

MISSOURI HAZARDOUS WASTE AND PCB MANAGEMENT FACILITY PERMIT
PART I
PERMIT NUMBER: MOD000610766

PERMITTEE

Owner: Solvent Recovery ~~Corporation~~L.L.C.

700 Mulberry Street
Kansas City, MO 64101

Operator: Solvent Recovery

716 Mulberry Street
Kansas City, MO 64101

FACILITY LOCATION

716 Mulberry Street
Kansas City, MO 64101
Jackson County
North Latitude – 39°06'12"
West Longitude – 94°06'27"

FACILITY DESCRIPTION

Solvent Recovery Corporation (SRC) blends, ~~and~~ mixes ~~hazardous~~, transports, handles, and stores hazardous waste, and brokers hazardous waste received for off-site treatment or disposal. SRC is a hazardous waste management facility that accepts waste from various generators. SRC is ~~certified~~ permitted to handle most hazardous waste other than dioxin ~~or polychlorinated biphenyl's greater than 50 ppm~~ containing compounds. Waste streams that are viable fuel candidates are blended and shipped to cement kilns. Along with blending, SRC utilizes miscellaneous treatment units to extract paint and paint related wastes from collected containers and operates a lab pack ~~dep~~ pack operation for consolidation, or shipment off-site of permitted containerized waste. For waste streams that cannot be fuel blended, SRC acts as a broker and

Solvent Recovery ~~L.L.C. Corporation~~

Missouri Hazardous Waste and PCB Management Facility Permit – Part I

MOD000610766

Page 2

transfers these wastes to other facilities that can store or treat these waste streams. ~~Wastewater streams can also be generated when hazardous waste containment areas come in contact with rainwater. These waste streams are regulated under the Clean Water Act.~~ SRC also accepts containerized waste containing polychlorinated biphenyls greater than 50 parts per million (ppm) and brokers for disposal.

PERMITTED ACTIVITIES

This Permit allows for the ~~container and tank~~ storage and/or treatment of various “F, K, P, ~~and U, and M~~” listed hazardous wastes, as well as ignitable, reactive, corrosive, and characteristic hazardous waste in containers and tanks as specified in the Part A application. For specific requirements pertaining to polychlorinated biphenyls handling and storage, please refer to the approved Toxic Substances Control Act Commercial Storage Application dated August 15, 2006, with revisions dated April 13, 2007, and May 1, 2007. This permit also requires implementation of a sitewide corrective action program to address releases from Solid Waste Management Units and Areas of Concern. There are also contingent corrective action conditions to address releases to the environment from Solid Waste Management Units and/or Areas of Concern as necessary and appropriate.

EFFECTIVE DATES OF PERMIT: March 30, 2005 to March 30, 2015

Modified Date

~~Doyle Childers~~ Daniel R. Schuette, Director
~~DEPARTMENT OF NATURAL RESOURCES~~
DIVISION OF ENVIRONMENTAL
QUALITY

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	5
DEFINITIONS.....	9
SCHEDULE OF COMPLIANCE.....	11
SUBMITTAL OF REQUIRED INFORMATION	14
STANDARD PERMIT CONDITION	15
GENERAL PERMIT CONDITIONS.....	15
SPECIAL PERMIT CONDITIONS	16
I. Storage in Containers [40 CFR Part 264 Subpart I]	16
II. Storage and Treatment in Tanks [40 CFR Part 264 Subpart J]	21
III. Miscellaneous Treatment [40 CFR Part 264 Subpart X].....	3029
IV. Lab p ack Depack Operation	31
V. Railroad Car Operations [10 CSR 25-7.264(3)]	3231
VI. Waste Minimization.....	32
VII. Seismic Evaluation Requirements [10 CSR 25-7.270(2)(B)4.].....	32
VIII. Air Emission Standards for Tanks and Containers [10 CSR 25-7.264(1)].....	3231
IX. 100-Year Floodplain Requirements [40 CFR 264.18(b)].....	33
CORRECTIVE ACTION CONDITIONS	3534
I. Identification of Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs)	3435
II. Notification Requirements for and Assessment of Newly-Identified SWMU(s) and Areas of Concern (AOCs)	3738
III. Notification Requirements for and Assessment of Newly-Identified Releases from Previously-Identified SWMUs and AOCs	3940
IV. Interim/Stabilization Measures	4042
V. RCRA Facility Investigation (RFI) Work Plan	4243
VI. RCRA Facility Investigation (RFI) Report.....	4445
VII. Interim Groundwater Monitoring Plan (ISMs).....	4647
VIII. Corrective Measures Study (CMS) Work Plan.....	4748
IX. Corrective Measures Study (CMS) Report.....	4849

X.	Final Remedy Approval.....	4951
XI.	Activity and Use Limitations (AULs)	5051
XII.	Financial Assurance for Corrective Action Corrective Action Cost Estimates and Financial Assurance	5152
XIII.	Semi-Annual Progress and Corrective Action Effectiveness Reports.....	6568
XIV.	Supplemental Data	6871
XV.	Review and Approval Procedures.....	6971
XVI.	Planned Activities	6972
XVII.	Contingent Activities	7072
	FACILITY SUBMISSION SUMMARY	7173

DRAFT

INTRODUCTION

After public notice, according to 10 CSR 25-8.124, and review of the Solvent Recovery Corporation's Resource Conservation and Recovery Act (~~RCRA~~) Part B Permit Application, (hereafter referred to as the Application), the Missouri Department of Natural Resources (hereafter referred to as the Department) has determined that the application substantially conforms to the provisions of the Missouri Hazardous Waste Management Law (and all standards, rules, and regulations adopted under this act), Section 260.350, et seq., RSMo. Pursuant to Section 260.375 (13), RSMo, the Department hereby approves the application and issues Permit Number MOD000610766 to the Solvent Recovery Corporation (hereafter referred to as the Permittee) for the operation of the hazardous waste facility as set forth in the application and this Permit. This Permit also addresses corrective action requirements for solid waste management units. Applicable regulations are found in 40 CFR Parts 124, 260 through 264, 266, 268, and 270, and in 10 CSR 25-7 as specified in this Permit. Part I of this Permit is issued under state authority and Part II is issued under federal authority. Part I of this Permit shall remain in effect even if Part II is terminated or has expired.

The consolidated P permit application that was submitted by the Permittee ~~April 2, 2001~~ June 2, 2005, and all revisions dated ~~April 25, 2001, May 2, 2001, May 6, 2001, May 16, 2001, July 18, 2001, February 12, 2002, March 29, 2002, and May 20, 2002, the temporary authorization application dated February 7, 2003, the final health profile dated October 31, 2002, and the habitual violator disclosure August 15, 2006, April 13, 2007, and May 1, 2007~~, will hereafter be referred to as the “approved permit application.” No updated revised consolidated permit application will be required as part of the permit modification. The Permittee shall maintain all the documents outlined above with the original consolidated permit application. The approved Permit application, along with all of the additional documents to be submitted under Schedule of Compliance, Item I.A. is defined as the “consolidated Permit application.”

Any inaccuracies found in information submitted may be grounds for the termination, revocation and reissuance, or modification of this Permit in accordance with 40 CFR Part 270 Subpart D, incorporated by reference in 10 CSR 25-7.270(1) and modified in 10 CSR 25-7.270(2)(D), and for potential enforcement action. The Permittee shall inform the Department of any deviation from, or changes in, the information in the application, which would affect the Permittee's ability to comply with the applicable regulations or P permit conditions.

When the Department receives any information (such as inspection results, information from the Permittee, or requests from the Permittee) it may decide whether cause exists to modify, revoke and reissue, or terminate a facility's permit. All such changes to the Permit will be in accordance with 10 CSR 25-7.270(2)(D), 10 CSR 25-8, and 40 CFR Part 270 Subpart D; as incorporated by reference in 10 CSR 25-7.270(1).

Solvent Recovery ~~L.L.C.~~ Corporation

Missouri Hazardous Waste and PCB Management Facility Permit – Part I

MOD000610766

Page 6

All ~~P~~ permit application information shall be available to the public unless nondisclosure is requested in writing as set forth in Section 260.430, RSMo and 10 CSR 25-7.270(2)(B)2. The Permit and accompanying material will be available for review by the public at the Department's central office in Jefferson City, Missouri, the ~~United States~~ U.S. Environmental Protection Agency (EPA), Region VII, (~~USEPA~~) office in Kansas City, Kansas, and the City of Kansas City Library, Kansas City, Missouri.

The Permittee's hazardous waste facility is located at 716 Mulberry Street, Kansas City, Missouri. The Permittee is permitted to operate the container storage facilities, tank storage and treatment, and miscellaneous treatment units as specified in this Permit. The permit modification allows for the operation of a polychlorinated biphenyl (PCB) container storage area to store PCB material at concentrations greater than 50 parts per million for brokerage only. The PCBs will be managed in accordance with 40 CFR Part 761 as incorporated in 10 CSR 25-13 and procedures described in the approved Toxic Substances Control Act Commercial Storage application dated August 15, 2006, with revisions dated April 13, 2007, and May 1, 2007.

Construction and operation of this hazardous waste facility and corrective action shall be in accordance with the provisions of this Permit, the Missouri Hazardous Waste Management Law (Sections 260.350 to 260.434, RSMo), the rules and regulations promulgated thereunder [Code of State Regulations, Title 10, Division 25 (10 CSR 25)] as effective on the date of this Permit, all the final engineering plans, petitions, specifications, and operating procedures which were submitted to the Department during the ~~P~~ permit application review process and which are included in the final version of the ~~P~~ permit application, which is hereby approved by the Department, and any other conditions, changes, or additions to the plans, specifications, and procedures as specified in this Permit. The consolidated ~~P~~ permit application, which includes engineering plans, specifications and operating procedures, is therefore incorporated into the conditions of this Permit. All conditions specified in this Permit supersede any conflicting information in the consolidated ~~P~~ permit application. Where conflicts arise between documents the latest revision shall be effective.

The Permittee shall comply with all applicable environmental laws and regulations enforced by the Department. These environmental requirements are administered by the Air Pollution Control Program, the Hazardous Waste Program, the Land Reclamation Program, ~~the Public Drinking Water Program~~, the Solid Waste Management Program, and the Water ~~Pollution Control~~ Protection Program. Failure to comply with these environmental laws, in certain circumstances, result in the suspension or revocation of this Permit and may subject the Permit holder to civil and criminal liability.

This Permit for operational, closure, and corrective action activities is issued only to the Permittee named above. This Permit is issued for a period of ten years and expires at midnight on March 30, 2015. This Permit is subject to review and modification by the Department in accordance with Section 260.395.12, RSMo.

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. All citations to federal regulations throughout this Permit are for the sake of convenient reference. The federal regulations are adopted by reference in 10 CSR 25. In the instances where state regulations are more stringent, the appropriate state reference is given and shall apply.

Any appeals of the issuance or denial of the Permit or specific permit conditions based on state authority shall be filed in accordance with Sections 260.395.11 and 621.250, RSMo. The written petition requesting the appeal must be filed with the Administrative Hearing Commission within thirty (30) days after the Permit is mailed or delivered, whichever is earlier. If the petition is sent by registered mail or certified mail, it will be considered filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be considered filed on the date it is received by the Administrative Hearing Commission.~~Any appeals of the issuance or denial of the Permit or specific Permit conditions based on state authority shall be filed in accordance with Section 260.395.11, RSMo. The appeal shall be filed with the Missouri Hazardous Waste Management Commission within 30 days from the date of this Permit. The Missouri Supreme Court has ruled that corporations and associations may only proceed in legal matters through attorneys licensed to practice in Missouri. *Reed v. Labor and Industrial Relations Commission*, 789 S.W.2d 19 (Mo banc 1990). The court held that a pleading, filed by a non-attorney on behalf of a corporation or association is null and void, and therefore, such pleading will not be accepted by the Hazardous Waste Management Commission. Individuals and partnerships are not required to have an attorney and are allowed to represent themselves in front of the Commission.~~

40 CFR 264.101(a), as incorporated by reference in 10 CSR 25-7.264(1), requires all owners or operators of facilities seeking a pPermit for the treatment, storage, or disposal of hazardous waste to institute corrective action as necessary to protect human health and the environment for all releases of hazardous waste or hazardous constituents from any solid waste management unit, regardless of the time at which waste was placed in such unit.

40 CFR 264.101(b), as incorporated by reference in 10 CSR 25-7.264(1), requires that Permits issued under the Hazardous Waste Management Law, contain a schedule of compliance for

corrective action (where corrective action cannot be completed prior to permit issuance) and assurances of financial responsibility for completing such corrective action.

40 CFR 264.101(c), as incorporated by reference in 10 CSR 25-7.264(1), requires that corrective action be taken by the facility owner or operator beyond the facility property boundary, where necessary to protect human health and the environment, unless the owner or operator demonstrates that, despite the owner/operator's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such action.

Further, 40 CFR 264.101(c), as incorporated by reference in 10 CSR 25-7.264(1), stipulates that the owner/operator is not relieved of any responsibility to cleanup a release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases will be determined on a case-by-case basis. In addition, assurances of financial responsibility for completing such corrective action must be provided.

40 CFR 270.32(b)(2), as incorporated by reference in 10 CSR 25-7.270(1), and Section 260.395.12, RSMo, requires that each Permit issued under that section contain terms and conditions as the Department determines necessary to protect human health and the environment.

On July 6, 1999, Missouri received final authorization for revisions to its hazardous waste management program, including the corrective action portion of the hazardous and solid waste amendments of 1984 (HSWA) Codification Rule (July 15, 1985, 50 FR 28702) which had been previously adopted by the state. Thus, the corrective action requirements implemented by the state in lieu of the ~~USEPA~~ are incorporated into Part I of this Permit and are under state authority. Authority for other Hazardous and Solid Waste Amendments of 1984 (HSWA) requirements for which the state is not authorized is retained by the ~~USEPA~~ and appear in Part II of the Permit.

DEFINITIONS

For purposes of this Permit, terms used herein shall have the same meaning as those in [the Resource Conservation and Recovery Act \(RCRA\)](#) and 40 CFR Parts 124, 260, 261, 264, 266, 268, and 270, and 10 CSR 25, unless this Permit specifically provides otherwise. Where terms are not defined in RCRA, the regulations, the permit, or ~~USEPA~~ [the U.S. Environmental Protection Agency](#) guidance or publications, 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.

“Area of Concern (AOC)” means any area where an actual or potential release of hazardous waste or hazardous constituents which is not from a solid waste management unit has occurred or is occurring and is determined by the Department to pose a current or potential threat to human health or the environment. Investigation and/or remediation of ~~AOCs~~ [areas of concerns](#) may be required pursuant to Section 260.395, RSMo, and 40 CFR 270.32(b)(2), as incorporated by reference in 10 CSR 25-7.270(1).

“Director” means the Director of the Missouri Department of Natural Resources.

“Facility” means:

“All contiguous land and structures, other appurtenances, and improvements on the land used for treating, storing, or disposing hazardous waste.”

“All contiguous property under the control of the owner/operator, for the purpose of implementing corrective action under 40 CFR 264.101, as incorporated by reference in 10 CSR 25-7.264(1) and as specified in Corrective Action Conditions I. through XVII. of this Permit.”

“Hazardous constituent” means any chemical compound listed in 40 CFR Part 261 Appendix VIII as incorporated in 10 CSR 25-4.261.

“Hazardous waste” means any waste, or combination of wastes as defined by or listed in 10 CSR 25-4, which because of its quantity, concentration, 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 which may pose a threat to the health of humans or other living organisms.

[“Polychlorinated biphenyl \(PCB\)” means any chemical substance that is limited to the biphenyl molecule that has been chlorinated to varying degrees or any combination of substances which contain this substance as described in 10 CSR 25-13.010.](#)

“PCB container” means any package, can, bottle, bag, barrel, drum, tank, or other device that contains PCBs or PCB Articles and whose surface(s) has been in direct contact with PCBs.

“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).

“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.

“Stabilization” means actions to control or abate threats to human health and/or the environment from releases at RCRA facilities and/or to prevent or minimize the further spread of contamination while long-term remedies are pursued.

DRAFT

SCHEDULE OF COMPLIANCE

- I. Within sixty (60) calendar days after the effective date of this Permit, the Permittee shall:
- ~~A. Submit to the Department two copies of the consolidated Permit application as required by 10 CSR 25-7.270(2)(B)7. This consolidated Permit application shall include the following:
 - ~~1. The “approved Permit application,” as defined in the Introduction of this Permit; and~~
 - ~~2. All changes made to the application as a result of the public comment period.~~~~
 - B.A. Submit to the Department a certification by the Permittee that the Permittee has read the Permit and all modifications in its entirety and understands all ~~P~~ permit conditions contained herein.
 - C.B. Submit to the Department a check or money order payable to the State of Missouri for any outstanding engineering review costs.
 - C. Submit to the Department for approval a revised/updated Part A. The revised/updated Part A shall include all permitted units at the facility. The revised Part A submittal shall include a diagram of the facility clearly outlining where each permitted unit is located.
 - ~~D. Submit to the Department a check or money order payable to the State of Missouri for \$1,000 for each year the Permit is to be in effect beyond the first year. This Permit is effective for ten years. Since the Permittee has submitted a check for \$1,000 with the RCRA Permit application, the remaining balance to be submitted by the Permittee is \$9,000 for this ten-year Permit.~~
- ~~II. The Permittee shall update the facility’s financial assurance instrument to reflect the cost estimate in the approved Permit application within 60 calendar days after the effective date of this Permit. The Permittee shall submit the updated financial assurance instrument to the Department for approval within 15 days of securing the instrument.~~

~~III.~~ II. The Permittee shall comply, as necessary, with all corrective action requirements of this Permit as specified in the Corrective Action Conditions section of this Permit, and as summarized on Tables IV and V attached hereto.

III. Prior to receipt of containerized polychlorinated biphenyl material, the Permittee shall:

- A. Meet all requirements of the approved Toxic Substances Control Act Commercial Storage application dated August 15, 2006, with revisions dated April 13, 2007, and May 1, 2007.
- B. Submit to the Department for review draft updates to the financial assurance instrument to reflect the increased closure estimate in Section 7 of the August 15, 2006 permit modification request.
- C. After the Department's review of the draft update, the Permittee shall execute or otherwise finalize the update in order to make it legally binding. The update must be in a form identical to the draft financial assurance documents reviewed and approved by the Department.
- D. Permittee shall submit all original executed and/or otherwise finalized financial assurance instruments or other documents to the Department. Facsimiles or photocopies are not acceptable.

IV. Within 180 calendar days after the effective date of this Permit, the Permittee shall submit for the department's review and approval a closure certification, in accordance with 40 CFR 264.115, for the following Tanks:

- T-1 Still Tank
- T-2 Still Tank
- T-15 Bulk Waste Storage Tank
- T-16 Bulk Waste Storage Tank
- T-25 Bulk Waste Storage Tank

~~IV. Within 60 calendar days after the effective date of this Permit, the Permittee shall make the necessary modifications to the operation, procedures, control system, and check lists to be in compliance with any permit conditions that are new or modified as compared to the July 3, 1991, Hazardous Waste Management Facility Treatment and Storage Permit and subsequent modification of that permit.~~

Solvent Recovery L.L.C. Corporation

Missouri Hazardous Waste and PCB Management Facility Permit – Part I

MOD000610766

Page 13

~~V. Within 60 calendar days after the effective date of this Permit, the Permittee shall contact the Solid Waste Management Program in writing to determine compliance with Missouri Solid Waste Management regulations, in regards to the management of solid waste collected by or de-listed by the facility. A copy of this correspondence shall be submitted to the Hazardous Waste Program for verification.~~

DRAFT

SUBMITTAL OF REQUIRED INFORMATION

- I. The Permittee shall submit three copies of all reports, documents, or plans/specifications; ~~and consolidated permit application~~ required under the terms of this Permit to:

Chief, Permits Section
Missouri Department of Natural Resources
Hazardous Waste Program
173~~80~~ East Elm Street (lower level)
P.O. Box 176
Jefferson City, MO 65102-0176

- II. The Permittee shall submit two copies of all reports, documents, or plans/specifications required under the terms of this Permit to:

Chief, RCRA Corrective Action and Permits Branch
~~United States~~ U.S. Environmental Protection Agency, Region VII
Air, ~~RCRA and Toxics Division~~ and Waste Management Division
901 North Fifth Street
Kansas City, KS 66101

- III. The Permittee shall also submit two copies of all reports, documents, or plans/specifications required under the terms of this Permit regarding handling or storage of PCB waste, or the financial assurance mechanism to:

Chief, Chemical Risk Information Branch
U.S. Environmental Protection Agency, Region VII
Air and Waste Management Division
901 North Fifth Street
Kansas City, KS 66101

STANDARD PERMIT CONDITION

- I. The Permittee shall comply with the requirements set forth in the Missouri Hazardous Waste Management Law (and all standards, rules, and regulations adopted under this act), Section 260.350, et seq., RSMo, 40 CFR Part 264 Subpart H, 40 CFR 270.30, 40 CFR 270.40, 40 CFR 270.42, ~~and 40 CFR 270.51,~~ [and 40 CFR Part 761](#), as incorporated and modified in 10 CSR 25-7, ~~and 10 CSR 25-8,~~ [and 10 CSR 25-13](#).

GENERAL PERMIT CONDITIONS

- I. The Permittee shall comply with the requirements set forth in 40 CFR Part 264 Subpart B, 40 CFR Part 264 Subpart C, 40 CFR Part 264 Subpart D, 40 CFR Part 264 Subpart E, 40 CFR Part 264 Subpart H, 40 CFR Part 268, and 40 CFR Part 270, as incorporated and modified in 10 CSR 25-7; and 10 CSR 25-8.

- II. Notification of an Emergency Situation [Chapter 260.505.4, RSMo]

The Permittee shall at the earliest practical moment upon discovery of an emergency involving the hazardous waste under the Permittee's control, notify the Department's emergency response hotline at (573) 634-2436 and the National Response Center at 1-800-424-8802.

SPECIAL PERMIT CONDITIONS

The Department has established the following additional Permit conditions for the Permittee's hazardous waste facility.

I. Storage in Containers [40 CFR Part 264 Subpart I]

A. Waste Identification

The Permittee shall store in containers only the hazardous wastes identified in the approved Part A Permit Application. All stored wastes are subject to the terms of this Permit.

B. Waste Quantities

The maximum inventory of wastes that may be stored at each hazardous waste container storage area is specified below:

Basement

No containers storing hazardous waste are to be located in this area at any time.

1st Floor

1. Room A

92 fifty-five gallon containers or 5,060 gallons, whichever is less; and

2. Room B

~~120~~ 150 fifty-five gallon containers or ~~6,600~~ 8250 gallons, whichever is less; and

~~3. Room C~~

~~30 fifty five gallon containers or 1,650 gallons, whichever is less;~~

4.3. Drum Storage Warehouse

The capacity is not to exceed ~~1,553~~ 1591 fifty-five gallon containers or ~~161,150~~ 87,505 gallons, whichever is less.

2nd Floor

1. Oxidizer Container Storage

67 fifty-five gallon containers or 3,685 gallons, whichever is less;

2. Caustic Container Storage

218 fifty-five gallon containers or 11,990 gallons, whichever is less; [and](#)

3. Inorganic and Organic Acid Container Storage

125 fifty-five gallon containers or 6,875 gallons, whichever is less; [and](#)

3rd Floor

The capacity is not to exceed 343 fifty-five gallon containers or 18,865 gallons, whichever is less.

4th Floor

~~The capacity is not to exceed 343 fifty five gallon containers or 18,865 gallons, whichever is less.~~

[1. PCB Waste Storage Area](#)

[The capacity is not to exceed 80 fifty-five gallon containers or 4400 gallons, whichever is less; and](#)

[2. RCRA Storage Area](#)

[The capacity is not to exceed 305 fifty-five gallon containers or 16,775 gallons, whichever is less.](#)

Roll-off Containers

There are up to a maximum of eight 40 cubic yard roll-off containers allowed by this Permit to store non-liquid hazardous waste in accordance with the approved application.

C. Condition of Containers [40 CFR 264.171]

1. If a container holding hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the Permittee shall transfer the hazardous waste from the container to a container that is in good condition, or manage the waste in some other way that complies with the conditions of this Permit, such as over-packing.
2. During the entire on-site storage period, containers storing hazardous wastes shall be labeled and marked in accordance with the applicable, currently-effective ~~United States~~ [U.S.](#) Department of Transportation (~~USDOT~~) regulations regarding hazardous materials, 49 CFR Part 172.

D. Compatibility of Waste with Containers [40 CFR 264.172]

1. The Permittee shall use a container that is made of, or lined with, materials which will not react with and are otherwise compatible with the hazardous waste to be stored so that the ability of the container to contain the waste is not impaired.
2. Only ~~USDOT~~ [U.S. Department of Transportation](#) approved containers shall be used for storage of hazardous waste on-site.

E. Management of Containers [40 CFR 264.173]

1. A container holding hazardous waste shall always be closed during storage, except when it is necessary to add or remove waste. A container holding hazardous waste shall not be opened, handled, or stored in a manner that may rupture the container or cause it to leak or spill.
2. The Permittee shall store containers in a manner that ensures physical stability and allows for visual inspection of each container and each container's label, except for visual inspection of containers not containing free liquids where container size prohibits the inspection of center containers when palletized provided the outermost containers are clearly labeled as to the number of containers on the pallet.
3. Class 1 flammable liquids, as defined in the National Fire Protection Association's ([NFPA](#)) "Flammable and Combustible Liquids Code"

(NFPA 30, as revised 1996) shall not be stacked over five feet in height. Class II combustible liquids, as defined in the [National Fire Protection Association's NFPA's](#) "Flammable and Combustible Liquids Code" (NFPA 30, as revised 1996) shall not be stacked over ten feet in height.

4. The Permittee shall store containers in a manner that ensures physical stability and allows for visual inspection of each container. For containers that are stacked on pallets, the maximum stacking height shall not exceed eight feet. All container labels shall be visible from an aisle. All containers shall be accessible from an aisle. A minimum of four feet of aisle space shall be maintained between rows of adjacent containers to allow for inspection of each container. When containers are stored on pallets, a minimum of one-half foot of spacing shall be maintained between the pallets within the row.

[5. Use and management of PCB containers shall comply with 40 CFR Part 761.65\(b\), as incorporated in 10 CSR 25-13.010\(8\)\(I\).](#)

F. Inspections [40 CFR 264.174]

At least weekly, the Permittee shall inspect areas where containers are stored, looking for leaking containers and for deterioration of containers and the containment system caused by corrosion or other factors.

G. Containment [40 CFR 264.175]

The Permittee shall design and operate containment systems for the container storage areas as follows:

1. A base shall underlie the containers, which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed.
2. The base shall be sloped or the containment system shall be otherwise designed and operated to drain and remove liquids resulting from leaks, spills or precipitation unless the containers are elevated or are otherwise protected from contact with accumulated liquids.

3. The containment system shall have sufficient capacity to contain 10 percent of the volume of all containers or 100 percent of the volume of the largest container, whichever is greater. Containers that do not contain free liquids need not be considered in this determination.
4. Run-on into the containment system must be prevented unless the collection system has sufficient excess capacity in addition to that required in Special Permit Condition I.G.3. above to contain any run-on which might enter the system.
5. Spilled or leaked waste shall be removed from the sump or collection area in as timely a manner as is necessary to prevent overflow of the collection system.

H. Staging [10 CSR 25-7.264(2)(A)3.]

A container holding hazardous waste shall not be staged, stored, or managed in an area not addressed by this Permit for a period which exceeds 24 hours.

I. Special Requirements for Ignitable or Reactive Waste [40 CFR 264.176 and 10 CSR 25-7.264(2)(I)]

The Permittee shall maintain the facility as illustrated in the approved ~~P~~ permit application in such a manner that meets compliance with 10 CSR [25-7.264\(2\)\(I\)\(5\)](#).

J. Special Requirements for Incompatible Waste [40 CFR 264.177]

1. The Permittee shall not place incompatible wastes or materials in the same container unless such action is in compliance with the requirements of 40 CFR 264.17(b).
2. The Permittee shall not place hazardous waste in an unwashed container that previously held an incompatible waste or material.
3. The Permittee shall separate by device (i.e., a dike or other physical means) containers of incompatible waste or materials. No incompatible waste or materials may be stored together in the storage areas without providing separation sufficient to prevent the mixing of any spilled materials which may be incompatible.

K. Closure [10 CSR 25-7.264(2)(G)]

At closure, the Permittee shall remove all hazardous waste and hazardous waste residues from the container storage areas and containment systems and close in accordance with the closure plan in the approved ~~P~~ permit application for the hazardous waste management facility. If the Permittee is unable to close according to the closure plan, then the Permittee must submit a permit modification to the Department in accordance with 40 CFR 270.42.

II. Storage and Treatment in Tanks [40 CFR Part 264 Subpart J]

A. Waste Identification

The Permittee shall store and treat in tanks only the hazardous wastes identified in the approved Part A Permit ~~a~~ Application. This condition does not preclude the storage and treatment of non-hazardous wastes. All stored and treated wastes are subject to the terms of this Permit and shall be managed as hazardous waste. No Toxic Substances Control Act PCB wastes shall be stored in tanks without modification to the U.S. Environmental Protection Agency/CRIB approval and the Missouri Hazardous Waste Management Facility Permit.

B. Waste Quantities

This Permit is for the following three storage/treatment tank units, unless as provided elsewhere in this Permit. The hazardous waste storage tank identifications, functional names, total volumes, and daily throughputs are described below.

Table I – Storage/Treatment Tank Identification

Tank Number	Tank Name	Tank Volume (gallons)	Tank Throughput (gallons/day)
Tank 40A	<u>Storage/Blend Tank</u>	30,000	60,000
Tank 40B	<u>Storage/Blend Tank</u>	30,000	60,000
Tank 40C	<u>Storage/Blend Tank</u>	30,000	60,000

C. The Permittee shall meet the requirements of 10 CSR 25-7.264(2)(J)6 for blending of hazardous waste in tanks ~~prior to burning~~ and for physical treatment

of hazardous waste in tank systems. 10 CSR 25-7.264(2)(J)6 requires facilities which treat hazardous waste in tank systems to comply with 40 CFR Part 264 Subpart X and 10 CSR 25-7.264(2)(X).

D. Permitted Treatment

The Permittee shall perform only physical fuel blending in the identified tanks and ancillary equipment to those tanks as specified in Special Permit Condition II.A. and II.B. of this Permit. For the purposes of this Permit, physical fuel blending shall be defined as the mixing of compatible, non-reactive hazardous wastes in order to meet the criteria for hazardous waste fuels as described in the approved [P](#)permit application.

E. Assessment of Existing Tank System's Integrity [40 CFR 264.191]

The Permittee's Tank 40A, 40B, and 40C qualifies as an existing tank system. The Permittee has provided a written tank integrity assessment for the existing tank as required by 40 CFR 264.191(a). The Permittee shall keep the written assessment on file at the facility.

F. Design and Installation of new Tank Systems or Components [40 CFR 264.192]

1. Prior to operating any new tank systems at the facility, the Permittee shall obtain and submit to the Director a written assessment, reviewed and certified by an independent, qualified, professional engineer registered in the state of Missouri. This certification shall be in accordance with 40 CFR 270.11(d). This assessment shall include a final design set of certified construction drawings, and shall show that the foundation, structural supports, seams, connections, and pressure controls are adequately designed to ensure that the tank systems will not collapse, rupture, or fail. This assessment will be subject to regulatory review and approval process.
2. The Permittee shall ensure that proper handling procedures are adhered to in order to prevent damage to the new tank systems during installation. Prior to placing the new tank systems in use, an independent, qualified installation inspector or an independent, qualified, professional engineer registered in the state of Missouri, either of whom is trained and experienced in the proper installation of tank systems or components, shall inspect the systems for weld breaks, punctures, scrapes of protective

coatings, cracks, corrosion, and other indications of structural damage or other inadequate construction/installation. All deficiencies noted during the inspection shall be remedied before the tank systems are placed in use.

3. The Permittee shall test all new tanks and ancillary equipment for tightness prior to being placed in use. If a tank system is found not to be tight, all repairs necessary to remedy the leak(s) in the system shall be performed prior to the tank system being placed into use.
4. The Permittee shall ensure that all ancillary equipment is supported and protected against physical damage and excessive stress due to settlement, vibration, expansion, or contraction.
5. The Permittee shall obtain and keep on file at the facility, written statements by those persons required to certify the design of the tank systems and supervise the installation and repairs of the tank systems in accordance with the requirements of 40 CFR 264.192(b) through (f).

G. Containment and Detection of Releases [40 CFR 264.193]

1. In order to prevent the release of hazardous waste or hazardous constituents into the environment, the Permittee shall provide secondary containment that meets the requirements of 40 CFR 264.193 for all of its tank systems.
2. Secondary containment systems shall be:
 - a. Designed, installed, and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, groundwater, or surface water at any time during the use of the tank system; and
 - b. Capable of detecting and collecting releases and accumulated liquids until the collected material is removed.
3. To meet the requirements of 40 CFR 264.193(b), secondary containment systems shall be, at a minimum:
 - a. Constructed of, or lined with, materials that are compatible with the wastes to be placed in the tank systems and shall have

sufficient strength and thickness to prevent failure owing to pressure gradients (including static head and hydrologic forces), physical contact with the waste to which the materials are exposed, climatic conditions, and the stress of daily operation (including stresses from nearby traffic);

- b. Placed on a foundation or base capable of providing support to the secondary containment system, resistance to pressure gradients above and below the system and capable of preventing failure due to settlement, compression, or uplift;
- c. Provided with a leak detection system that is designed and operated so that it will detect the failure of either the primary or secondary containment structure, or the presence of any release of hazardous waste or accumulated liquid in the secondary containment system within 24 hours, or at the earliest practicable time if the Permittee is able to demonstrate to the Department's satisfaction that existing detection technologies or site conditions will not allow detection of a release within 24 hours and that a specified additional amount of time is necessary; and
- d. Sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. Spilled or leaked waste and accumulated precipitation shall be removed from the secondary containment system within 24 hours, or in as timely a manner as is possible to prevent harm to human health or the environment, if the Permittee is able to demonstrate to the Department's satisfaction that removal of the released waste or accumulated precipitation cannot be accomplished within 24 hours. If the collected material is a hazardous waste under 40 CFR Part 261, it shall be managed as a hazardous waste. If the collected material is discharged through a point source to waters of the state, it is subject to the requirements of Chapter 644, RSMo, as amended. If the collected material is discharged to a Publicly Owned Treatment Works, it is subject to the requirements of Chapter 644, RSMo and its implementing regulations. If the collected material is released to the environment, it may be subject to the reporting requirements of 40 CFR Part 302.

4. Secondary containment for tanks shall include one or more of the following devices: a liner (external to the hazardous waste storage tank); a vault; a double-walled tank; or an equivalent device, as approved by the Director. The design, construction, and operation of these devices shall satisfy the requirements of 40 CFR 264.193(e).
5. Ancillary equipment shall be provided with secondary containment (e.g., trench, jacketing, double-walled piping) that meets the requirements of 40 CFR 264.193(b) and (c), except for the following tank system components that are visually inspected for leaks on a daily basis: aboveground piping (exclusive of flanges, joints, valves, and other connections), welded flanges, welded joints, and welded connections, sealless or magnetic coupling pumps and sealless valves, and pressurized aboveground piping systems with automatic shut-off devices.

H. General Operating Requirements [40 CFR 264.194]

1. The Permittee shall not place hazardous wastes in a tank system if the hazardous wastes would cause the tank, its ancillary equipment, or the containment system to rupture, leak, corrode, or otherwise fail.
2. The Permittee shall use appropriate controls and practices to prevent spills and overflows from tank or containment systems. These shall include at a minimum:
 - a. Spill prevention controls such as, but not limited to, check valves and dry disconnect couplings; and
 - b. Overfill prevention controls such as, but not limited to, level sensing devices, high level alarms, automatic feed cutoffs, or a bypass to standby tanks, which limit tank working volumes.

I. Inspections [40 CFR 264.195]

The Permittee shall inspect all tanks and tank systems as specified in this Permit condition and the approved Permit application. At a minimum, an independent, qualified, professional engineer registered in the state of Missouri shall test all of the permitted tanks by ultrasonic methods for material thickness and perform a detailed visual inspection. These tests and inspections shall be made at regular intervals not to exceed 12 months between inspections.

1. The Permittee shall develop, and follow a schedule and written procedures for inspecting overfill controls. This schedule shall specify a minimum frequency of once each week for testing the electronic overfill control system, and this information shall be recorded in the operating record.
2. The Permittee shall inspect at least once each operating day:
 - a. Aboveground portions of the tank systems to detect corrosion or releases of waste;
 - b. Data gathered from monitoring and leak detection equipment to ensure that the tank system is being operated according to its design; and
 - c. The construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system, to detect erosion or signs of releases of hazardous waste.
3. The Permittee shall document these inspections in the operating record of the facility. Any deterioration or malfunction found shall be remedied in accordance with 40 CFR 264.15(c). Also, 40 CFR 302.6 may require the Permittee to notify the National Response Center in the event of a release.

J. Response to Leaks or Spills and Disposition of Leaking or Unfit-for-use Tanks Systems [40 CFR 264.196 and 10 CSR 25-7.264(2)(J)4.]

A tank system or secondary containment system from which there has been a leak or spill, or which is unfit for use, shall be removed from service immediately, and the Permittee shall satisfy the following requirements:

1. The Permittee shall immediately stop the flow of hazardous waste into the tank or secondary containment system and inspect the system to determine the cause of the release.
2. Removal of waste from tank systems or secondary containment systems:
 - a. If the release was from the tank system, the Permittee shall, within 24 hours after detection of the leak, remove as much of the waste

as is necessary to prevent further release of hazardous waste into the environment and to allow inspection and repair of the tank system to be performed.

- b. If the material released was to a secondary containment system, the Permittee shall remove all released materials from the secondary containment system within 24 hours.

3. Containment of Releases to the Environment

The Permittee shall immediately conduct an inspection of the release and, based upon that inspection, shall:

- a. Prevent further migration of the leak or spill to soils or surface water; and
- b. Remove, and properly dispose of, any contaminated soil and/or surface water. Those tank systems which are intended to be closed without removing the hazardous waste shall meet the requirements of 10 CSR 25-7.264(2)(N)1.A. and 40 CFR Part 264 Subpart N, as incorporated in 10 CSR 25-7.264. If the tank system cannot meet the requirements and contamination exists, the Permittee shall clean up contaminated residues and hazardous constituents to the greatest extent practical during closure.

4. Notification and Reports

- a. Any release to the environment, except a release that is exempted under 40 CFR 264.196(d)(2), shall be reported to the Director within 24 hours of its detection. If the release has been reported pursuant to 40 CFR Part 302, that report will satisfy this requirement.
- b. A leak or spill of hazardous waste is exempted from notification and reporting requirements if it is less than or equal to a quantity of one pound and is immediately contained and cleaned up.
- c. Within 30 days of detection of a release to the environment, the Permittee shall submit a report to the Director which details the likely route of migration of the release, characteristics of the

surrounding soil (soil composition, geology, hydrogeology, climate), the results of any monitoring or sampling conducted in connection with the release (if available; when these results are not available within 30 days, these results shall be submitted as soon as they become available), proximity to downgradient drinking water, surface water, and populated areas, and descriptions of response actions taken or planned.

5. The tank system shall be closed in accordance with Special Permit Condition II.M., unless the Permittee satisfies the following requirements:
 - a. If the cause of the release was a spill that has not damaged the integrity of the system, the Permittee may return the system to service as soon as the released waste is removed and repairs, if necessary, are made.
 - b. If the cause of the release was a leak from the primary tank system into the secondary containment system, the system shall be repaired prior to returning the tank system to service.
 - c. If the source of the release was a leak into the environment from a tank system component without secondary containment, the Permittee shall comply with the provisions of 40 CFR 264.196(e)(4).
6. The Permittee shall provide certification of major repairs to tank systems from which there has been a leak or spill, or which was unfit for use, in accordance with 40 CFR 264.196(f)

K. Special Requirements for Ignitable or Reactive Waste [40 CFR 264.198]

1. The Permittee shall not place ignitable or reactive waste in tank systems, unless:
 - a. The waste is treated, rendered, or mixed before or immediately after placement in the tank system so that the resulting waste, mixture, or dissolved material no longer meets the definition of ignitable or reactive waste in 40 CFR Part 261, and the Permittee complies with 40 CFR 264.17(b); or

- b. The waste is stored or treated in such a way that it is protected from any material or conditions that may cause the waste to ignite or react; or
 - c. The tank system is used solely for emergencies.
 2. The Permittee shall comply with the requirements for the maintenance of protective distances between tanks storing ignitable or reactive wastes and any public ways, streets, alleys, or any adjoining property that can be built upon as required in Tables 2-1 through 2-6 of the [National Fire Protection Association's NFPA's](#) "Flammable and Combustible Liquids Code," (1977 or 1981, incorporated by reference in 40 CFR 260.11).
- L. Special Requirements for Incompatible Wastes [40 CFR 264.199]
 1. The Permittee shall not place incompatible wastes or materials in the same tank system unless such action is in compliance with the requirements of 40 CFR 264.17(b).
 2. The Permittee shall not place hazardous waste in a tank system that has not been decontaminated and that previously held an incompatible waste or material, unless the Permittee complies with 40 CFR 264.17(b).
- M. Closure and Post-Closure Care [40 CFR 264.197 and 10 CSR 25-7.264(2)(J)5.]

At closure of a tank system, the Permittee shall remove or decontaminate all hazardous waste and hazardous residues from the tank systems, including, but not limited to: contaminated tank system components (liners, etc.), contaminated soils, and contaminated equipment and structures, and shall close in accordance with the Closure Plan in the approved ~~P~~ permit application. If the Permittee is unable to close according to the Closure Plan, then the Permittee must submit a permit modification to the Department in accordance with 40 CFR 270.42. The Closure Plan, closure activities, cost estimates for closure, and financial responsibility for tank systems shall meet all of the requirements specified in 40 CFR Part 264 Subparts G and H, 10 CSR 25-7.264(2)(G) and 10 CSR 25-7.264(2)(H).

III. Miscellaneous Treatment [40 CFR Part 264 Subpart X]

The Permittee shall meet the standards for miscellaneous physical and chemical treatment units in 40 CFR Part 264 Subpart X. The regulated miscellaneous treatment units identified in this Permit are the two loose pack machines.

A. Waste Identification [40 CFR 264.601]

The Permittee may treat only the hazardous wastes identified in the approved Part A ~~P~~ permit application subject to the terms of this Permit.

B. Operating Requirements [40 CFR 264.601]

1. The Permittee shall use only the mechanical treatment devices that are specified in the application for treatment of hazardous waste.
2. The Permittee shall operate all miscellaneous treatment units only in accordance with the manufacturer's applicable operating manuals and as described in the application.
3. At all times the loose pack units are operating, the air emissions control equipment will be operating and fully functional.

C. Inspection Schedules and Procedures [40 CFR 264.602]

1. The Permittee shall inspect the treatment systems in accordance with the Inspection Schedule specified in Appendix A of the permit application.
2. The Permittee shall inspect the vapor recovery systems to ensure that solvent vapor breakthrough has not occurred through the granular activated carbon canisters.
3. The Permittee shall document compliance with Item C.(2) of this section and record and maintain the information in the operating record for the facility.

- D. Special Requirements for Incompatible Wastes [40 CFR 264.601 and 40 CFR 264.17]

The Permittee shall not place incompatible wastes or incompatible wastes and materials, in the miscellaneous treatment unit, unless such action is in compliance with 40 CFR 264.17(b) and 40 CFR 264.17(c).

- E. Closure [40 CFR 264.601 and 10 CSR 25-7.264(2)(G)]

At closure, the Permittee shall remove all hazardous waste and hazardous waste residues from all equipment and containment systems associated with the miscellaneous treatment process and close in accordance with the submitted Closure Plan for these units. If the Permittee is unable to close according to the closure plan, then the Permittee must submit a permit modification to the Department in accordance with 40 CFR 270.42.

IV. Lab Pack Depack Operation

- A. The Permittee must adhere to the proposed design and construction standards and the operation and maintenance as detailed in the Lab Packing Procedure section in Appendix 2-E contained within the permit application.
- B. In addition to the procedures outlined in the application, the Permittee must also comply with the following:
1. Upon receipt, all lab pack containers that are not to be processed within 24 hours will be stored in the designated storage area relative to the proper chemical hazard classification;
 2. Only one lab pack container may be placed in the organic consolidation area for packing/depacking at any given time;
 3. Only two lab pack containers may be placed in the inorganic consolidation area for packing/depacking at any given time;
 4. The designated consolidation areas must be clearly delineated with tape or painted lines on the floor of the facility;

5. No lab pack container may remain in the designated consolidation area longer than 24 hours. The designated consolidation area is not considered to be a permitted storage area;
6. When the accumulation container is full, it must be removed from the designated consolidation area; and
7. The air emissions control equipment will be operating and fully functional when the lab pack containers are being packed or depacked.

V. Railroad Car Operations [10 CSR 25-7.264(3)]

The Permittee shall comply with the applicable requirements of 10 CSR 25-7.264(3) and the Railcar Management Plan as submitted with the Part B ~~P~~ permit application.

VI. Waste Minimization

Pursuant to 40 CFR 264.73(b)(9), the facility operating record shall contain a certification by the Permittee, made no less often than annually, that the Permittee has a program in place to reduce the volume and toxicity of hazardous waste that he generates 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.

VII. Seismic Evaluation Requirements [10 CSR 25-7.270(2)(B)4.]

The Permittee has demonstrated compliance with the seismic requirements as certified by an independent professional engineer registered in the state of Missouri. The Permittee shall maintain the seismic evaluation in the operating record.

VIII. Air Emission Standards for Tanks, ~~Surface Impoundments,~~ and Containers [10 CSR 25-7.264(1)]

- A. The Permittee shall comply with the applicable requirements of 40 CFR Part 264 Subpart BB, as amended December 8, 1997, for all units identified in the approved ~~P~~ permit application.
- B. The Permittee shall comply with the applicable requirements of 40 CFR Part 264 Subpart CC, as amended December 8, 1997, for all units identified in Table II.

Table II – Units Subject to Subpart CC Standards

Unit Identification	Unit Type	Subpart CC Control Option
Tank 40A	30,000 gallon tank	40 CFR 264.1084
Tank 40B	30,000 gallon tank	40 CFR 264.1084
Tank 40C	30,000 gallon tank	40 CFR 264.1084
Roll-off Storage	Container Storage	40 CFR 264.1086
1 st Floor Room A	Container Storage	40 CFR 264.1086
1 st Floor Room B	Container Storage	40 CFR 264.1086
1st Floor Room C	Container Storage	40 CFR 264.1086
1 st Floor Drum Storage Warehouse	Container Storage	40 CFR 264.1086
2 nd Floor Oxidizer Container Storage	Container Storage	40 CFR 264.1086
2 nd Floor Caustic Container Storage	Container Storage	40 CFR 264.1086
2 nd Floor Inorganic and Organic Acid Container Storage	Container Storage	40 CFR 264.1086
3 rd Floor	Container Storage	40 CFR 264.1086
4 th Floor	Container Storage	40 CFR 264.1086

IX. 100-Year Floodplain Requirements [40 CFR 264.18(b)]

- A. The Permittee has submitted information, as required in 40 CFR 270.14(b)(iii), which identifies the facility as being located in the 100-year floodplain. As such, the Permittee must design, construct, operate, and maintain the facility in such a manner so as to prevent the washout of any hazardous waste by a 100-year flood, as required by 40 CFR 264.18(b).
- B. 40 CFR 270.14(b)(11)(iv) gives facilities located in the 100-year floodplain two options:
1. Demonstration that the engineering design of the facility is adequate to withstand the forces of a 100-year flood event; or

2. Demonstration that hazardous waste can be removed in a safe and timely manner to a facility eligible to receive such waste in accordance with hazardous waste laws and regulations.

The Permittee has chosen to comply with Special Condition ~~VIII~~.B.2. To fully satisfy this requirement, the design of the facility regarding footings and foundations for tank systems and container storage areas, as well as other aspects of facility design, must be maintained as described in the approved ~~P~~ permit application.

DRAFT

CORRECTIVE ACTION CONDITIONS

I. Identification of Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs)

- A. The ~~United States~~ U.S. Environmental Protection Agency (~~USEPA~~) evaluated potential releases of hazardous waste and hazardous constituents via a Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA) completed in September 1989 by Jacobs Engineering Group Incorporated. The RFA identified 14 different SWMUs because of the wide variety of wastes handled by the facility. The 14 identified SWMUs were Drum Storage and Staging Areas (Basement, First, Second, Third, and Fourth Floors), Washex Still Area, DCI Still Area, Fuel Blending Area, Courtyard Area, Neutralization Area, Tank Farm, Wastewater Treatment Unit, East Loading Dock Area, and Stationary Rail Tank Car. A 15th SWMU, the Tank Truck Parking Lot, was also designated based on past waste management practices. Figure 1 shows the locations of the SWMUs. The RFA findings indicated that two of the 15 SWMUs required further investigation and possible corrective action. These included the Tank Truck Parking Lot and Stationary Rail Tank Car.

Tank Truck Parking Lot SWMU: Bulk tank trailers ~~are~~ were parked in an area directly east of the main building at the northeast corner of Eighth and Mulberry Streets. No curbing or containment structures surround the parking lot and the lot has a gravel base and surface. Two known spills have occurred on the parking lot during its use by ~~Philip (Solvent Recovery)~~ Corporation. The first occurred on May 11, 1985, when an elbow plate bolt on the bottom side of a 6000 gallon tanker penetrated the lining of the tank, allowing solvent to leak from the flange seam. The incident resulted in 2000 to 2500 gallons of the solvent (consisting of paint thinner, mineral spirits, and acetone) being spilled. All but 200 to 250 gallons of solvent were reportedly recovered along with contaminated soil for off-site disposal. The second spill occurred on January 29, 1988, when a tanker containing 6800 gallons of a D001 flammable liquid tipped onto its nose in the parking lot. The contents of the tank began spilling through the cap over the front compartment. Approximately 200 to 300 gallons of materials were spilled before the cap was replaced. A large amount of the waste liquid and contaminated soil was removed for off-site disposal.

The Tank Truck Parking Lot SWMU is an approximately 4000 square feet area located in the northern portion of Solvent Recovery Corporation's property on the northeast corner of Eighth and Mulberry Streets. The area has a gravel surface, is fenced, and used for vehicle and equipment parking.

Stationary Rail Tank Car SWMU: The tank ~~designated as (T-12)~~ during the RFA consisted of a ~~U.S. Department of Transportation DOT~~ 103 expanded dome, stationary rail car with a capacity of 10,000 gallons. The tank ~~is-was~~ a disk head-end, carbon steel, riveted construction tank on the exterior north end of the building. Support ~~is-was~~ provided by two saddles at each end and one in the middle. Containment ~~is-was~~ provided by a concrete block wall (four feet high) on three sides and the buildings exterior wall on the remaining side. The containment structure ~~is-was~~ designed to receive and contain spills from other floors in the building. ~~Since t~~There ~~is-was~~ no roof over the containment structure, ~~and~~ the unit collect~~ed~~ precipitation. Accumulated precipitation ~~is-was~~ analyzed for hazardous constituents and, if none ~~are-were~~ detected, the water ~~is-was~~ discharged to the sanitary sewer. If contamination ~~is-was~~ detected in the accumulated water, the water ~~is-was~~ processed through a wastewater treatment system in the basement before discharge to the sanitary sewer.

Reidel Environmental removed Tank T-12 in 1982 prior to Burlington Environmental's purchase of the facility. The containment structure was removed after the 2001 fire. The building adjacent to the containment was demolished after the fire. The building pad, which is approximately 3 feet above ground surface remains. The SWMU is an approximately 6900 square feet area located north and west of the former building pad. Over half of the area of the SWMU is beneath the current drum storage area. Approximately 600 square feet of the SWMU has a gravel surface.

- B. While a visual inspection conducted during the RFA did not detect any signs to indicate the occurrence of a past release in the Courtyard Area SWMU, contamination was later discovered in the area. In a RCRA Facility Investigation (RFI) Quarterly Report, dated July 21, 1992, the facility notified ~~USEPA~~, Region VII, that while conducting facility modifications in the Courtyard Area, contaminated soil was discovered under the concrete floor. Soil samples collected from under the former location of Tanks C1, C2, and C3 indicated the presence of toluene, xylene, and ethyl acetate. Approximately 40 to 50 cubic yards of contaminated and potentially contaminated soil was removed and

disposed of off-site. The excavation was backfilled with compacted clay and a new reinforced concrete floor was installed. The Courtyard Area subsequently became the third SWMU requiring further corrective action.

Courtyard Area SWMU: The Courtyard Area ~~is was an~~ open space on the ~~west north~~ side (~~rear half~~) of the main storage building. Although open on the top, the entire area ~~is was~~ encompassed by ~~a concrete curbing 30 inches high buildings on the south, east, north, and west sides~~. The area is underlain by ~~an~~ 9.5-inch thick concrete pad. A concrete curbing 30 inches high provided secondary containment for the above ground storage tanks in the Courtyard. The curbing was removed after the 2001 fire. All precipitation within the ~~confinement containment~~ structure ~~is was~~ collected in a concrete sump and ~~is~~ analyzed prior to discharge to the sanitary sewer. This water ~~is was~~ handled in the same manner as precipitation discharged from the Stationary Rail Tank Car SWMU.

The Courtyard SWMU is a 2800 square feet area located beneath the former containment pad, drum storage area, drum storage building, and main building of the facility. The entire SWMU is covered with concrete.

- C. On February 1, 2001, an 11,000-gallon aboveground storage tank used for blending fuel (~~Super Blender~~) exploded. The tank (designated T-16) was located within the boundaries of the ~~e~~Courtyard SWMU. A third party investigator concluded that the blended fuel in T-16 contained an aluminum paste that reacted with minor amounts of water causing the generation of hydrogen gas that subsequently led to the explosion and fire. The alternative fuel in ~~t~~Tank T-16 had a distinctive dark gray color, investigation of surrounding properties found splattered material mainly in a north, northeast, and east direction. The four-story portion of the 716 building and the firewall of the process building apparently shielded the blast and kept fuel from splattering in those directions. Media impacted by splattered fuel included soil, porous brick and concrete, asphalt pavement, coated rubber roofing membrane, asphalt roofing material, rail ballast material, steel rails and creosote treated telephone poles, and railroad ties. Soil was contaminated on site with splattered fuel, as well as on Landmark West Bottoms, ~~R~~railroad, and Department of Corrections' properties. The 700 Mulberry Street building, and the former railroad yard office as well as the street and two telephone poles on the Landmark West property were also splattered with fuel.

Most of the splattered fuel was cleaned up during explosion response activities. Approximately 275,000 gallons of water from fire fighting activities, contained

storm water, and water from a pipe rupture in the adjacent drum storage building came in contact with the hazardous materials. It could not be determined how much contaminated water infiltrated into the soil on the north side of the Courtyard and Stationary Rail Tank Car SWMUs. Releases associated with the [Super Blender](#) explosion did not result in the redesignation of a new SWMU/AOC and are being addressed as part of the activities associated with the Courtyard Area SWMU.

[The tanks formerly located in the courtyard were destroyed or removed after the explosion and fire. The building on the east, north, and west side of the courtyard were destroyed and demolished. The Courtyard SWMU is now a concrete pad approximately three feet above existing grade and the grade of the pad for the drum storage area.](#)

- D. In the event any new information becomes available indicating that human health or the environment may be adversely impacted, the Permittee may be required to re-evaluate any report previously approved by the [USEPA](#) to determine the need for further corrective action for the aforementioned SWMUs/AOCs and any newly-identified SWMUs/AOCs and/or any release(s) from previously-identified SWMUs/AOCs, including off-site release(s), as specified in Corrective Action Conditions II. and III.

II. Notification Requirements for and Assessment of Newly-Identified SWMU(s) and Areas of Concern (AOCs)

- A. The Permittee shall notify the Department and [USEPA](#) in writing of any SWMU(s) or AOC(s) identified subsequent to the issuance of this Permit no later than fifteen (15) calendar days after discovery, or after discovery should have been made.
- B. The Department may require a SWMU/AOC Assessment Work Plan for conducting an investigation of the newly-identified SWMU(s) or AOC(s). Within 30 calendar days after receipt of the Department's request for a SWMU/AOC Assessment Work Plan, the Permittee shall submit a SWMU/AOC Assessment Work Plan which shall include a discussion of past waste management practices at the unit, as well as a sampling and analysis program for groundwater, land, surface and subsurface strata, surface water and/or air, as necessary to determine whether a release of hazardous waste, including hazardous constituents from such unit(s) has occurred, or is occurring. The sampling and analysis program shall be capable of yielding representative samples and shall include monitoring

parameters sufficient to assess the release of hazardous waste and/or hazardous constituents from the newly-identified SWMU(s)/AOC(s) to the environment. The SWMU/AOC Assessment Work Plan shall specify any data to be collected to provide for a complete SWMU/AOC Assessment Report, as specified below. The SWMU/AOC Assessment Work Plan shall contain a schedule for conducting the work specified therein.

- C. The SWMU/AOC Assessment Work Plan will be reviewed in accordance with the procedures set forth in Corrective Action Condition XV. Review and Approval Procedures. The Permittee shall implement the plan according to the schedule contained therein, after it is approved by the Department.
- D. The Permittee shall submit a newly-identified SWMU/AOC Assessment Report to the Department and USEPA according to the schedule specified in the approved SWMU/AOC Assessment Work Plan. The SWMU/AOC Assessment Report shall present and discuss the information obtained from implementation of the approved SWMU/AOC Assessment Work Plan. At a minimum, the SWMU/AOC Assessment Report shall provide the following information for each newly-identified SWMU/AOC:
1. The location of the newly-identified SWMU/AOC in relation to other SWMU(s)/AOC(s);
 2. The type and function of the unit;
 3. The general dimensions, capacities, and structural description of the unit;
 4. The period during which the unit was operated;
 5. The physical and chemical properties of all wastes that have been or are being managed at the SWMU/AOC, to the extent available;
 6. The results of any sampling and analysis conducted;
 7. Past and present operating practices;
 8. Previous uses of area occupied by the SWMU/AOC;
 9. Amounts of waste handled; and

10. Drainage areas and/or drainage patterns near the SWMU(s)/AOC(s).
- E. The SWMU/AOC Assessment Report will be reviewed in accordance with the procedures set forth in Corrective Action Condition XV. Review and Approval Procedures. Based on the findings of this report, the Department will determine the need for further investigations, including stabilization, a RFI and/or a [Corrective Measures Study \(CMS\)](#), at specific unit(s) identified in the SWMU/AOC Assessment Report.
- F. If the Department determines that additional investigations are needed, the Department may require the Permittee to prepare and submit for approval a work plan for such investigations. This work plan for additional investigations shall contain a schedule for conducting the work specified therein and will be reviewed and approved in accordance with the procedures set forth in the Review and Approval Procedures, Corrective Action Condition XV. The Permittee shall implement the approved plan in accordance with the schedule contained in the plan.

III. Notification Requirements for and Assessment of Newly-Identified Releases from Previously-Identified SWMUs and AOCs

- A. The Permittee shall notify the Department and ~~USEPA~~, in writing, of any newly-identified release(s) of hazardous waste, including hazardous constituents, from previously-identified SWMUs and AOCs discovered during the course of groundwater monitoring, field investigation, environmental auditing, or other activities undertaken after issuance of this Permit, no later than 15 days after discovery or after discovery should have been made.
- B. The Department may require a Newly-Identified Release Work Plan for conducting an investigation of the newly-identified release(s). Within 30 days after receipt of notice that the Department requires a Newly-Identified Release Work Plan, the Permittee shall submit a Newly-Identified Release Work Plan which shall include a discussion of the waste/chemical management practices related to the release; a sampling and analysis program for groundwater, land surface and subsurface strata, surface water or air, as necessary to determine whether the release poses a threat to human health or the environment. The sampling and analysis program shall be capable of yielding representative samples and shall include monitoring parameters sufficient to assess the release of hazardous waste and/or hazardous constituents to the environment. The

Newly-Identified Release Work Plan shall contain a schedule for conducting the work contained therein and shall specify any data to be collected to provide for a complete Newly-Identified Release Report, as specified below.

- C. The Newly-Identified Release Work Plan will be reviewed and approved in accordance with the procedures set forth in the Review and Approval Procedures, Corrective Action Condition XV. Upon approval thereof by the Department, the Permittee shall implement the approved plan in accordance with the schedule contained in the plan.
- D. The Permittee shall submit a Newly-Identified Release Report to the Department and the **USEPA** according to the schedule specified in the approved Newly-Identified Release Work Plan. The Newly-Identified Release Report shall present and discuss the information obtained during implementation of the approved Newly-Identified Release Work Plan. At a minimum, the report shall provide the following information for each newly-identified release:
1. The location of the newly-identified release in relation to any other SWMU(s)/AOC(s);
 2. The general dimensions of the release;
 3. The period during which the release is suspected to have occurred;
 4. The physical and chemical properties of all wastes that comprise the release;
 5. The results of any sampling and analyses conducted;
 6. Past and present operating practices near and at the location of the release;
 7. Previous uses of the area(s) occupied near and at the location of the release;
 8. Amounts of waste handled near and at the location of the release; and
 9. Drainage areas and/or discharge patterns near and at the location of the release.

- E. The Newly-Identified Release Report will be reviewed in accordance with the procedures set forth in Corrective Action Condition XV. Review and Approval Procedures. Based on the findings of the report and any other available information, the Department will determine the need for further investigation, including stabilization, an RFI, and/or a CMS.

IV. Interim/Stabilization Measures (ISMS)

- A. If the Permittee becomes aware of a situation that may require ~~interim/stabilization measures (ISMS)~~S to protect human health and the environment, the Permittee shall notify the Department and the ~~USEPA~~ within 24 hours of the time the Permittee becomes aware, or should have become aware of the situation.
- B. If during the course of any activities initiated under this Permit, the Permittee or the Department determines that a release or potential release of hazardous waste, including hazardous constituents, poses a threat to human health or the environment, the Department may require ISMs to slow or stop the further spread of contamination until final corrective action measures can be implemented. The Department will determine the specific action(s) that shall be taken to implement ISMs, including potential permit modifications, and the schedule for implementing the stabilization requirements, and will inform the Permittee of decisions regarding the action(s) in writing. This requirement shall not preclude the Permittee from responding to an emergency situation without direction of the Department.
- C. If, at any time, the Permittee determines or should have known that the stabilization program is not effectively limiting or stopping the further spread of contamination, the Permittee shall notify the Department and the ~~USEPA~~ in writing no later than ten days after such a determination is made. The Department may require that the stabilization program be revised to make it effective in limiting or stopping the spread of contamination, or that final corrective action measures are required to remediate the contaminated media.
- D. In cases where releases or potential releases present minimal human health and environmental exposure concerns and/or the proposed remedial solution is relatively uncomplicated, the Permittee may propose ISMs for review and approval by the Department according to the procedures set forth in the Review and Approval Procedures. Corrective Action Condition XV. These ISMs shall be consistent with and may supplement and/or satisfy the requirements for a final

remedy(s) in specific areas. Proposed ISMs which are determined by the Department to be significant (e.g., those which are anticipated to comprise a substantial portion of the final remedy) may be subject to public review and comment prior to final approval by the Department.

- E. On April 4, 2003, the ~~USEPA~~ and the Department approved the “Soil Vapor Extraction – Interim Measures Work Plan” for source removal in the Courtyard, Stationary Rail Car, and Tank Truck Parking Lot Solid Waste Management Units. This Interim Measure shall be operated under the terms provided in the “Soil Vapor Extraction – Interim Measure Work Plan” dated February 28, 2003, and under conditions provided in the April 4, 2003, approval letter.

V. RCRA Facility Investigation (RFI) Work Plan

- A. To date, RFI Work Plans have been submitted in two phases at the site. The “Draft Phase I RCRA Facility Investigation Report for [Solvent Recovery Corporation \(Formerly Burlington Environmental Inc. \(Formerly Solvent Recovery Corporation\)\)](#) Kansas City, Missouri, ~~USEPA~~ ID MOD000610766” was performed by Riedel Environmental Services was dated February 16, 1994. Phase I activities conducted by Riedel included drilling and sampling 33 soil borings (approximately 15 feet in depth) in 1993, groundwater monitoring wells MW-01, MW-02, and MW-03 were constructed prior to 1993, MW-01 was destroyed sometime prior to 1993, and groundwater monitoring wells MW-04 and MW-05 were constructed in 1993.

The RFI Revised Phase II Work Plan for the Kansas City ~~F~~facility was completed by Philip Environmental on February 13, 1997. The ~~USEPA~~ approved the RFI Revised Work Plan on February 26, 1997. Five addenda were prepared by Philip Environmental to supplement the RFI Revised Phase II Work Plan to address specific issues. The supplements were Addendum 1 Surface Geophysical Survey dated June 20, 1997, Addendum 2 Groundwater and Surface Water Level Measurement Procedures dated June 20, 1997, Addendum 3 Soil Borings for Determination of Depth to Bedrock dated November 3, 1997, Addendum 4 Groundwater Monitoring Well Drilling and Installation dated May 6, 1998, and Addendum 5 Off-Site Subsurface Investigation dated November 12, 1999. Each addendum was followed by an information report of findings following site activities, but data collected during these activities was intended to be part of and approved in the final RFI Report.

- B. If, in addition to the RFI work that has already been completed, the Department determines that further investigations are needed for newly-identified SWMUs/AOCs and/or new releases from previously-identified SWMUs/AOCs pursuant to Corrective Action Conditions II. or III., the Permittee shall be notified of this determination in writing. The Department may require the Permittee to prepare and submit an RFI Work Plan for such investigations. If an RFI Work Plan is required, the Permittee shall submit it within [sixty \(60\)](#) days of receipt of the notice. The RFI Work Plan shall contain provisions which are designed to meet the following objectives:
1. Full characterization of the nature, vertical and horizontal extent, and rate of migration of releases of hazardous waste and/or hazardous constituents from a newly-identified SWMU/AOC or groups of SWMUs/AOCs or newly-identified release(s) at the facility and the actual or potential receptors of such releases; and
 2. Collection of any other pertinent data which may be utilized to substantiate future corrective action decisions.
- C. The content of the RFI Work Plan shall be appropriate for site-specific conditions and shall be consistent with and address all applicable investigation elements described in the most recent version of the RCRA Facility Investigation Guidance; EPA 530/ SW-89-031. At a minimum, the RFI Work Plan shall detail all proposed activities and procedures to be conducted at the facility, a description of current conditions, the schedule for implementing and completing such investigations, and for submission of reports (including the final RFI Report), the qualifications of personnel performing or directing the investigations, including contractor personnel, and the overall management of the RFI.
- D. The RFI Work Plan shall include a Quality Assurance Project Plan-~~(QAPP)~~. The ~~QAPP~~ [Quality Assurance Project Plan](#) shall present the policies, organization, objectives, functional activities, and specific quality assurance and quality control activities designed to achieve the data quality goals of the RFI. It shall include the RFI objectives, sampling procedures, analytical methods, field and laboratory quality control samples, chain-of-custody procedures and data review, validation and reporting procedures.
- E. The Permittee shall prepare and maintain a health and safety plan during the project that assures the RFI activities are conducted in a manner that is protective of human health and the environment.

- F. Due to the complexity of defining the extent of contamination, the Permittee may be required to use a phased approach which requires the submittal of supplemental RFI Work Plans.
- G. The RFI Work Plan(s) will be reviewed in accordance with the procedures set forth in the Review and Approval Procedures, Corrective Action Condition XV. The Permittee shall complete implementation in accordance with the schedules contained in the plan(s).

VI. RCRA Facility Investigation (RFI) Report

- A. A RFI Final Report dated January 31, 2002, has been submitted by [SRC Solvent Recovery Corporation](#). This RFI Report is intended to expedite final remedy implementation at the site. The RFI Report substantially addressed the RFI objectives contained in this Permit and contained provisions acknowledging that any remaining data gaps would be addressed in a separate report. Final approval of the RFI Report is linked to review and approval of the Draft Data Gap Report which was submitted to the Department and [USEPA](#) by the Permittee on April 9, 2004.
- B. The Permittee shall submit any additional RFI Report required by this Permit to the Department and [USEPA](#) in accordance with the schedule contained in the corresponding approved RFI Work Plan. The RFI Report shall present all information gathered under the approved RFI Work Plan along with a brief facility description and map showing the property boundary and all SWMUs/AOCs. The information presented in the RFI Report shall be presented in a form that is consistent with Section 5 of the most recent version of the [USEPA](#) publication entitled, RCRA Facility Investigation Guidance; EPA 530/SW-89-031.
- C. The RFI Report shall provide an interpretation of the RFI information gathered, supported with adequate documentation, to enable the Department to determine whether additional stabilization and/or corrective measures may be necessary. The RFI Report shall describe the procedures, methods, and results of all investigations of SWMUs/AOCs and associated releases, including, but not limited to, the following, as appropriate:
 - 1. Characterization of the nature, concentration(s), horizontal and vertical extent, and direction/rate of movement of releases from SWMUs/AOCs at the facility;

2. Characterization of the environmental setting of the facility, including:
 - a. Hydrogeological conditions;
 - b. Climatological conditions;
 - c. Soil and bedrock characteristics;
 - d. Surface water and sediment quality; and
 - e. Air quality and meteorological conditions.
 3. Characterization of SWMUs/AOCs from which releases have been or may be occurring, including unit and waste characteristics;
 4. Descriptions of human and environmental receptors and associated risks to the receptors, which are, may have been, or based on site-specific circumstances, could be exposed to release(s) from SWMUs/AOCs;
 5. Assessment of potential risks to the human and environmental receptors exposed to release(s) from SWMUs/AOCs;
 6. Extrapolations of future contaminant movement including description of contaminant fate and transport mechanisms and pathways for human and environmental exposure;
 7. Laboratory, bench-scale, pilot-scale and/or appropriate tests or studies to determine the feasibility or effectiveness of treatment technologies or other technologies that may be appropriate in implementing remedies at the facility;
 8. Statistical analyses to aid in the interpretation of data; [and](#)
 9. Results of any stabilization measures previously implemented.
- D. The RFI Report will be reviewed in accordance with the procedures set forth in Review and Approval Procedures, Corrective Action Condition XV. After review of the RFI Report, if the Department determines that the objectives of the RFI have not been met, the Department may require additional investigation. Upon approval of the Data Gap Report by the Department, the Department shall begin

review of the Permittee's CMS Work Plan (submitted on September 30, 2002) pursuant to Corrective Action Condition VIII. It is anticipated that the CMS Work Plan will need to be updated to include information gained from the Data Gap Report and Soil Vapor Extraction – Interim Measure Measures Work Plan dated February 28, 2003, and approved by the USEPA and the Department on April 4, 2003.

VII. Interim Groundwater Monitoring Plan

- A. A draft Interim Groundwater Monitoring Plan dated December 15, 2000, was submitted to the Department and USEPA, ~~for~~and the Department's ~~for~~review. A revised Interim Groundwater Monitoring Plan is included in the Corrective Measures Study Work Plan submitted September 30, 2002. Continued groundwater monitoring is necessary to ensure adequate delineation of the horizontal and vertical extent of groundwater contamination. Further revision of the Interim Groundwater Monitoring Plan may be necessary for any newly-identified SWMUs, AOCs, or releases from previously identified SWMUs/AOCs.
- B. The Interim Groundwater Monitoring Plan will be reviewed and approved in conjunction with the review and approval of the CMS Work Plan with the procedures set forth in Review and Approval Procedures, Corrective Action Condition XV. The Permittee shall initiate implementation of said plan within 90 days of Departmental approval and shall continue groundwater monitoring in accordance with the approved Interim Groundwater Monitoring Plan until approval of a final remedy.
- C. Upon approval of the Permittee's Interim Groundwater Monitoring Plan, groundwater-related information and analysis results collected pursuant to the approved interim groundwater monitoring plan shall be submitted as part of the Semi-Annual Progress Reports required by Corrective Action Permit Condition XIII. Semi-Annual Progress reports to which groundwater analysis results are attached shall include a summary and analysis of the groundwater monitoring results for the reporting period, groundwater potentiometric surface maps, groundwater quality trend graphs, and a map delineating the boundaries of the contaminant plume, as appropriate. The Semi-Annual Progress Reports shall identify and discuss any obvious trends, increasing levels of contamination and/or any abnormalities in the data.

VIII. Corrective Measures Study (CMS) Work Plan

- A. The Permittee submitted a CMS Work Plan to the Department and USEPA on September 30, 2002. This plan is expected to be revised to include information gained from the RFI Data Gap Report and Soil Vapor Extraction – Interim Measures Work Plan.
- B. If, in the future, the Department determines that a release(s) of hazardous waste and/or hazardous constituents from newly- and/or previously-identified SWMUs/AOCs pursuant to Corrective Action Special Permit Conditions II. or III., may present a threat to human health or the environment, the Department may require the Permittee to prepare and submit a CMS Work Plan and will notify the Permittee in writing of this decision. This notice will identify the hazardous constituent(s) of concern and may specify remedial alternatives to be evaluated by the Permittee during the CMS.
- C. The Department may require the Permittee to identify and evaluate, as part of any CMS, one or more specific potential remedies for removal, containment, and treatment of hazardous waste, including hazardous constituents in contaminated media based on the objectives established for the corrective action. These remedies may include a specific technology or combination of technologies that, in the Department's judgment, may be capable of achieving standards for protection of human health and the environment.
- D. In addition to the CMS Work Plan of September 30, 2002, the Permittee shall submit any future CMS Work Plan to the Department and USEPA within 45 days of notification of the requirement to conduct a CMS. The CMS Work Plan shall be consistent with guidance contained in the USEPA document entitled: RCRA Corrective Action Plan (Final), May 1994, OSWER Directive 9902.3-2A. At a minimum, any CMS Work Plan required by this Permit shall include an implementation schedule and shall provide the following information, as appropriate:
1. A description of the general approach to investigating and evaluating potential remedies;
 2. A definition of the specific objectives of the study;
 3. A description of the remedies which will be studied;

4. A description of those potential remedies which were preliminarily considered, but were dropped from further consideration, including the rationale for elimination;
 5. The specific plans for evaluating remedies to ensure compliance with remedy standards;
 6. The schedules for conducting the study and submitting a CMS Report;
 7. The proposed format for the presentation of information; and
 8. Laboratory, bench-scale, pilot-scale, and/or appropriate tests or studies to determine the feasibility or effectiveness of treatment technologies or other technologies that may be appropriate in implementing remedies at the facility.
- E. The Department will review and approve any CMS Work Plan required by this Permit in accordance with the procedures set forth in Review and Approval Procedures, Corrective Action Condition XV. The Permittee shall implement the approved plan in accordance with the schedule contained in the plan.

IX. Corrective Measures Study (CMS) Report

- A. The Permittee shall submit a CMS Report to the Department and USEPA according to the schedule contained in the approved CMS Work Plan. The CMS Report shall present all information gathered under the approved CMS Work Plan.
- B. If the Department determines that a CMS Report is necessary to address a release(s) of hazardous waste and/or hazardous constituents from newly- and/or previously-identified SWMUs/AOCs pursuant to Corrective Action Conditions II. or III., the Permittee shall submit a CMS Report to the Department and the USEPA according to the schedule contained in the approved CMS Work Plan. The CMS Report shall present all information gathered under the approved CMS Work Plan and shall be consistent with guidance contained in the USEPA document entitled, RCRA Corrective Action Plan (Final), May 1994, OSWER Directive 9902.3-2A. The CMS Report shall summarize the results of the investigations for each remedy studied and of any bench-scale or pilot tests conducted. The CMS Report shall include, but not be limited to, the following information:

1. Evaluation of performance, reliability, ease of implementation, and potential impacts of each remedy studied, including safety impacts, cross media impacts, and control of exposure to any residual contamination;
 2. Assessment of the effectiveness of each remedy in achieving adequate control of sources and cleanup of the hazardous waste or hazardous constituents released from the SWMU(s)/AOC(s);
 3. Assessment of the time required to begin and complete each remedy;
 4. Estimation of the costs of implementing each remedy;
 5. Recommendation of remedy and rationale for selection; and
 6. Assessment of institutional requirements, such as state or local Permit requirements, or other environmental or public health requirements which may substantially affect implementation of the remedy.
- C. The CMS Report shall contain adequate information to support the Department in the remedy approval decision-making process.
- D. The CMS Report will be reviewed in accordance with the procedures set forth in Review and Approval Procedures, Corrective Action Condition XV. Upon approval thereof by the Department, the Department will approve a final remedy as specified in Corrective Action Condition X.

X. Final Remedy Approval

Following the approval of the CMS Report or equivalent, the Department will prepare a Statement of Basis (~~SB~~) summarizing the corrective measures alternatives that were evaluated by the Permittee, including justification for the proposed final remedy identified by the Permittee in the CMS Report.

Following preparation of the ~~SB~~ [Statement of Basis](#) by the Department, a permit modification will be initiated pursuant to 40 CFR 270.41 or 270.42(c), as applicable, to implement the proposed final remedy.

Upon completion of the public participation activities associated with the permit modification to implement the proposed final remedy, the Department will approve a final remedy that will: 1) be protective of human health and the environment; 2) control

and/or eliminate the source(s) of contaminants so as to reduce or eliminate, to the maximum extent practicable, further contaminant releases, exposures or migration that might pose a threat to human health and the environment; 3) meet all applicable federal, state, and local laws and regulations.

XI. Activity and Use Limitations (AULs)

- A. The Permittee shall notify the Department prior to any future construction or excavation activities which disturb existing contamination at any SWMUs or other areas subject to AULs. This requirement will ensure that necessary precautions are taken when disturbing and/or exposing any contaminated environmental media at the facility. Future construction, excavation activities, or land use changes may necessitate further evaluation of site conditions at SWMUs with residual levels of contamination above corresponding regulatory thresholds at that time.
- B. Prior to conveyance of any property at the facility, or transfer of custody or control of any real property, that is currently under control of the Permittee, the Department may require modification or revocation and reissuance of this Permit to change the name of the Permittee and incorporate such other requirements as necessary to continue the AULs engineering and institutional controls, as well as ongoing remediation and corrective action.

~~XII. Financial Assurance for Corrective Action~~

- ~~A. Within 120 days after this Permit has been modified to include a final remedy for any SWMU/AOC or release, the Permittee shall demonstrate continuous compliance with the RCRA financial assurance requirements in effect at that time for corrective action being performed under state law. The effective financial assurance requirements for corrective action shall be consistent with and/or substantially equivalent to that specified in either final 40 CFR Part 264 Subpart S corrective action regulations or 40 CFR Part 264 Subpart H, as incorporated by reference in 10 CSR 25 7.264. The amount of financial assurance shall be based on the Permittee's cost estimate for the approved final remedy, which is contained in the approved CMS Report or equivalent.~~
- ~~B. Annually by March 1, the Permittee shall adjust the corrective action cost estimate to account for inflation in accordance with 40 CFR 264.142(b) and any other changes in the costs associated with implementation, operation, maintenance and monitoring of the approved final remedy. If the cost estimate~~

~~increases, documentation of adequate financial assurance for that increase shall be provided to the Department within 60 days following the increase in the cost estimate~~

XII. Corrective Action Cost Estimates and Financial Assurance

The Permittee shall comply with the requirements set forth in the Missouri Hazardous Waste Management Law and all standards, rules, and regulations adopted under this act, Section 260.350, et seq., RSMo, 40 CFR Part 264 Subpart H, 40 CFR 270.30, 40 CFR 270.40, 40 CFR 270.42, and 40 CFR 270.51, as incorporated and modified in 10 CSR 25-7 and 10 CSR 25-8.

A. Cost Estimates

1. Corrective Action Cost Estimate

Within sixty (60) days of the final remedy permit modification, the Permittee shall submit a detailed written cost estimate, in current dollars, of the cost of hiring a third party to perform the corrective action activities required by this Permit.

a. The cost estimate shall account for the total costs of the work activities including any necessary long-term costs, such as operation, maintenance, five year review, and monitoring costs.

b. A third party is a party who:

(1) Is neither a parent nor a subsidiary of the Permittee; and

(2) Does not share a common parent or subsidiary with the Permittee.

c. The cost estimates shall not include any salvage value that may be realized from the sale of wastes, facility structures or equipment, land or other assets associated with the facility.

d. Discounting is not allowed

The Permittee shall submit each corrective action cost estimate for review and approval by the Department. The Department will

review each cost estimate and notify the Permittee, in writing, of the Department's approval, rejection, or modification of the cost estimate in accordance with Corrective Action Permit Condition XV. If the Department does not approve the cost estimate, the Department will notify the Permittee in writing of the estimate's deficiencies and specify a due date for submittal of a revised cost estimate.

2. Revisions to the Corrective Action Cost Estimate

a. Annual Adjustment for Inflation

The Permittee shall adjust annually the corrective action cost estimate for inflation until all corrective action activities required by this Permit are complete. The inflation adjustment shall be determined by using the procedures described in 40 CFR 264.142(b) except that the inflation factor should be derived from the most recent annual Implicit Price Deflator for the Gross Domestic Product instead of the Gross National Product. The cost estimate is due within sixty (60) days before the anniversary date of the establishment of the financial assurance instrument used to comply with this section.

b. Additional Corrective Action Activities

The Permittee shall increase the corrective action cost estimate if:

- (1) The Permittee or the Department determines that any additional corrective action activities are required; or
- (2) If any other conditions increase the estimated cost of the corrective action activities to be performed under this Permit.

If the Department determines that a new cost estimate is required, the Department will notify the Permittee of this requirement.

The Permittee shall submit each revised corrective action cost estimate for review and approval by the Department. The Department will review each revised cost estimate and notify the

Permittee, in writing, of the Department's approval, rejection, or modification of the cost estimate in accordance with Corrective Action Permit Condition XV. If the Department does not approve the revised cost estimate, the Department will notify the Permittee in writing of the estimate's deficiencies and specify a due date for submittal of a new revised cost estimate.

B. Financial Assurance

In order to provide for the full and final completion of the corrective action activities required by this Permit, the Permittee shall establish and maintain financial assurance for the benefit of the Department in the amount at least equal to the most recent Department-approved corrective action cost estimate. The Permittee may use one or more of the financial assurance forms generally described in Corrective Action Condition XII.B.10. All financial assurance instruments provided pursuant to this Permit shall be satisfactory in form and substance as determined by the Department. The Department reserves the right to limit the choices of the Permittee to one or more of the instruments described in Corrective Action Condition XII.B.10., on a case-by-case basis, in order to ensure the full and final completion of the corrective action activities required by this Permit.

1. Timeframes for Financial Assurance Instruments

- a. Within thirty (30) days after the Department's approval of the Permittee's corrective action cost estimate(s) pursuant to this Permit, the Permittee shall submit draft financial assurance instruments and related documents to the Department for review and approval.
- b. Within ten (10) days after Department approval of the draft financial assurance instrument(s), the Permittee shall execute or otherwise finalize all instruments or other documents required in order to make the selected financial assurance legally binding. The instruments or other documents must be in a form identical to the financial assurance documents reviewed and approved by the Department.
- c. Within thirty (30) days after receiving Department approval of the draft financial assurance instrument(s), the Permittee shall submit

all original executed and/or otherwise finalized instruments or other documents to the Department. The Permittee must submit original executed or otherwise finalized instruments or documents. Facsimiles or photocopies are not acceptable.

2. Certified Mail

The Permittee shall submit all financial assurance instruments and related required documents by certified mail to the Department.

3. Multiple Instruments

The Permittee may combine more than one mechanism to demonstrate financial assurance for the corrective action activities required by this Permit. However, mechanisms guaranteeing performance rather than payment may not be combined with other instruments.

4. Inadequate Financial Assurance Instrument

a. If at any time the Department determines that a financial assurance instrument provided pursuant to this Permit is inadequate, or no longer satisfies the requirements, the Department shall notify the Permittee in writing. This applies whether there is an increase in the estimated cost of the corrective action activities required by this Permit or for any other reason.

(1) Within thirty (30) days of receipt of such notice, the Permittee shall submit draft financial assurance instruments and related documents to the Department for review and approval. The draft financial assurance instruments and related documents shall address the inadequacies outlined in the Department's notice.

(2) Within ten (10) days after Department approval of the draft financial assurance instrument(s), the Permittee shall execute or otherwise finalize all instruments or other documents required in order to make the selected financial assurance legally binding. The instruments or other

documents must be in a form identical to the financial assurance documents reviewed and approved by the Department.

(3) Within thirty (30) days after receiving Department approval of the draft financial assurance instrument(s), the Permittee shall submit all original executed and/or otherwise finalized instruments or other documents to the Department. The Permittee must submit original executed or otherwise finalized instruments or documents. Facsimiles or photocopies are not acceptable.

b. Within ten (10) days, the Permittee shall notify the Department in writing if at any time the Permittee becomes aware of information indicating that any financial assurance instrument provided pursuant to this Permit is inadequate or no longer satisfies the requirements set forth or incorporated by reference herein. This applies whether due to an increase in the estimated cost of the corrective action activities required by this Permit or for any other reason. The Permittee shall follow the procedures in Corrective Action Permit Condition XII.B.4.(a) to replace the financial assurance instrument.

5. Obligation to Complete Corrective Action Activities

The Permittee's inability or failure to establish or maintain financial assurance for completion of the corrective action activities required by this Permit shall in no way excuse performance of any other requirements of this Permit, including, without limitation, the obligation of the Permittee to complete all necessary corrective action activities in strict accordance with the terms of this Permit.

6. Automatic Renewal

All financial assurance instruments shall automatically renew at the time of their expiration unless the financial assurance provider notifies both the Permittee and the Department by certified mail of a decision to cancel, terminate, or not renew a financial assurance instrument. The Permittee and the Department must receive such notification at least one hundred and twenty (120) days before expiration, cancellation, or termination of

the instrument. Under the terms of the financial assurance instrument, the one hundred and twenty (120) days will begin on the date of receipt of the notice by certified mail by both the Permittee and the Department. Within ninety (90) days following receipt of such notice by both the Permittee and the Department, the Permittee must provide alternate financial assurance and obtain written approval for such alternate financial assurance.

7. If the Permittee fails to provide alternate financial assurance within ninety (90) days, the Department will notify the financial assurance provider in writing before the expiration of the instrument. The notification to the financial assurance provider shall instruct the financial assurance provider to immediately deposit the remaining funds obligated under the financial assurance into the standby trust fund or a newly created trust fund approved by the Department.

8. Modification of Amount and/or Form of Financial Assurance

a. Reduction of Amount of Financial Assurance

If the Permittee believes that the estimated cost to complete the corrective action activities required by this Permit has diminished below the amount covered by the existing financial assurance provided under this Permit, the Permittee may submit a written proposal to the Department to reduce the amount of the financial assurance provided under this Permit. The amount of the financial assurance proposed must at least be equal to the estimated cost of the remaining corrective action activities required by this Permit. The written proposal shall specify, at a minimum, the cost of the remaining corrective action activities to be performed and the basis upon which such cost was calculated. In seeking approval of a revised financial assurance amount, the Permittee shall follow the procedures set forth in Corrective Action Permit Condition XII.B.7.b.(2) of this Section. The Department shall notify the Permittee of its approval in writing. The Permittee may reduce the amount of the financial assurance after receiving the Department's written approval but only in accordance with and to the extent permitted by such written approval. No change to the form or

terms of any financial assurance provided under this Section, other than a reduction in amount, is authorized except as provided in Corrective Action Permit Condition XII.B.7.b.

b. Change of Form of Financial Assurance

(1) If the Permittee wishes to change the form or terms of financial assurance, the Permittee may submit a written proposal to the Department to change the form of financial assurance. The submission of such a proposal shall be as provided in Corrective Action Permit Condition XII.B.7.b.(2). The approval of a proposal submitted under this Corrective Action Permit Condition XII.B.7. shall be made at the Department's sole discretion.

(2) A written proposal for a revised or alternative form of financial assurance shall specify, at a minimum:

(a) The cost of the remaining corrective action activities to be performed;

(b) The basis upon which such cost was calculated; and

(c) The proposed revised form of financial assurance, including all proposed instruments or other documents required in order to make the proposed financial assurance legally binding.

The proposed revised or alternative form of financial assurance shall satisfy all requirements set forth or incorporated by reference in this Permit. The Department shall notify the Permittee in writing of its decision to accept or reject a revised or alternative form of financial assurance submitted pursuant to this paragraph.

Within ten (10) days after receiving written approval of the proposed revised or alternative financial assurance, the Permittee shall execute and/or otherwise finalize all instruments or other documents required in order to make the selected financial assurance legally binding and effective in a form identical to the documents submitted to the Department.

Within thirty (30) days of receiving written approval of the proposed revised or alternative financial assurance, the Permittee shall submit to the Department all original executed and/or otherwise finalized instruments or other documents required in order to make the selected financial assurance legally binding.

The Department shall release, cancel, or terminate the prior existing financial assurance instruments only after the Permittee has submitted all executed and/or otherwise finalized new financial assurance instruments or other required documents to the Department.

9. Performance Failure

a. In the event that the Department determines that the Permittee

(1) Has ceased implementation of any of the corrective action activities required by this Permit;

(2) Is significantly or repeatedly deficient or late in its performance of the corrective action activities required by this Permit; or

(3) Is implementing the corrective action activities required by this Permit in a manner that may cause an endangerment to human health or the environment;

the Department may issue a written notice (“Performance Failure Notice”) of the Permittee’s failure to perform to both the Permittee and the financial assurance provider. The notice will specify the grounds upon which it was issued and will provide the Permittee a period of ten (10) days to remedy the circumstances.

b. If the Permittee fails to remedy the relevant Performance Failure to the Department’s satisfaction before the expiration of the ten-day notice period specified in Corrective Action Permit Condition XII.B.8.a, the Department shall have immediate access to and benefit of the financial assurance provided. The Department may, at any time thereafter, direct the financial assurance provider to immediately

(1) Deposit into the standby trust fund, or a newly created trust fund approved by the Department, the remaining funds obligated under the financial assurance instrument; or

(2) Arrange for performance of the corrective action activities required by this Permit.

c. The Department shall give the Permittee written notice if:

(1) The Department determines that any of the circumstances described in Special Permit Condition XII.B.8.a.(1), (2), or (3) have occurred, and

(2) The Department is nevertheless unable, after reasonable efforts, to secure the payment of funds or performance of the corrective action activities required by this Permit from the financial assurance provider.

d. Within ten (10) days of receiving such written notice, the Permittee shall provide cash to fund the standby trust fund, or a newly created trust fund approved by the Department. The funds must at least equal the cost of the remaining corrective action activities required by this Permit. The deposit shall be made in immediately available funds and without setoff, counterclaim, or condition of any kind.

10. Release of Financial Assurance

The Permittee may submit a written request to the Department to release the Permittee from the requirement to maintain financial assurance after the Department and the Permittee have mutually agreed that all corrective action activities required by this Permit are complete. The Department shall notify both the Permittee and the provider(s) of the financial assurance if and when the Permittee is released from all financial assurance obligations under this Permit. The Permittee shall not release, cancel, or terminate any financial assurance provided pursuant to this Permit except as provided in this paragraph or Corrective Action Permit Condition XII.B.7.b.

11. Financial Assurance Instruments

To the extent possible, the wording of the financial assurance documents shall meet the requirements of 40 CFR 264.143 and 40 CFR 264.151 as incorporated and modified in 10 CSR 25-7. All financial assurance instruments provided pursuant to this Permit shall be satisfactory in form and substance as determined by the Department.

a. Trust Fund

The trust fund shall be:

- (1) Established for the benefit of the Department;
- (2) Administered by a trustee who has the authority to act as a trustee under federal or state law and whose trust operations are regulated and examined by a federal or state agency; and
- (3) Acceptable in all respects to the Department.

The trust agreement shall provide that the trustee shall make payments from the fund as the Department shall direct in writing

- (4) To reimburse the Permittee for expenditures made by the Permittee for corrective action activities performed in accordance with this Permit, or
- (5) To pay any other person whom the Department determines has performed or will perform the corrective action activities required by this Permit.

The trust agreement shall further state that the trustee shall not refund to the grantor any amounts from the fund until the Department has advised the trustee in writing that the corrective action activities performed in accordance with this Permit have been completed to the satisfaction of the Department.

b. Surety Bond

A surety bond must unconditionally guarantee either:

- (1) Payment at the direction of the Department into a standby trust fund that meets the requirements of the trust fund in Corrective Action Permit Condition XII.B.10.a.; or
- (2) Performance of the corrective action activities required by this Permit. The Surety Company issuing the bond shall, at a minimum, be among those listed as acceptable sureties on Federal Bonds as set forth in Circular 570 of the U.S. Department of the Treasury.

If the Permittee seeks to establish financial assurance by using a surety bond, the Permittee shall, at the same time, establish and maintain a standby trust fund. The standby trust fund must meet the requirements of Corrective Action Permit Condition XII.B.10.a. Funds from the surety bond shall be deposited into the standby trust fund if the Department directs the financial assurance provider to do so, pursuant to Corrective Action Permit Condition XII.B.8, of this section.

c. Irrevocable Letter of Credit

An irrevocable letter of credit shall be payable at the direction of the Department into a standby trust fund that meets the requirements of Corrective Action Permit Condition XII.B.10.a. The letter of credit shall be issued by a financial institution

- (1) That has the authority to issue letters of credit, and
- (2) Whose letter of credit operations are regulated and examined by a federal or state agency.

If the Permittee seeks to establish financial assurance by using a letter of credit, the Permittee shall, at the same time, establish and maintain a standby trust fund. The standby trust fund must meet the requirements of Corrective Action Permit Condition XII.B.10.a. Funds from the letter of credit shall be deposited into

the standby trust fund if the Department directs the financial assurance provider to do so, pursuant to Corrective Action Permit Condition XII.B.8.

d. Policy of Insurance

A policy of insurance shall:

- (1) Provide the Department with rights as a beneficiary which are acceptable to the Department; and
- (2) Be issued by an insurance carrier that
 - (a) Has the authority to issue insurance policies in Missouri, and
 - (b) Whose insurance operations are regulated and examined by a federal or state agency.
- (3) The insurance policy shall be issued for a face amount at least equal to the current approved corrective action cost estimate for the corrective action activities to be performed under this Permit, except where costs not covered by the insurance policy but are covered by another financial assurance instrument, as permitted in Corrective Action Permit Condition XII.B.3. of this section.
- (4) The insurance policy shall state that the insurer shall make payments up to an amount equal to the face amount of the policy as directed by the Department in writing
 - (a) To reimburse the Permittee for expenditures made by the Permittee for corrective action activities performed in accordance with this Permit or
 - (b) To pay any other person whom the Department determines has performed or will perform the corrective action activities required by this Permit.

(5) The insurance policy shall also state that it may not be canceled, terminated or non-renewed and the policy shall remain in full force and effect in the event that:

(a) The Permittee is named as a debtor in a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code; or

(b) The Department notifies the insurer of the Permittee's failure to perform, under Corrective Action Permit Condition XII.B.8.

XIII. Semi-Annual Progress and Corrective Action Effectiveness Reports

A. The Permittee shall submit to the Department and the USEPA signed Semi-Annual Progress Reports summarizing all permitted corrective action activities undertaken during each preceding calendar half-year (i.e., January through June and July through December). Each sSemi-aAnnual pProgress rReport shall be due within sixty (60) days following the last day of each reporting period (i.e., March 1, and September 1). The Semi-Annual Progress Reports may be combined with the Annual/Semi-Annual Groundwater Corrective Action Effectiveness Reports.

The first Semi-Annual Progress Report shall be due within sixty (60) days of the end of the six-month period in which this Permit becomes effective. The sSemi-aAnnual pProgress rReports shall continue to be submitted until such time as the Permittee's corrective action activities are complete. The Semi-Annual Progress Reports shall include the following information for the time period being reported:

1. A description of the work completed;
2. Summaries of all findings, including summaries of laboratory data;
3. Summaries of all problems or potential problems encountered during the reporting period and actions taken to rectify problems;
4. Projected work for the next reporting period; and

5. Any instances of noncompliance with the corrective action requirements of this Permit not required to be reported elsewhere in this Permit.

B. Detailed technical information shall be submitted as part of the Semi-Annual Corrective Action Effectiveness Reports outlined below and/or other reports (i.e., intermediate measures, RFI, CMS, etc.) required by this Permit. If provided in other reports, this detailed information need not be reproduced as part of the Permittee's ~~s~~Semi-~~a~~Annual ~~p~~Progress ~~r~~Reports.

C. Groundwater-Related Reporting Requirements:

The Permittee shall submit to the Department, on a semi-annual basis for the preceding calendar half-year (i.e., January through June and July through December), Semi-Annual Groundwater Corrective Action Effectiveness Reports, including all raw analytical data from the Permittee's semi-annual groundwater sampling events. The Permittee's Semi-Annual Groundwater Corrective Action Effectiveness Reports shall be submitted to the Department by March 1, and September 1, of each calendar year for the preceding calendar half-year. Each September 1 Semi-Annual Report shall be raw data with comments on exceedances. Each March 1 Semi-Annual Report will include a comprehensive evaluation and be called the Annual Groundwater Corrective Action Report. The reports shall include groundwater analysis results, field parameter measurement results, copies of field sampling and well inspection log sheets, well repair documentation, ~~QA/QC~~ Quality Assurance/Quality Control data, statistical analysis of groundwater data, field investigation results, volume of groundwater extracted, and other relevant groundwater-related information, as appropriate. The Semi-Annual Reports shall also discuss any exceedances of the Groundwater Protection Standards.

As part of the Annual Groundwater Corrective Action Report, the Permittee shall prepare and submit a comprehensive evaluation of the facility-wide groundwater monitoring program for the preceding calendar year (i.e., January through December).

The Permittee's Annual Groundwater Corrective Action Reports submitted to the Department by March 1 of each calendar year for the preceding calendar year shall:

1. Narratively discuss the nature and evolution of the Permittee's facility wide groundwater monitoring program as well as conclusions concerning

the overall adequacy of the program as related to its intended purpose, including any interim measures/stabilization actions/remedial action plans. Any conclusions concerning inadequacies in the Permittee's groundwater monitoring program shall be accompanied by a discussion of proposed remedies. Specific details concerning any proposed remedies should be further developed outside of the scope of these reports and/or as otherwise specified in this Permit.

2. Comprehensively address all of the technical requirements of 40 CFR Part 264 Subpart F and this Permit. The Permittee shall summarize relevant groundwater monitoring information and shall present this information in the form of narrative discussions, groundwater flow calculations, and/or diagrammatic illustrations (e.g., tabular groundwater and statistical data summaries, hydrogeologic and potentiometric contour maps/cross-sections, chemical parameter trend graphs, calculated rate(s) of contaminant migration, contaminant isoconcentration maps/cross-sections, fence/isometric diagrams, groundwater flow nets, etc.), as appropriate.
3. Evaluate the effectiveness of the groundwater corrective action program, including, but not limited to, the following:
 - a. The rate and direction of groundwater movement in underlying aquifers and potential effects on any corrective action measures being designed or implemented at the facility for removal, containment or control of the groundwater contaminant plume(s);
 - b. The horizontal and vertical extent and concentrations of hazardous constituents in groundwater throughout the contaminant plume(s) as evaluated from the data obtained through the Permittee's groundwater monitoring program;
 - c. Any surface and/or subsurface well integrity problems and their potential or actual influence on the groundwater data or efficiency of the groundwater corrective action program;
 - d. The quantity of free Non-Aqueous Phase Liquids (~~NAPLs~~) if present and groundwater extracted from the subsurface during either stabilization activities, remedial action plans, or as part of the groundwater corrective action program. This information

should be reported both as a total amount and per well or extraction location, and shall be used in conjunction with dissolved phase contaminant concentration information to estimate quantities of contaminants removed;

e. The performance information associated with operation of the Soil Vapor Extraction System – Interim Measure as specified in the February 28, 2003, Soil Vapor Extraction – Interim Measures Work Plan and additional requirements specified in the April 4, 2003, USEPA and Department letter Approval of Soil Vapor Extraction – Interim Measures Work Plan.

4. Contain detailed boring logs for new exploratory borings and/or detailed as-built monitoring well diagrams for any new monitoring wells installed during the corresponding reporting period, as appropriate.

D. Copies of other reports (e.g., inspection reports), information, or data shall be made available to the Department and USEPA upon request.

XIV. Supplemental Data

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 by the Permittee during the term of this Permit, including the term of any re-issued Permits.

XV. Review and Approval Procedures

A. Following submission of any plan or report pertaining to corrective action activities (excluding Corrective Action Special Condition XIII. Reports: the Corrective Action Effectiveness Report and Semi-Annual Progress Reports), the Department will review and either approve or disapprove the plan or report in writing. If the Department does not approve the plan or report, the Department will notify the Permittee in writing of the plan's or report's deficiencies and specify a due date for submittal of a revised plan or report.

B. If the Department does not approve the revised plan or report, the Department may modify the plan or report and notify the Permittee of the modifications. The plan or report as modified by the Department shall be the approved plan or report.

- C. The Permittee disagrees with any Department-initiated plan or report modifications, and a mutually acceptable resolution of such modifications cannot be informally reached, any appeal of the Department-initiated modifications shall be filed in accordance with Section 260.400, RSMo, and 10 CSR 25-8.
- D. Requests for extensions to the compliance dates associated with this Permit will be considered, and may be granted, on a case-by-case basis. Any extension request(s) must specify the proposed new compliance date and must be accompanied by an explanation of the reason for the extension. The Department must receive extension requests at least [fifteen \(15\)](#) days prior to the originally scheduled compliance date.
- [E. Pertaining to the TSCA PCB Storage Area, all activities shall be approved by both the Department and EPA/CRIB and all reports and documents for the TSCA PCB Storage Area will be sent to both the Department and the EPA/CRIB Branch Chief.](#)

XVI. Planned Activities

The Permittee shall comply with the schedule for planned corrective action activities as specified in this Permit and as summarized on Table IV attached hereto.

XVII. Contingent Activities

- A. The Permittee shall comply, as necessary, with the schedule(s) for contingent ~~C~~corrective action activities as specified in this Permit and as summarized in Table V attached hereto.

FACILITY SUBMISSION SUMMARY

Table III – Summary of the Submittal Requirements Pursuant to this Permit

Submittal Requirements	Due Date	Permit Condition
Consolidated Permit Application	Within 60 calendar days of effective date of this permit.	Schedule of Compliance Item I.A.
Certification that Permittee has read and understands this Permit and all permit modifications.	Within 60 calendar days of effective date of this permit modification.	Schedule of Compliance Item I.B.A.
Check or money order for \$9000 and all outstanding engineering review costs.	Within 60 calendar days of effective date of this permit modification.	Schedule of Compliance Item I.C.&D.B.
The Permittee shall submit to the Department for approval a revised/updated Part A. The Permittee shall update the facility's financial assurance instrument to reflect the cost estimate located in the approved Permit application.	Within 60 calendar days of effective date of this permit modification. Within 60 calendar days after the effective date of this Permit.	Schedule of Compliance Item I.C. Schedule of Compliance Item II.
Original Financial Assurance Instruments	Prior to receipt of containerized PCB material.	Schedule of Compliance Item III.C.
The Permittee shall submit to the Department for approval a closure certification for Tanks T-1, T-2, T-15, T-16, & T-25.	Within 180 calendar days of the effective date of this permit modification.	Schedule of Compliance Item IV.
Quarterly Reports with information required by 10 CSR 25-5.262(2)(D) and 10 CSR 25-7.264(2)(E)	Within 45 calendar days after the end of each quarter.	Standard Permit Condition I.
Biennial Report with information required by 40 CFR 264.75	March 1 of each even numbered calendar year.	General Permit Condition I.

Table IV – Summary of the Planned Corrective Action Submittal Requirements Pursuant to the Corrective Action Conditions of this Permit.

Submittal Requirements	Due Date	Corrective Action Condition
RFI Report Approval	Final approval for expedited report will be contingent on approval of CMS Work Plan.	VI.A.
Implementation of interim groundwater monitoring program	Upon approval of CMS Work Plan.	VII.B
CMS Work Plan	Submittal on September 30, 2002.	VIII.A
CMS Report	Report submittal due based on schedule contained in CMS Work Plan.	IX.A.
Annual/Semi-Annual Corrective Action Progress and Effectiveness Reports	By March 1 and September 1 of each calendar year.	XIII.A <u>& and C.</u>

Table V – Summary of the Contingent Corrective Action Submittal Requirements Pursuant to the Corrective Action Conditions of this Permit

Contingent Submittal Requirements	Due Date	Corrective Action Condition
Written notification of newly-identified SWMU(s) and AOC(s).	No later than 15 days after discovery.	II.A.
SWMU/AOC Assessment Work Plan	Within 30 days after receipt of Department's request.	II.B.
SWMU/AOC Assessment Report	In accordance with the schedule in the approved SWMU/AOC Assessment Work Plan.	II.D.
Written notification of newly-identified releases from previously-identified SWMUs and AOCs.	No later than 15 days after discovery.	III.A.
Newly-Identified Release Work Plan	Within 30 days after receipt of Department's request.	III.B.
Newly-Identified Release Report	In accordance with the schedule in the approved Newly-Identified Release Work Plan.	III.D.
Stabilization Notification	Within 24 hours of discovery of need for stabilization.	IV.A.
RFI Work Plan	Within 60 calendar days of notice by the Department that an RFI Work Plan is required.	V.B.
CMS Work Plan	Within 45 calendar days of notice by the Department that a CMS is required.	VIII.D.
CMS Report	According to the schedule in the approved CMS Work Plan.	IX.B.

Contingent Submittal Requirements	Due Date	Corrective Action Condition
<u>Institutional Controls</u>	Prior to activities.	<u>XI.A & B.</u>
<u>Corrective Action Cost Estimate</u> Corrective Action Financial Assurance	<u>Within 60 calendar days after the final remedy permit modification.</u> Within 120 days of Permit modification to include final remedy and within 60 days following any increase in cost estimate.	<u>XII.A.</u> XII.A & B.
<u>Update Cost Estimate for Corrective Action</u> Financial Assurance Cost Estimate Adjustment	<u>Annually, within 60 calendar days before the anniversary date of the establishment of the financial assurance instrument.</u> Annually by March 1 to account for inflation and/or any other changes in the corrective action cost estimate.	<u>XII.A.2.</u> XII.B.
<u>Draft Financial Assurance Instrument</u>	<u>Within 30 calendar days of approval of Cost Estimate.</u>	<u>XII.B.</u>
<u>Final Financial Assurance Instrument</u>	<u>Within 10 calendar days of approval of Draft Financial Assurance Instrument.</u>	<u>XII.B.</u>
<u>Update Financial Assurance Instrument for Corrective Action</u>	<u>Annually, within 30 calendar days of approval of cost estimate.</u>	<u>XII.B.</u>