEQ shall:

i Notify the Permittee in writing of the final decision.

ii Provide notice of the final modification decision in a locally distributed newspaper.

4 . Permit Review

This Permit may be reviewed by the DEQ five years after the date of permit issuance and may be modified as necessary. Nothing in this section shall preclude the DEQ from reviewing and modifying the Permit at any time during its term.

5 . Compliance with Permit

Compliance with a RCRA permit during its term constitutes compliance, for purposes of enforcement, with subtitle C of RCRA except for those requirements not included in the permit which:

a. Become effective by statute;

b. Are promulgated under 40 CFR 268 restricting the placement of hazardous wastes in or on the land; or

c. Are promulgated under 40 CFR 264 regarding leak detection systems for new and replacement surface impoundment, waste pile, and landfill units, and lateral expansions of surface impoundment, waste pile, and landfill units. The leak detection system requirements include double liners, CQA programs, monitoring action leakage rates, and response action plans, and will be implemented through the procedures of 40 CFR 270.42 Class 1 permit modifications.

6. Specific Waste Ban

a. The Permittee shall not place in any land disposal unit the wastes specified in 40 CFR 268 after the effective date of the prohibition unless the Administrator has established disposal or treatment standards for the hazardous waste and the Permittee meets such standards and other applicable conditions of this Permit.

b. The Permittee may store wastes restricted under 40 CFR 268 solely for the purpose of accumulating quantities necessary to facilitate proper recovery, treatment, or disposal provided that it meets the requirements of 40 CFR 268.50(a)(2) including, but not limited to, clearly marking each tank or container.

c. The Permittee is required to comply with all requirements of 40 CFR 268.7 as amended. Changes to the waste analysis plan will be considered permit modifications at the request of the Permittee, pursuant to 40 CFR 270.42.

d. The Permittee shall perform a waste analysis at least annually or when a process changes, to determine whether the waste meets applicable treatment standards. Results shall be maintained in the operating record.

e. The Permittee must comply with requirements restricting placement of hazardous wastes in or on land which become effective by statute or promulgated under Part 268, regardless of requirements in the Permit. Failure to comply with the regulations may subject the Permittee to enforcement action under Section 3008 of RCRA.

7. Information Submittal

Failure to comply with any condition of the Permit, including information submittal, constitutes a violation of the Permit and is grounds for enforcement action, permit amendment, termination, revocation, suspension, or denial of permit renewal application. Falsification of any submitted information is grounds for termination of this Permit (40 CFR 270.43).

The Permittee shall ensure that all plans, reports, notifications, and other submissions to the DEQ required in this Permit are signed and certified in accordance with 40 CFR 270.11. All copies of these plans, reports, notifications or other submissions shall be submitted to the DEQ by Certified Mail or hand delivered to:

Oklahoma Department of Environmental Quality
Land Protection Division
707 North Robinson, P.O. Box 1677
Oklahoma City, Oklahoma 73101-1677

8. Plans and Schedules Incorporation Into Permit

All plans and schedules required by this Permit are, upon approval by the DEQ, incorporated into this Permit by reference and become an enforceable part of this Permit. Since required items are essential elements of this Permit, failure to submit any of the required items or submission of inadequate or insufficient information may subject the Permittee to enforcement action under Section 3008 of RCRA which may include fines, suspension, or revocation of the Permit.

Any noncompliance with approved plans and schedules shall be termed noncompliance with this Permit. Written requests for extensions of due dates for submittals may be granted by the DEQ in accordance with Permit Condition VII.A .3.

If the DEQ determines that actions beyond those provided for, or changes to what is stated herein, are warranted, the DEQ may modify this Permit as described by 40 CFR 270.41.

9. Data Retention

All raw data, such as laboratory reports, drilling logs, bench-scale or pilot-scale data, and other supporting information gathered or generated during activities undertaken pursuant to this Permit shall be maintained at the facility during the term of this Permit, including any reissued Permits.

10. Management of Wastes

a. All solid wastes which are managed pursuant to a remedial measure taken under the corrective action process or as an interim measure addressing a release or the threat of a release from a solid waste management unit shall be managed in a manner protective of human health and the environment and in compliance with all applicable Federal, State and local requirements. Approval of units for managing wastes and conditions for operating the units, if approved, shall be granted through the permitting process.

B. SPECIFIC CONDITION - CLOSURE

Pursuant to Section 3005(j)(1) of the Hazardous and Solid Waste Amendments of 1984, the Permittee shall close Tank 2007 in accordance with the following provisions:

1. The Permittee shall close Tank 2007 in accordance with the Closure Plan(s) as approved at the time of closure, and which meet(s) all relevant State and Federal closure requirements at the time of closure; and

2. The Permittee shall notify DEQ in writing at least 60 days prior to commencement of closure.

C. CORRECTIVE ACTION

1. Corrective Action for Releases: Section 3004(u) of RCRA, as amended by HSWA, and 40 CFR 264.101, require that permits issued after November 8, 1984, address corrective action for releases of hazardous waste or hazardous constituents from any SWMU at the facility, regardless of when the waste was placed in the unit.

2. Action Levels

a. Applicability - The concept of action levels, described in the RFI guidance document shall be used by the Permittee to determine the need for further corrective actions under this Permit. The Permittee shall conduct a CMS whenever concentrations of hazardous constituents in ground water, surface water, soils, or air exceed action levels for any environmental medium; or when the DEQ determines that concentrations of contaminants, even if below action levels, present a threat to human health or the environment. The concept of action levels is not the same as cleanup levels, although in some cases a final cleanup level may be set to equal the action level.

b. Calculation - The Permittee shall adhere to RFI guidance in the calculation of action levels for all the environmental media. These action levels shall be updated as new toxicity data and promulgated standards (e.g., maximum contaminant levels) are derived. The most recent reference doses, reference concentrations, and cancer slope factors (e.g., data found in EPA's Integrated Risk Information System) shall be utilized in the calculation of action levels. The toxicity data available at the time that a determination for further action is made (i.e., requirement to conduct a CMS), including interim measures, shall be utilized in the calculations. If used as final cleanup levels, action levels shall be calculated using the most recent toxicity data and promulgated standards existing at the time of implementation of corrective measures.

3. Risk Assessment

a. The Permittee shall conduct human health and ecological risk assessments as necessary for the protection of human health and the environment. These risk assessments shall be used to establish baseline risk at a site and/or to derive final or interim cleanup levels at the site. These risk assessments, if necessary, shall be performed concurrently with the corrective action activities specified in this Permit.

b. The Permittee shall utilize, but not be limited to, the following EPA documents and publications: "Compendium of ORD and OSWER Documents Relevant to RCRA Corrective Action" (EPA530-B-92-003, April 1992); "Ecological Assessments of Hazardous Waste Sites, A Field and Laboratory Reference Document" (EPA/600/3-89/013, March 1989); "ECO Update, Ecological Assessment of Superfund Sites: An Overview" (Publication 9345.0-05I, Vol. 1, No. 2, December 1991); and "ECO Update, Developing A Work Scope for Ecological Assessments" (Publication 9345.0-05I, Vol. 1, No. 4, May 1992); including any subsequent revisions.

1) Baseline Risk Assessments - Baseline risk assessments, if required, shall be used to evaluate the risks posed by contaminants at a site prior to the beginning of any corrective actions. This type of risk assessment shall be used in certain circumstances instead of action levels to determine the need for remedial action.

2) Although the action level concept shall serve as a trigger for a CMS, certain exceptions will apply, but not be limited to the following circumstances. In cases where the

applicable action levels are not protective enough of sensitive environmental systems; such as wetlands, estuaries, and habitats of endangered or threatened species, the Permittee shall conduct a baseline environmental risk assessment. In cases where there are confirmed releases to ground water, surface water, air, or sediments, a baseline risk assessment shall be required to determine the need for stabilization/interim measures, especially where health advisories have been issued by local/state governments. In addition, action levels may be inappropriate at a site where there are multiple contaminants or where leaching from contaminated soils into groundwater pose greater risk than ingestion of the soils.

3) If an action level has been exceeded, for any of the environmental media of concern, at any time during the corrective action activities required by this Permit, the Permittee may be required to conduct a risk assessment to determine risks to human health and the environment and the necessity to perform interim measures. Risk assessments to determine final cleanup levels or to be used in justifying no further action determinations shall be conducted only after the Permittee has determined the full vertical and horizontal extent of contamination from each SWMU or groups of SWMUs specified in this permit.

c. Risk Assessments for Deriving Cleanup Levels - Risk assessments, if required, may also be used as a starting point for cleanup goals, in addition to the final cleanup level. In addition, where cleanup levels fail to incorporate significant routes of exposure at a particular site, or where remedies cannot meet the 10^{-4} to 10^{-6} risk range for carcinogens or meet action levels if chosen as final cleanup levels, a risk assessment may also be required.

The DEQ intends to review risk assessments as part of the CMS Phase of the corrective action activities specified in this Permit in deriving final cleanup goals, but only after the Permittee has determined the full vertical and horizontal extent of contamination from each SWMU or groups of SWMUs specified in this permit.

d. Corrective Action for Releases Beyond Facility Boundary: Section 3004(v) of RCRA as amended by HSWA, and Federal regulations promulgated as 40 CFR 264.101(c), require corrective actions beyond the facility property boundary, where necessary to protect human health and the environment, unless the Permittee

demonstrates that, despite the Permittee's best efforts, the Permittee was unable to obtain the necessary permission to undertake such actions. The Permittee is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where offsite access is denied.

e. Financial Responsibility: Assurances of financial responsibility for corrective action shall be provided as specified in the Permit following major modification for remedy selection.

4. Dispute Resolution

a. The parties shall use their best efforts to informally and in good faith resolve all disputes or differences of opinion. If, however, disputes arise concerning the corrective action which the parties are unable to resolve informally, the following procedures shall apply. If Permittee's dispute concerns its inability to meet a specified deadline, then Permittee is obligated to advise the DEQ of the issue at least 30 days in advance of the deadline.

b. The DEQ shall provide Permittee written notice of its disapproval or modification of any interim submission under HSWA, including, but not limited to, implementation of workplans, approval of documents, scheduling of any work, or selection, performance, or completion of any correction action. The written notice of disapproval or modification shall set forth the reasons for the disapproval or modification. If the Permittee disagrees, in whole or in part, with any such written notice, the Permittee shall notify the DEQ in writing, within 10 days of receipt of the written notice. The Permittee and the DEQ shall use their best efforts to informally and in good faith resolve the dispute. The Permittee is entitled to meet with the DEQ in office or by teleconference, if it so desires, in order to resolve the dispute.

c. If Permittee and the DEQ are unable to resolve the dispute, the Permittee may request a final decision by the Director of the Land Protection Division. Within 30 days of receipt of the DEQ's written notice, the Permittee shall submit to Director of the Land Protection Division, a written statement of its arguments and explanations of its position. The written statement should include, at a minimum, the specific points of dispute, the position the Permittee maintains should be adopted as consistent with the Permit requirements and the basis therefore, any matters which it considers necessary for proper determination of the dispute, and whether the Permittee requests an informal conference in front of the permit approval authority. The Permittee's failure to follow the

procedures set forth in this paragraph will constitute a waiver of its right to further consideration of the dispute.

d. The Director of the Land Protection Division, at his/her discretion, will determine whether an informal conference, if requested by the Permittee, will be held.

e. The DEQ shall consider the written position of the Permittee and the oral arguments, if an informal conference is convened, and shall provide a written statement of its decision based on the record. This statement shall be considered to be incorporated as an enforceable part of the permit. The written statement shall respond to the Permittee's arguments and shall set forth the reasons for the DEQ's final decision. Such decision shall be the final resolution of the dispute and shall be implemented immediately by the Permittee according to the schedule contained therein.

f. Notwithstanding the invocation of this dispute resolution procedure, the Permittee shall proceed to take any action required by those portions of the submission and of the permit the DEQ determines are not substantially affected by the dispute.

g. The Permittee shall invoke the Dispute Resolution provisions of this Permit in good faith and not for purposes of delay.

D. NOTIFICATION REQUIREMENTS FOR AND ASSESSMENT OF NEWLY-IDENTIFIED SWMUs AND POTENTIAL AOCs

1. The Permittee shall notify the DEQ, in writing, of any newly-identified SWMU(s) and potential AOCs (i.e., a unit or area not specifically identified during the RFA), discovered in the course of ground water monitoring, field investigations, environmental audits, or other means, no later than thirty (30) calendar days after discovery. The permittee shall also notify the DEQ of any newly-constructed land-based SWMUs (including but not limited to, surface impoundments, waste piles, landfills, land treatment units) and newly-constructed SWMUs where any release of hazardous constituents may be difficult to identify (e.g., underground storage tanks) no later than thirty (30) days after construction. The notification shall include the following items, to the extent available:

a. The location of the newly-identified SWMU or potential AOC on the topographic map required under 40 CFR Section 270.14(b)(19). Indicate all existing units (in relation to other SWMUs);

b. The type and function of the unit;

c. The general dimensions, capacities, and structural description of the unit (supply any available drawings);

d. The period during which the unit was operated;

e. The specifics, to the extent available, on all wastes that have been or are being managed at the SWMU or potential AOC; and

f. Results of any sampling and analysis required for the purpose of determining whether releases of hazardous waste including hazardous constituents have occurred, are occurring, or are likely to occur from the SWMU or whether the AOC should be considered a SWMU.

2. Based on the results of this Notification the DEQ will designate the newly-identified AOC(s). Based on the results of this notification or investigation conducted, the DEQ will determine the need for further investigations or corrective measures at any newly-identified SWMU(s) or AOC(s). If the DEQ determines that such investigations are needed, the DEQ may require the Permittee to prepare a plan for such investigations. The plan for investigation of SWMU(s) or AOC(s) will be reviewed for approval as part of the a new RFI Workplan. The Permit will be modified to incorporate the investigation requirements for the newly-identified AOC(s) or SWMU(s) if an investigation is required.

E. NOTIFICATION REQUIREMENTS FOR NEWLY-DISCOVERED RELEASES AT SWMU(s) AND AOC(s)

The permittee shall notify the DEQ in writing, no later than fifteen (15) calendar days after discovery, of any release(s) from a SWMU or AOC of hazardous waste or hazardous constituents discovered during the course of groundwater monitoring, field investigation, environmental auditing, or other means. Such newly-discovered releases may be from newly-identified SWMUs or AOCs, newly-constructed SWMUs, or from SWMUs or AOCs for which, based on the findings of the RFA, completed RFI, or investigation of an AOC(s), the DEQ had previously determined no further investigation was necessary. The notification shall include information concerning actual and/or potential impacts beyond the facility boundary and on human health and the environment, if available at the time of the notification. The DEQ may require further investigation and/or interim measures for the newly-identified release(s), and may require the Permittee to prepare a plan for the investigation and/or interim measure. The plan will be reviewed for approval as part of a new RFI Workplan. The Permit will be modified to incorporate the investigation, if required.

F. INTERIM MEASURES

1. If during the course of any activity initiated under this Permit, the DEQ determines that a release or potential release of hazardous constituents from a SWMU poses a threat to human health and the environment, the DEQ may require interim measures. The DEQ shall determine the specific measure(s) or require the Permittee to propose a measure(s). The interim measure(s) may include a permit modification, a schedule for implementation, and a written plan. The DEQ shall notify the Permittee in writing of the requirement to perform interim measures. The DEQ may modify this Permit to incorporate interim measures into the Permit.

2. The Permittee may propose interim measures at any time. The proposal shall include a written plan and a schedule for implementation. Depending upon the nature of the interim measure, a permit modification may not be required.

3. The following factors will be considered by the DEQ in determining the need for interim measures and the need for permit modification:

   a. Time required to develop and implement a final remedy;

   b. Actual and potential exposure to human and environmental receptors;

   c. Actual and potential contamination of drinking water supplies and sensitive ecosystems;

   d. The potential for further degradation of the medium in the absence of interim measures;

   e. Presence of hazardous wastes in containers that may pose a threat of release;

   f. Presence and concentration of hazardous waste including hazardous constituents in soil that have the potential to migrate to ground water or surface water;

   g. Weather conditions that may affect the current levels of contamination;

   h. Risks of fire, explosion, or accident; and

   i. Other situations that may pose threats to human health and the environment.

G. RFI and CMS/CMI

The Permittee submitted the RCRA Corrective Measures Study/Corrective Measures Implementation (CMS/CMI) Plan on January 17, 1994. It was approved on April 29, 1994. Final approval of the RFI was granted on October 3, 1996. Please see Table VII-1 for a listing of the SWMUs, a brief summary of corrective action processes which have been implemented and the current corrective action determination at each one.

H. DETERMINATION OF NO FURTHER ACTION

1. If necessary to protect human health or the environment, a determination of no further action shall not preclude the DEQ from requiring continued or periodic monitoring of air, soil, ground water, or surface water, when site-specific circumstances indicate that releases of hazardous waste or hazardous constituents are likely to occur.

2. A determination of no further action shall not preclude the DEQ from requiring further investigations, studies, or remediation at a later date, if new information or subsequent analysis indicates a release or likelihood of a release from a SWMU at the facility that is likely to pose a threat to human health or the environment. In such a case, the DEQ shall initiate a modification to the Permit.

I. CMS PLAN

1. If the DEQ has reason to believe that a SWMU has released concentrations of hazardous constituents, or if the DEQ determines that contaminants present a threat to human health or the environment given action levels or site-specific exposure conditions, the DEQ may require a CMS and shall notify the Permittee in writing. The notification may also specify remedial alternatives to be evaluated by the Permittee during the CMS.

2. The Permittee shall submit a CMS Plan to the DEQ within ninety (90) calendar days from notification of the requirement to conduct a CMS. The Scope of Work for a CMS Plan is in Permit Condition S.

   The CMS Plan shall provide the following information:

   a. A description of the general approach to the investigation, and potential remedies;

   b. A definition of the overall objectives of the study;

c. Specific plans for evaluating remedies to ensure compliance with remedy standards;

d. Schedules for conducting the study; and

e. The proposed format for the presentation of information.

3. After the Permittee submits the CMS Plan, the DEQ will approve, disapprove, or modify the plan in writing.

If the DEQ approves the CMS Plan, the Permittee shall implement the plan.

In the event of disapproval (in whole or in part) of the CMS Plan, the DEQ shall specify deficiencies in writing. The Permittee shall modify the plan to correct these within the time frame specified in the notice of deficiency. The modified CMS Plan shall be submitted in writing to the DEQ for review. Should the permittee take exception to the disapproval, decision, or directive, the Permittee shall submit a written statement of the grounds for the exception in accordance with dispute resolution provisions of this permit.

J. CMS IMPLEMENTATION

No later than fourteen (14) calendar days after the Permittee has received written approval from the DEQ for the CMS Plan, the Permittee shall begin implementation of the Corrective Measures Study and execute the plan according to the schedules specified and in accordance with the approved CMS Plan. All approved plans become incorporated into this Permit.

K. CMS FINAL REPORT AND SUMMARY

1. Within sixty (60) calendar days after the completion of the CMS, the Permittee shall submit a CMS Final Report and Summary. The Summary shall summarize the Final Report. The CMS Final Report shall discuss the results of investigations of each remedy studied and of any bench-scale or pilot tests conducted. It must include an evaluation of each remedial alternative. The CMS Final Report shall present all information gathered during the CMS, and must contain adequate information to support the remedy selection process. In the CMS Final Report, the Permittee shall propose a corrective action program that shall:

a. Attain compliance with corrective action objectives for hazardous constituents in each medium;

b. Control sources of releases;

c. Meet acceptable waste management requirements; and

d. Protect human health and the environment.

2. After the Permittee submits the CMS Final Report and Summary, the DEQ will either approve or disapprove them in writing. Should the Permittee take exception to the disapproval, decision, or directive, the Permittee shall notify the DEQ according to the provisions in this Permit.

If the DEQ approves the CMS Final Report and Summary, the Permittee shall mail the approved Summary to all individuals on the facility mailing list established pursuant to 40 CFR 124.10(c)(1)(ix), within fifteen (15) calendar days of receipt of approval.

If the DEQ determines the CMS Final Report and Summary do not fully meet the objectives, the DEQ may disapprove the CMS Final Report and Summary. If the DEQ disapproves the Report, the DEQ shall notify the Permittee in writing of the Report's deficiencies and specify a due date for submittal of a revised Final Report and Summary. Once approved, the Summary shall be mailed to all individuals on the facility mailing list as specified above.

3. Based on preliminary results and the CMS Final Report, the DEQ may require the Permittee to evaluate additional remedies or particular elements of one or more proposed remedies.

L. CORRECTIVE MEASURE (REMEDY) SELECTION AND IMPLEMENTATION

Within thirty (30) calendar days after approval of CMS Final Report and Summary, the DEQ shall initiate modification of the Permit, for corrective measure (remedy) selection, based on the approved CMS Final Report. The resultant modified permit will include schedules for remedy implementation.

M. CMS SCOPE OF WORK

1. Purpose

The purpose of the CMS is to develop and evaluate corrective measures alternatives and to recommend the corrective measure or measures to be taken. The required information shall include each item specified under CMS Tasks IV-

VI. The Permittee will furnish the personnel, materials, and services necessary to prepare the CMS, except as otherwise specified.

If the Permittee believes that certain requirements of the Scope of Work are not applicable, the specific requirements shall be identified and the rationale for inapplicability shall be provided.

2. Scope

The Corrective Measure Study consists of three tasks:

Task IV: CMS Plan

a. Description of Current Situation
b. Establishment of Corrective Action Objectives
c. Description of Approach to CMS
d. Schedule for CMS

Task V: Corrective Measures Study

a. Identification of Corrective Measures Alternatives(s)
b. Screening of Corrective Measures Alternatives(s)
c. Development of Corrective Measures Alternative(s)
d. Evaluation of Corrective Measures Alternative(s)
e. Selection of Corrective Measures Alternative(s)

Task VI: CMS Final Report and Summary

3. Task IV: CMS Plan

a. Description of Current Conditions

The Permittee shall briefly describe current conditions at the facility to update information provided in the RFI Final Report and Summary. This shall include previous and/or ongoing remedial activity or interim measures.

b. Establishment of Corrective Action Objectives

The Permittee shall propose to the DEQ for review and approval, facility specific objectives for the corrective action. These objectives shall be based on public health and environmental criteria, information gathered during the RFI, EPA guidance, and the requirements of any applicable Federal statutes and regulations.

c. Description of Approach to CMS

The Permittee shall describe the general approach to the corrective measures study. The approach shall include identification, development, screening, and evaluation of the corrective measures alternatives. The Permittee shall describe specific plans for laboratory and bench-scale studies, or field studies, if needed. Specific plans for evaluating remedy effectiveness shall also be developed. The approach shall specify formats to be used for data presentation, including raw data, maps, charts, graphs, engineering schematics, construction design, etc.

d. Schedule

The Permittee shall develop a schedule for implementing the corrective measures study, and a schedule for submitting quarterly progress reports on the study implementation.

4. Task V: Corrective Measures Study

The CMS consists of five parts: identification, screening, development, evaluation, and selection of the corrective measures alternative(s).

a. Identification of Preliminary Corrective Measures Alternative(s)

Based on the results of the RFI and the CMS Plan objectives, the Permittee shall identify all possible alternatives for removal, containment, treatment and/or other remediation of the contamination.

b. Screening of Preliminary Corrective Measures Alternatives

The Permittee shall screen the identified preliminary corrective measures alternatives to eliminate those that may not prove feasible to implement, that rely on technologies unlikely to perform satisfactorily or reliably, or that do not achieve the corrective action objective within a reasonable time period. This screening process focuses on eliminating those technologies which have severe limitations for a given set of waste and site-specific conditions. The screening step may also eliminate technologies based on inherent technological limitations.

Site, waste, and technological characteristics which are used to screen inapplicable technologies are described in more detail below:

1) Site Characteristics: Site data should be reviewed to identify conditions which may limit or promote the use of certain technologies. Technologies whose use is clearly

precluded by site characteristics should be eliminated from further consideration;

2) Waste Characteristics: Identification of waste characteristics that limit the effectiveness or feasibility of technologies is an important part of the screening process. Technologies clearly limited by waste characteristics should be eliminated from consideration.

3) Technological Limitations: The level of technology development, performance record, and operation and maintenance problems shall be identified for each technology considered. Technologies that are unreliable, perform poorly, or are not fully demonstrated may be eliminated in the screening process.

c. Development of Corrective Measures Alternatives

The Permittee shall develop corrective measures alternatives based on corrective measures objectives, and identification and screening of preliminary alternatives. The Permittee shall rely on engineering practice to determine which of the previously identified and screened technologies appear most suitable for the site. Technologies can be combined to form the overall corrective measures alternatives. The alternatives developed should represent a workable number of options that each appears to adequately address all site problems and corrective action objectives. Each alternative may consist of an individual technology or a combination of technologies. The Permittee shall document the reasons for excluding technologies.

When a new technology is proposed or similar waste streams have not routinely been treated or disposed of using the technology, the Permittee shall conduct laboratory and/or bench-scale studies to determine the applicability to facility conditions. The Permittee shall analyze the technologies, based on literature review, vendor contracts, and past experience to determine the testing requirements.

1) The Permittee shall develop a testing plan identifying the type(s) and goal(s) of the study (ies), the level of effort needed, and the procedures to be used for data management and interpretation.

2) Upon completion of testing, the Permittee shall evaluate the testing results to assess the technology or technologies with respect to the site-specific questions identified in the test plan.

3) The Permittee shall prepare a report summarizing the testing program and its results, both positive and negative.

d . Evaluation of Corrective Measures Alternative(s)

The Permittee shall evaluate each corrective measures alternative developed. The evaluation shall be based on technical, environmental, human health and institutional concerns. The Permittee shall also develop cost estimates for each corrective measure.

1) Technical, Environmental, Human Health, and Institutional Concerns

The Permittee shall provide a description of each corrective measures alternative which includes but is not limited to the following: preliminary process flow sheets; preliminary sizing and type of construction for buildings and structures; and rough quantities of utilities required. The Permittee shall evaluate each alternative in the four following areas:

a) Technical

The Permittee shall evaluate each corrective measure alternative based on performance, reliability, implementability and safety.

i The Permittee shall evaluate performance based on the effectiveness and useful life of the corrective measure:

(a) Effectiveness shall be evaluated in terms of the ability to perform intended functions such as containment, diversion, removal, destruction, or treatment. The effectiveness of each corrective measure shall be determined either through design specifications or by performance evaluation. Any specific waste or site characteristics which could potentially impede effectiveness shall be considered. The evaluation should also consider the effectiveness of combinations of technologies.

(b) Useful life is defined as the length of time the level of effectiveness can be maintained. Each corrective measure shall be evaluated in terms of the projected service lives of its component technologies. Resource availability in the future life of the technology, as well as appropriateness of the technologies, must be considered in estimating the useful life of the project.

ii The Permittee shall provide information on the reliability of each corrective measure including operation and maintenance requirements and demonstrated reliability:

(a) Operation and maintenance requirements include the frequency and complexity of operation and maintenance. Technologies requiring frequent or complex operation and maintenance activities should be regarded as less reliable than technologies requiring little or straightforward operation and maintenance. The availability of labor and materials to meet these requirements shall also be considered.

(b) Demonstrated and expected reliability is a way of measuring risk and effect of failure. The Permittee should evaluate whether technologies have been used effectively under analogous conditions; whether the combination of technologies have been used together effectively; whether failure of any one technology has an immediate impact on receptors; and whether the corrective measure has the flexibility to deal with uncontrollable changes at the site.

iii The Permittee shall describe the implement ability of each corrective measure including relative ease of installation (constructability) and total time required to achieve a given level of response:

(a) Constructability is determined by conditions both internal and external to facility conditions and includes such items as location of underground utilities, depth to water table, heterogeneity of subsurface materials, and location of facility (i.e., remote location vs. congested urban area). The Permittee shall evaluate what measures can be taken to facilitate construction under site specific conditions. External factors which affect implementation include the need for special permits or agreements, equipment availability, and the location of suitable off-site treatment or disposal facilities.

(b) Time has two components to be addressed: the time it takes to implement a corrective measure and the time it takes to see beneficial results. Beneficial results are defined as the reduction of contaminants to acceptable levels as established in the corrective measures objectives.

iv The Permittee shall evaluate each corrective measures alternative with regard to safety. This evaluation shall include threats to the safety of nearby communities and environments as well as those to workers during implementation. Factors to consider include fire, explosion, and exposure to hazardous substances.

b) Environmental

The Permittee shall perform an Environmental Assessment for each alternative. The assessment shall focus on facility

conditions and pathways of contamination actually addressed by each alternative. The Environmental Assessment for each alternative will include at a minimum, an evaluation of the short- and long-term beneficial and adverse effects of the response alternative, evaluation of any adverse effects on environmentally sensitive areas, and an analysis of measures to mitigate adverse impacts.

c) Human Health

The Permittee shall assess each alternative in terms of the extent to which it mitigates short- and long-term potential exposure to any residual contamination and protects human health both during and after implementation of the corrective measure. The assessment will describe the levels and characterizations of contaminants on-site, potential exposure routes, and potentially affected populations. Each alternative will be evaluated to determine the level of exposure to contaminants and the reduction over time. For management of mitigation measures, the relative reduction of impact will be determined by comparing residual levels of each alternative with existing criteria, standards, or regulations acceptable to the DEQ.

d) Institutional

The Permittee shall assess relevant institutional needs for each alternative. Specifically, the effects of Federal, State, and Local environmental and public health standards, regulations, guidance, advisories, ordinances, or community relations on the design, operation, and timing of each alternative shall be considered.

2) Cost Estimate

The Permittee shall develop an estimate of the cost of each corrective measures alternative and for each phase or segment of the alternative. The cost estimate shall include capital, and operation and maintenance costs.

a) Capital costs consist of direct and indirect costs.

i Direct capital costs include:

(a) Construction costs: Cost of materials, labor (including fringe benefits and worker's compensation), and equipment required to install the corrective measures alternative;

(b) Equipment costs: Costs of treatment, containment, disposal and/or servicing of equipment used to implement the action;

(c) Land and site development costs: Expenses associated with purchase of land and development of existing property; and

(d) Building and services costs: Costs of process and non-process buildings, utility connections, purchased services, and disposal costs.

ii Indirect capital costs include:

(a) Engineering expenses: Costs of administration, design, construction, supervision, drafting, and testing of corrective measures alternatives;

(b) Legal fees and license or permit costs: Administrative and technical costs necessary to obtain licenses and permits for installation and operation;

(c) Start-up and shakedown costs: Costs incurred during corrective measure start-up; and

(d) Contingency allowances: Funds to cover costs resulting from unforeseen circumstances such as adverse weather conditions, strikes, and inadequate facility characterization.

b) Operation and maintenance costs are post-construction costs necessary to ensure continued effectiveness of a corrective measure. The Permittee shall consider the following operation and maintenance cost components:

i Operating labor costs: Wages, salaries, training, overhead, and fringe benefits associated with the labor needed for post-construction operation;

ii Maintenance materials and labor costs: Costs for labor, parts, and other resources required for routine maintenance of facilities and equipment;

iii Auxiliary materials and energy: Costs of such items as chemicals and electricity for treatment plant operations, water and sewer service, and fuel;

iv Purchased services: Sampling costs, laboratory fees, and professional fees which can be predicted;

v Disposal and treatment: Costs of transporting, treating, and disposing of waste materials, such as treatment plant residues, generated during operation;

vi Administrative costs: Costs associated with administration of corrective measures operation and maintenance not included under other categories;

vii Insurance, taxes, and licensing costs: Costs of such items as liability and accident insurance; real estate taxes on purchased land or rights-of-way; licensing fees for certain technologies; and permit renewal and reporting costs;

viii Maintenance reserve and contingency funds: Annual payments into escrow funds to cover costs of anticipated replacement or rebuilding of equipment, and any large

unanticipated operation and maintenance costs; and

ix Other costs: Items that do not fit any of the above categories.

e. Selection of Corrective Measures Alternative(s)

The Permittee shall select a corrective measures alternative using technical, human health, and environmental criteria. At a minimum, the following criteria shall be used to select the final corrective measure or measures.

1) Technical

a) Performance: Corrective measure or measures which are most effective at performing their intended functions and maintaining performance over extended periods of time will be given preference;

b) Reliability: Corrective measure or measures which do not require frequent or complex operation and maintenance activities and have proven effective under conditions similar to those anticipated will be given preference;

c) Implement ability: Corrective measure or measures which can be constructed and operated to reduce levels of contamination to attain or exceed applicable standards in the shortest period of time will be preferred; and

d) Safety: Corrective measure or measures which pose the least threat to the safety of nearby residents and environments as well as workers during implementation will be preferred.

2) Human Health

The corrective measure or measures must comply with existing EPA criteria, standards, or regulations for the protection of human health. Corrective measures which provide the minimum level of exposure to contaminants and the maximum reduction in exposure with time are preferred.

3) Environmental

The corrective measure or measures imposing the least adverse impact or greatest improvement on the environment over the shortest period of time will be preferred.

5. Task VI: CMS Final Report and Summary

The Permittee shall prepare a CMS Final Report and Summary presenting the results of the CMS and recommending a corrective action program. The Report shall at a minimum include:

a. A summary of all the corrective measures alternatives originally identified, and the screening rationale employed. The results of development of each alternative shall be described, and the evaluation of those developed shall be presented in detail. The report will describe the rationale for selection of a corrective measures alternative, including performance expectations, preliminary design criteria and rationale, general operation and maintenance requirements, and long-term monitoring requirements. The report shall include summary tables which allow the alternative or alternatives to be easily understood. Trade-offs among health risks, environmental effects, and other pertinent factors shall be highlighted;

b. A proposed corrective action program that will attain compliance with concentration level objectives, control sources of releases, meet acceptable waste management requirements, and protect human health and the environment;

c. Design and implementation precautions, including special technical problems, additional engineering data required, permits and regulatory requirements, access, easements, and right-of-way, health and safety requirements, and community relations activities;

d. Cost estimates and schedules including capital cost estimate, operation and maintenance cost estimate, and project schedule (design, construction, operation);

e. A schedule for corrective measure (remedy) implementation.

6. General CMS Reporting Requirements

a. Two hard copies and one IBM compatible disk copy of all reports shall be submitted by the Permittee to the DEQ;

b. The CMS Plan shall be submitted by the Permittee to the DEQ;

c. The CMS Final Report and Summary shall be submitted by the Permittee to the DEQ;

d. Within 90 days of the date the Permittee is notified to begin a CMS, the Permittee shall provide the DEQ with signed, quarterly progress reports.

TABLE VII-1
SOLID WASTE MANAGEMENT UNITS

SWMU	Corrective Action	Determination
Asphalt Pit 1	Removed under Corrective Measures Implementation (CMI)	Corrective Action (CA)completed
Asphalt Pit 2	Removed under CMI	CA completed
Asphalt Pit 3	Removed under CMI	CA completed
Biosludge Pit	No significant hazardous constituents found during RCRA Facility Investigation (RFI)	CA completed
Drainage Ditch	Removed as part of a closure	CA completed
Storm Water Retention Pond	Closed with RCRA final cover	Monitored under post-closure permit
Process Wastewater Drainage Ditch	No significant hazardous constituents found during the RFI; concrete lined	CA completed
Settling Lagoons	No significant releases to soils or groundwater were found during the RFI	CA completed
Closed Landfill	No significant releases to soils or groundwater were found during the RFI	CA completed
API Separator	No significant releases to soils or groundwater were found during the RFI	CA completed
API Separator	No significant releases to soils or groundwater were found during the RFI	CA completed
API Separator Sludge Pit	No significant releases to soils or groundwater were found during the RFI	CA completed
Closed Oil Trap	No significant releases to soils or groundwater were found during the RFI	CA completed
Asphalt Pit 4 / Southern Leaded Tank Bottoms Disposal Area	No significant releases to soils or groundwater were found during the RFI	CA completed
Northern Leaded Tank Bottoms Disposal Area	Further RFI is required, but is deferred due to this SWMU's proximity to the free-product hydrocarbon plume. The RFI is deferred until the ongoing remediation of this plume is complete	RFI deferred