
**PERMIT
FOR THE STORAGE AND TREATMENT
OF MIXED WASTE AND FOR STORAGE AND DISPOSAL OF MIXED-TOXIC SUBSTANCES CONTROL
ACT (TSCA) REGULATED POLYCHLORINATED BIPHENYL (PCB) WASTES**

Department of Ecology
3100 Port of Benton Blvd.
Richland, WA 99354

U.S. Environmental Protection Agency
Region 10
1200 6th Avenue, Suite 900
Seattle, WA 98101-3140

Issued in accordance with the applicable provisions of the Hazardous Waste Management Act, Chapter 70.105 Revised Code of Washington (RCW), and the regulations promulgated thereunder in Chapter 173-303 Washington Administrative Code (WAC), the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) and the Hazardous and Solid Waste Amendments of 1984 (HSWA), and the regulations promulgated thereunder in Title 40 of the Code of Federal Regulations (CFR), and Section 6(e)(1) of the Toxic Substances Control Act of 1976 (TSCA), Public Law No. 94-469, 15 USC §2605(e)(1) et seq., and the Federal PCB Regulations, 40 CFR §§761.65(d) and 761.60(e).

ISSUED TO: Perma-Fix Northwest, Richland Incorporated
2025 Battelle Boulevard
Richland, WA 99354

This Permit is effective as of July 7, 1999, and shall remain in effect until July 7, 2009, unless revoked and reissued, modified, or terminated under WAC 173-303-830(3) and (5), 40 CFR §270.30(f) or for any other reasons which the Regional Administrator of the Environmental Protection Agency, Region 10, deems necessary to protect human health and the environment pursuant to 40 CFR §§761.65(d) and 761.60(e), or continued in accordance with WAC 173-303-806(7), 40 CFR Part 270, Subpart B, and 40 CFR §§761.65(d) and 761.60(e).

In any consecutive twelve (12) month period total operational hours processing mixed waste and mixed TSCA-regulated PCB waste for the GASVIT™ System shall be limited to 2,100,100 pounds. These operational hours shall be tracked and reported in accordance with permit conditions VI.A.1.f.(ii) and VI.A.1.f.(iii).

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Date Issued: May 28, 1999
Expiration Date: July 7, 2009

Permit No. WAR 0000 10355

ISSUED BY: Washington State Department of Ecology and
U.S. Environmental Protection Agency, Region 10

Original signed 5/28/99
Michael Wilson, Program Manager
Nuclear Waste Program
Washington State Department of
Ecology

Original signed 5/28/99
Michael A. Bussell, Director
Office of Waste and Chemicals Management
U.S. Environmental Protection Agency,
Region 10

Date: _____

Date: _____

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INTRODUCTION

Pursuant to:

1. Chapter 70.105 RCW, the Hazardous Waste Management Act of 1976, as amended, and regulations codified in Chapter 173-303 WAC,
2. Solid Waste Disposal Act (42 U.S.C. 3251 et seq.) as amended by the Resource Conservation and Recovery Act of 1976 (RCRA) and the Hazardous and Solid Waste Amendments of 1984 (HSWA),
3. Regulations promulgated by the U.S. Environmental Protection Agency (Agency) codified in Title 40 of the Code of Federal Regulations (40 CFR), and
4. Section 6(e)(1) of the Toxic Substances Control Act of 1976 (TSCA), 15 USC §2605(e)(1), and the Federal PCB Regulations, 40 CFR Part 761.

A Permit and PCB Approval (hereafter referred to in this document as a Permit) is issued to Perma-Fix Northwest, Richland Incorporated. (hereinafter called the Permittee) to operate a mixed waste and mixed-TSCA regulated PCB waste storage and disposal facility located at 2025 Battelle Blvd., Richland, Washington, at latitude 46° 20' 32" North (degrees, minutes, seconds) and longitude 119° 17' 52" West (degrees, minutes, seconds).

All references in this Permit, with exceptions of Modules VI and VII, to mixed waste shall also incorporate references to dangerous waste not contaminated with radioactive materials and references to mixed-TSCA regulated PCB waste shall also incorporate reference to TSCA regulated PCB waste not contaminated with radioactive materials until the GASVIT™ System commences operation pursuant to Module VI of this Permit. After the GASVIT™ System commences operation pursuant to Module VI of this Permit, the Permittee shall not manage wastes that are not contaminated with radioactive materials.

The Permittee shall comply with all terms and conditions set forth in this Permit and in Attachments AA through BBB. The Permittee shall also comply with all applicable state regulations contained in Chapter 173-303 WAC (Attachment LL) with the applicable federal regulations, including 40 CFR Parts 260 through 266, Part 268, Part 270, and Part 761, and other regulations which are, by statute, self-implementing. If the Permit and the above attachments or regulations conflict, the wording of the Permit shall prevail pursuant to WAC 173-303-815(2)(iii) and 40 CFR §270.32(c).

This Permit is based upon the administrative record, as required by WAC 173-303-840, 40 CFR §124.9, and 40 CFR §§761.65(d) and 761.60(e). The Permittee's failure in the application or during the Permit issuance process to fully disclose all relevant facts or the Permittee's misrepresentation of any relevant facts at any time shall be grounds for the termination or modification of this Permit and/or initiation of an enforcement action, including criminal proceedings. The Permittee shall inform the Director of the Washington State Department of Ecology (hereafter called the Director) and the Regional

Administrator of the United States Environmental Protection Agency, Region 10, of any deviations from Permit conditions or changes from information provided in the Part B Permit Application. In particular, the Permittee shall inform the Director and the Regional Administrator of any proposed changes that might affect the ability of the Permittee to comply with applicable regulations and permit conditions or that alter any of the conditions of the Permit in any way.

The Washington State Department of Ecology (hereafter called the Department) will administer and enforce all conditions of this Permit which are based on federal regulations for which the State of Washington has received final authorization and all conditions which are state-only requirements (i.e., required by state regulations but not by federal regulations). Any challenges of any permit condition that concern state requirements (i.e., conditions of this Permit for which the State of Washington is authorized or conditions which are state-only requirements) shall be appealed to the Pollution Control Hearings Board in accordance with WAC 173-303-845. In the event that the Department does not maintain its authorization for the federal RCRA program, then the United States Environmental Protection Agency (hereafter called the Agency) will administer and enforce all permit conditions except those which are state-only requirements.

The Agency will administer and enforce all permit conditions which are based on federal regulations promulgated that have not yet been adopted by the State of Washington and/or have not been included in the state's authorized program. The Agency may administer and enforce any permit condition based on federal regulations for which the State of Washington is authorized if, in the Agency's judgment, the Department should fail to enforce that permit condition. The Agency will not enforce any permit condition that is based on a state-only requirement.

The Agency has determined, in accordance with 40 CFR §761.65(d)(4) that the PCB storage units have met the requirements under 40 CFR §761.65(d)(2). This is based upon the Agency's review of the Permittee's application and conclusion that the operation of the PCB storage units at the Permittee's facility shall not pose an unreasonable risk of injury to health or the environment.

The Agency has determined in accordance with 40 CFR §761.60(e) that the Perma-Fix Northwest, Richland Inc. GASVIT™ System (when operated in accordance with the conditions of this Permit) shall provide PCB destruction equivalent to disposal in a 40 CFR §761.70 incinerator and shall not pose an unreasonable risk of injury to human health or the environment. This is based upon the Agency's review of the Permittee's application and shall be demonstrated pursuant to Module VII of this Permit.

Table I-1 of this Permit provides a regulatory authority matrix for this Permit.

LIST OF ATTACHMENTS

The following listed documents are hereby incorporated, in their entirety, by reference into this Permit. Some of the documents are excerpts from the Permittee's mixed waste and mixed-TSCA regulated PCB waste Permit Application (most recently amended on February 27, 2008). The Department and the Agency have, as deemed necessary, modified specific language in the attachments. These modifications are described in the permit conditions (Modules I through VIII) and thereby supersede the language of the attachment. These incorporated attachments are enforceable conditions of this Permit, as modified by the specific permit conditions. Specific permit conditions (Module I through VIII) supersede the language of the attachments if the permit conditions and attachment language is found to be in conflict.

All references in these attachments to the terms "ATG, PEcoS, PFNW-R" shall be read as reference to the permittee.

Attachment AA - Facility Description, consisting of:

- (1) Facility Description, Section B-1a(i)-I of the Permit Application, as last revised on February 7, 2011.
- (2) Topography Site Area, Drawing 31001-C-002, Sheet C101, of Attachment 7 of the Permit Application, prepared on February 14, 1998.

Attachment BB - Part A Dangerous Waste Permit Forms, consisting of:

- (1) Part A Form, Appendix A-1, Section A of the Permit Application, as last revised on July 8, 2009.

Attachment CC - Waste Analysis Plan, consisting of:

- (1) Waste Analysis, Section C of the Permit Application, as last revised on February 7, 2011
- (2) Waste Analysis Plan, Attachment 1 of the Permit Application, as last revised on February 7, 2011.
- (3) Waste Analysis Plan, Attachment 1 Appendix F of the Permit Application, as last revised on July 8, 2009

Attachment DD - Security Procedures and Equipment, consisting of:

- (1) Security, Section F-1 of the Permit Application, as last revised on February 14, 1998.
- (2) Location and Site Plan, Figure 2 of Attachment 15 of the Permit Application, prepared on February 14, 1998.

Attachment EE - Inspection Plan, consisting of:

- (1) Inspection Plan, Section F-2 and Tables F-1 and F-2 of the Permit Application, as last revised on February 14, 1998.
- (2) Inspection Plan, Attachment 19 of the Permit Application, as last revised on February 7, 2011.

Attachment FF - Training Plan, consisting of:

- (1) ~~Personnel Training Plan, Section H Attachment FF of the Permit Application, as last revised on March 15, 2007. February 14, 1998.~~
- ~~(2) Training Plan, Attachment 16 of the Permit Application, as last revised on June 19, 1998.~~

Attachment GG - Contingency Plan, consisting of:

- (1) Contingency Plan, ~~Section G~~ Attachment GG of the Permit Application, as last revised on March 10, 2011.
- ~~(2) Contingency Plan, Attachment 15 of the Permit Application, as last revised on June 19, 1998.~~

Attachment HH - Closure Plan and Financial Assurance, consisting of:

- (1) Closure and Financial Assurance, Section I of the Permit Application, as last revised on February 14, 1998.
- (2) Closure Plan, Attachment 17 of the Permit Application, as last revised on February 14, 1998, excluding table 5-1.

Attachment II - Preparedness and Prevention Measures, consisting of:

- (1) Preparedness and Prevention Requirements, Section F-3 of the Permit Application, as last revised on February 14, 1998.
- (2) Preventive Procedures, Structures, and Equipment, Section F-4 and Tables F-3, F-4, F-5, and F-6 of the Permit Application, as last revised on July 9, 1998.
- (3) MWF Work Procedures for Hazardous Operations, Attachment 14 of the Permit Application, as last revised on February 14, 1998.

Attachment JJ - Chapter 173-303 WAC, as last revised on February 11, 1998.

Attachment KK - Air Emissions, consisting of:

- (1) Air Emissions Control, Section D-8 of the Permit Application, as last revised on June 19, 1998.

Attachment LL - Container Management, consisting of:

- (1) Containers and Waste Tracking, Attachment 2 of the Permit Application, as last revised on February 7, 2011.
- (2) Containers, Section D-1 of the Permit Application, as last revised on January 29, 1999.

Attachment MM - Tank Management, consisting of:

- (1) Tank Systems, Section D-2 of the Permit Application, as last revised June 19, 1998.

Attachment NN - Stabilization Building Miscellaneous Treatment, consisting of:

- (1) STB Miscellaneous Units, Section D-11 of the Permit Application, as last revised on June 19, 1998.

Attachment OO - GASVIT™ Building Miscellaneous Treatment, consisting of:

- (1) GVB Miscellaneous Units, Section D-12 of the Permit Application, as last revised on June 19, 1998.

Attachment PP - Process Engineering Description for Stabilization Building, consisting of:

- (1) Process Engineering Description for Stabilization Building, Attachment 5 of the Permit Application, as last revised on March 10, 2011.

Attachment QQ - Process Engineering Description for GASVIT™ Building, consisting of:

- (1) Process Engineering Description for GASVIT™ Building, Non-Confidential Business Information Claimed version of Attachment 6 of the Permit Application, as last revised on July 9, 1998.
- (2) Process Engineering Description for GASVIT™ Building, Confidential Business Information Claimed version of Attachment 6 of the Permit Application, as last revised on July 9, 1998, in accordance with WAC

173-303-810(15), 40 CFR Part 2, and 40 CFR §§260.2 and 270.12, excluding Appendices A, B, and C.

Attachment RR - Construction Drawings for Stabilization, GASVIT™, Waste Storage and Access Control Buildings,
consisting of:

- (1) Construction Drawings, Attachment 7 of the Permit Application, as last revised on June 19, 1998, excluding drawings designated as Architectural (31001-A-###).

Attachment SS - Confidential Business Information Claimed Construction Drawings for GASVIT™ Building in accordance with WAC 173-303-810(15), 40 CFR Part 2, and 40 CFR §§260.2 and 270.12, consisting of:

- (1) GASVIT™ System Flow Diagrams and Piping and Instrumentation Diagrams, Appendix B of Attachment 6 of the Permit Application, as last revised on November 12, 1998.

Attachment TT - Equipment/Instrument List for Stabilization Building, consisting of:

- (1) Equipment/Instrument List for Stabilization Building, Attachment 8 of the Permit Application, as last revised on October 5, 1998.

Attachment UU - Equipment/Instrument List for GASVIT™ Building, consisting of:

- (1) Equipment/Instrument List for GASVIT™ System, Attachment 9 of the Permit Application, as last revised on October 5, 1998.

Attachment VV - Technical Specifications for the Stabilization Building, consisting of:

- (1) Technical Specifications for the Stabilization Building Process, Attachment 11 of the Permit Application, as last revised on February 14, 1998.
- (2) Tank Certifications, D-2i-031 of Calculations, Attachment 13 of this Permit Application, as last revised on February 11, 1998.

Attachment WW - Technical Specifications for the GASVIT™ Building, consisting of:

- (1) Technical Specifications for the GASVIT™ Building Process, Attachment 12 of the Permit Application, as last revised on July 9, 1998.

- (2) Tank Certifications, D-2i-029 and D-2i-030 of Calculations, Attachment 13 of this Permit Application, as last revised on February 11, 1998.
- (3) Confidential Business Information Claimed Technical Specifications for the GASVIT™ Building Process, Appendix A of Attachment 6 of the Permit Application, as last revised on July 9, 1998.

Attachment XX - Miscellaneous Specifications, consisting of:

- (1) Miscellaneous Item Specifications, Attachment 10 of the Permit Application, as last revised on February 14, 1998, excluding suggested Architectural Details.

Attachment YY - GASVIT™ System Demonstration Test Plan, consisting of:

- (1) Demonstration Test Plan, Attachment 3 of the Permit Application, as last revised on November 12, 1998.

Attachment ZZ - Approved Risk Assessment Work Plan, consisting of:

- (1) Risk Assessment Work Plan (RAWP), Attachment 4 of the Permit Application, as last revised on July 23, 1998.
- (2) Washington State Department of Ecology and U.S. Environmental Protection Agency, Region 10, conditional approval of ATG's July 23, 1998, RAWP, dated October 9, 1998.
- (3) Washington State Department of Ecology and U.S. Environmental Protection Agency, Region 10, October 26, 1998, amendment to their conditional approval of ATG's July 23, 1998, RAWP, dated October 26, 1998.

Attachment AAA - Preliminary Risk Assessment Calculations,
consisting of:

- (1) Appendix A, D-2I-046, Sections 1 to 5.4, and Tables C1 to C3 of Volume II of the Preliminary Risk Assessment of the Permit Application, as last revised on October 23, 1998.

Attachment BBB - Site Hazard Assessment for Mixed Waste Facility

- (1) Site Hazard Assessment Plan for the Mixed Waste Facility dated 10/22/99
- (2) Site Hazard Assessment for the Mixed Waste Facility, dated 1/7/2000

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DEFINITIONS

For purposes of this joint Permit, the following definitions apply unless provided otherwise in an individual Part of this Permit. All definitions contained in 40 CFR §§124.2, 260.10, 270.2, 264.141, 761.3, 761.123, and WAC 173-303-040 are hereby incorporated, in their entirety, by reference into this Permit. Any of the definitions used below, (a) through (z), shall supersede any definition of the same term given in 40 CFR §§124.2, 260.10, 270.2, 264.141, 761.3, and 761.123, and WAC 173-303-040. Where terms are not defined in the regulations or the Permit, the meaning associated with such terms shall be defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

- a. The term "**Accredited Laboratory**" means a laboratory that has been accredited by the Washington State Department of Ecology as described in WAC 173-50.
- b. The term "**Regional Administrator**" means the Regional Administrator of the U.S. Environmental Protection Agency, Region 10 (Agency), or a designated representative. The Director of the Office of Waste and Chemicals Management, U.S. Environmental Protection Agency, Region 10, (with the address as specified on page one [1] of this Permit) is a duly authorized and designated representative of the Regional Administrator for purposes of this Permit.
- c. The term "**Agencies**" means the U.S. Environmental Protection Agency, Region 10, and the Washington State Department of Ecology.
- d. The term "**Agency**" means the U.S. Environmental Protection Agency, Region 10, (with the address as specified on page one [1] of this Permit).
- e. The term "**Area of Concern (AOC)**" means any area of the facility where a release of dangerous constituents (including dangerous waste and hazardous substances) has occurred, is occurring, is suspected to have occurred, or threatens to occur.
- f. The term "**Cleanup Action Plan (CAP)**" means the document issued by the Department under WAC 173-340-360 which selects facility specific corrective measures and specifies cleanup standards (cleanup levels, points of compliance, and other requirements for the corrective measures.)
- g. The term "**Cleanup Standards**" means the standards promulgated under RCW 70.105D.030(2)(d) and include: (1) hazardous substance concentrations (cleanup levels) that protect human health and the environment; (2) the location at the facility where those cleanup levels must be attained (points of compliance); and (3) additional regulatory requirements that apply to a corrective action because of the type of action and/or the location of the facility.

- h. The term "**Corrective Action**" means any activities including investigations, studies, characterizations, and corrective measures, including actions taken pursuant to Chapter 70.105D RCW and Chapter 173-340 WAC, undertaken in whole or in part to fulfill the requirements of WAC 173-303-646 (Corrective Action).
- i. The term "**Corrective Measure**" means any measure or action to control, prevent, or mitigate releases and/or potential releases of dangerous constituents (including dangerous waste and hazardous substances) reviewed and approved by the Department for the facility and set forth in a facility specific Cleanup Action Plan (CAP) prepared in compliance with the requirements of Chapter 173-340 WAC, including WAC 173-340-360 (Selection of Cleanup Actions). Corrective measures may include interim actions as defined by Chapter 173-340 WAC. Interim actions will not necessarily be set forth in a facility specific CAP.
- j. The term "**Critical Systems**," as applied to determining whether a permit modification is required, means those specific portions of a TSD unit's structure or equipment whose failure could lead to the release of mixed waste and mixed-TSCA regulated PCB waste into the environment and/or systems which include processes which treat, transfer, store, or dispose of regulated wastes.
- k. The term "**Dangerous Constituent**" means any constituent identified in WAC 173-303-9905 (Dangerous Waste Constituents) or 40 CFR Part 264, Appendix IX, any constituent which caused a waste to be listed or designated as dangerous under the provisions of Chapter 173-303 WAC, and any constituent defined as a hazardous substance at RCW 70.105D.020(7).
- l. The term "**Dangerous Waste**" means any solid waste designated in WAC 173-303-070 through 173-303-100 as dangerous, extremely hazardous, or mixed waste. Dangerous wastes are considered hazardous substances under RCW 70.105D.020(7).
- m. The term "**Dangerous Waste Constituent**" means any constituent listed in WAC 173-303-9905 (Dangerous Waste Constituents) and any other constituent that has caused a waste to be a dangerous waste under Chapter 173-303 WAC.
- n. The term "**Dangerous Waste Management Unit (DWMU)**" means a contiguous area of land on or in which dangerous waste is placed, or the largest area in which there is a significant likelihood of mixing dangerous waste constituents in the same area, as defined in WAC 173-303-040 (Definitions).
- o. The term "**Days**" means calendar days, unless otherwise defined for a condition or section of this Permit.

- p. The term "**Department**" means the Washington State Department of Ecology (with the address as specified on page one [1] of this Permit).
- q. The term "**Director**" means the Director of the Washington State Department of Ecology or a designated representative.
- r. The term "**Facility**" means:
- a. For the purposes of implementing corrective action pursuant to Module VIII of this Permit, the term "Facility" includes all contiguous property under control of the Permittee under the provisions of Chapter 70.105 RCW or WAC 173-303-040, including the definition of facility at RCW 70.105D.020(3) and 40 CFR §761.3.
 - b. The term "Facility" for the remainder of this Permit means that property identified in the physical description of the area (including land, structures, appurtenances, and improvements) used to manage mixed waste and mixed-TSCA regulated PCB waste.

For both a. and b. above, the property description is as set forth in Attachment AA of this Permit and includes approximately forty-five (45) contiguous acres.

- s. The term "**Hourly Rolling Average**" shall mean the arithmetic mean of the sixty (60) most recent one-minute readings recorded.
- t. The term "**Independent Laboratory**" means a laboratory that is free from the influence, guidance, or control of the Permittee.
- u. The term "**Permit**" means the joint Permit issued by the Washington State Department of Ecology pursuant to Chapter 70.105 RCW and Chapter 173-303 WAC and by the U.S. Environmental Protection Agency, Region 10, pursuant to 42 U.S.C. 3251 et seq., 15 U.S.C §2605(e) (1) et seq., and 40 CFR Parts 124, 270, and 761.
- v. The term "**Special Nuclear Facility**" means nuclear power facilities, facilities subject to 10 CFR Part 21 or other facilities that handle, process, or use by-product, source, or special nuclear materials.

Local special nuclear facilities include Siemens, Washington Public Power Supply System (WPPSS), Pacific Northwest National Laboratory (PNNL), and the Hanford Site facilities.

- w. The term "**Standard Operating Procedure (SOP)**" shall mean a written description of the procedures by which a process, equipment, etc. shall be operated. An SOP may be written by the manufacturer and/or Perma-Fix Northwest, Richland Inc.

- x. The term "**Successful Completion of the Demonstration Test**" shall mean operations including a minimum of three (3), four-hour runs of continuous waste feed without significant interruptions (i.e., each test run was completed on the same day initiated and the samples have been preserved and maintained intact, and one in which sampling of exhaust gas was representative of the GASVIT™ System operations and adequate to achieve evaluation of PCB destruction and removal efficiency (DRE) to the 99.9999% level and PODC's DRE to the 99.99% level.)
- y. The term "**TSCA Regulated PCB Wastes**" means PCBs regulated pursuant to 40 CFR Part 761.
- z. The term "**Mixed-TSCA Regulated PCB Wastes**" means TSCA Regulated PCB Wastes that also contained source, special nuclear, or by-product material subject to regulation under the Atomic Energy Act of 1954, as amended, or naturally-occurring or accelerator-produced radioactive material.

MODULE I - STANDARD CONDITIONS

I.A. EFFECT OF PERMIT

I.A.1. The Permittee is authorized to store and treat mixed wastes and store and dispose of mixed-TSCA regulated PCB wastes in accordance with the conditions of this Permit and the applicable provisions of Chapter 173-303 WAC and 40 CFR Part 761. Any storage or treatment of mixed waste and storage or disposal of mixed-TSCA regulated PCB wastes by the Permittee at this facility that is not authorized by this Permit or by WAC 173-303-830(4)(e) or 40 CFR §270.42(e) and for which a permit is required under WAC 173-303-800, Section 3005 of RCRA, and 40 CFR Part 761 is prohibited. Subject to WAC 173-303-810(8) and 40 CFR §270.4 and Part 761, compliance with this Permit constitutes compliance, for the purposes of enforcement, with Chapter 173-303 WAC, Subtitle C of RCRA, and the applicable 40 CFR Part 761 standards upon which this Permit is based. Issuance of this Permit does not convey any property rights of any sort or any exclusive privilege. Issuance of this Permit does not authorize any injury to persons or property, any invasion of other private rights, or any infringement of federal, state, or local law or regulations.

I.B. PERMIT ACTIONS

I.B.1. This Permit may be modified, revoked and reissued, or terminated for cause as specified in WAC 173-303-830(3), (4), and (5), and in 40 CFR §§270.41, 270.42, and 270.43, and for any other reasons which the Regional Administrator of the U.S. Environmental Protection Agency, Region 10, deems necessary to protect human health and the environment pursuant to 40 CFR §§761.65(d) and 761.60(e). The filing of a request for a permit modification, revocation and re-issuance, or termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition.

I.B.2. This Permit may be renewed as specified in WAC 173-303-810(3), 40 CFR §270.30(b), 40 CFR §761.65(d), 40 CFR §761.60(e), and Permit Condition I.D.2. The Director and Regional Administrator review of any application for a permit renewal will consider improvements in the state of control and measurement technology, as well as changes in applicable regulations.

I.B.3. Permit modifications pursuant to this Permit for mixed waste and mixed-TSCA regulated PCB waste at the request of the Permittee must be done according to the three-tiered modification system specified in WAC 173-303-830(4) and 40 CFR §270.42. The Permit modification request must include change pages to the Permit, attachments, and permit application supporting documentation necessary to incorporate the proposed permit modification.

I.B.4. In addition to other requirements in WAC 173-303-830, within forty five (45) days of a permit change (i.e., permit modification) being

put into effect or approved, the Permittee shall retype the relevant portions of the Permit and attachments, to incorporate the change (if not already reflected in the change pages submitted in the original permit modification request), reprint the documents, and submit them to the Director and Regional Administrator.

I.C. SEVERABILITY

I.C.1. The provisions of this Permit are severable. 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. Invalidation of any state or federal statutory or regulatory provision that forms the basis for any condition of this Permit does not affect the validity of any other state or federal statutory or regulatory basis for said condition.

I.D. DUTIES AND REQUIREMENTS

I.D.1. The Permittee shall comply with all conditions of this Permit, except to the extent and for the duration such noncompliance is authorized by an emergency Permit and does not impact TSCA regulated PCB wastes. Any Permit noncompliance, other than noncompliance authorized by an emergency Permit not impacting TSCA regulated PCB wastes, constitutes a violation of Chapter 173-303 WAC and/or RCRA and/or TSCA and is grounds for: (a) enforcement action; (b) termination of Permit; (c) revocation and re-issuance of Permit; (d) modification of Permit; or (e) denial of a Permit renewal application.

I.D.2. If the Permittee wishes to continue an activity allowed by this Permit after the expiration date of this Permit, the Permittee shall submit a complete application for a Permit at least one hundred and eighty (180) days prior to Permit expiration.

I.D.3. In an enforcement action, it shall not be a defense for the Permittee that it would have been necessary to halt or reduce the Permitted activity in order to maintain compliance with the conditions of this Permit.

I.D.4. In the event of noncompliance with this Permit, the Permittee shall take all reasonable steps to minimize releases to the environment and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment. Such mitigation shall not be a defense to enforcement.

I.D.5. The Permittee shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance/quality control procedures to include following standard

operating procedures (SOPs) and training procedures. SOPs will be at a minimum reviewed and updated as needed by the Permittee. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Permit.

- I.D.6. The Permittee shall furnish to the Director and Regional Administrator, by the date specified by the Director and Regional Administrator, any relevant information which the Director and Regional Administrator request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Permit or to determine compliance with this Permit. The Permittee shall also furnish to the Director and Regional Administrator, upon request, copies of records that are required to be kept by this Permit.
- I.D.7. Pursuant to WAC 173-303-810(10), 40 CFR §270.30(i), and TSCA §11 (15 USC §2610), the Permittee shall allow the Director, Regional Administrator, or authorized representatives upon the presentation of credentials to:
- a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this Permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
 - c. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit;
 - d. Sample or monitor, at reasonable times, for the purposes of assuring Permit compliance or as otherwise authorized by Chapter 173-303 WAC and/or RCRA and/or TSCA, any substances or parameters at any location; and
 - e. Provide to the Department and the Agency a compatible telecommunications link to the Department and the Agency's computers, at locations acceptable to the Department and the Agency, to unrestricted twenty-four (24) hour access to key Perma-Fix Northwest, Richland Inc. facility operating data and emissions monitoring data. The necessary link must be operational before any shakedown thermal operations may begin pursuant to Module VII of this Permit.
- I.D.8. The Permittee shall give advance notice to the Director and Regional Administrator of any planned changes in the permitted facility or activity that may result in noncompliance with Permit requirements.
- I.D.9. The Permittee may not commence treatment or storage of mixed waste and may not commence disposal or storage of mixed-TSCA regulated PCB waste in any new or modified portion of the facility until the Permittee has submitted to the Director and Regional Administrator,

by certified mail or hand delivery, a letter signed by the Permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the Permit and:

- a. The Director or Agency has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the Permit; or
- b. The Director or Agency has either waived the inspection, or has not within fifteen (15) days notified the Permittee of intent to inspect.

I.D.10. Whenever the Permittee becomes aware that it failed to submit relevant facts in the Permit application or submitted incorrect information in a Permit application, or in any report to the Director and/or Regional Administrator, the Permittee shall promptly submit such facts or information.

I.E. MONITORING AND RECORDS

I.E.1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from WAC 173-303-110 or Appendix I of 40 CFR Part 261, or an equivalent method approved by the Director and/or Regional Administrator, as appropriate. Laboratory methods must be those specified in WAC 173-303-110(3)(a), 40 CFR Part 761, or an equivalent method, as specified in Attachment CC.

I.E.2. Pursuant to WAC 173-303-810(11), 40 CFR §§270.30(j)(3) and 761.180, records of monitoring information shall specify:

- a. The dates, exact place, and times of sampling or measurements;
- b. The individuals who performed the sampling or measurements;
- c. The dates analyses were performed;
- d. The individuals who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of such analyses.

I.F. COMPLIANCE NOT CONSTITUTING DEFENSE

I.F.1. Compliance with the terms of this Permit does not constitute a defense to any order issued or any action brought under Sections 3007, 3008, 3013, or 7003 of RCRA (42 U.S.C., Sections 6927, 6928, 6934, and 6973), Section 104 or 107, Section 15(1) and 16(a) of TSCA (15 U.S.C. §§2614 and 6973), and 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601 et seq., commonly known as CERCLA) as amended, or any other federal or state law governing protection of public health or the environment. However, compliance with terms of this Permit does

constitute a defense to any action alleging failure to comply with applicable standards upon which this Permit is based.

I.G. TRANSFER OF PERMITS

- I.G.1. In accordance with reporting requirements in WAC 173-303-810(14)(c) and 40 CFR §270.30(1)(3), the Permittee shall provide notice to the Director and Regional Administrator prior to transfer of ownership or operational control of this Permit to any person. The Director or Regional Administrator will require modification or revocation and re-issuance of the Permit to change the name of the Permittee and incorporate other requirements as may be necessary in accordance with procedures in WAC 173-303-830 and 40 CFR Part 270, Subpart D. Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner or operator in writing of the requirements of Chapter 173-303 WAC and 40 CFR Parts 264, 268, and 270, and this Permit.
- I.G.2. The Permittee must notify the Agency in accordance with 40 CFR §§761.65(h) and 761.65(g)(9) at least thirty (30) calendar days before transferring ownership of the facility or transferring the right to conduct the PCB storage and/or disposal operation. The transferor must also submit to the Agency, at least thirty (30) calendar days before such a transfer, a notarized affidavit signed by the transferee which states that the transferee will abide by the transferor's Agency PCB Storage and Disposal Permit, and documentation of establishment of financial assurance as required under Permit conditions II.O. Within thirty (30) days of receiving such notification, affidavit and documentation, the Agency will issue an amended Permit substituting the transferee's name for the transferors or the Agency may require the transferee to apply for a new PCB storage and/or Disposal Permit. In the latter case, the transferee must abide by the transferor's Agency Permit until the Agency issues the new Permit to the transferee.

I.H. PERMIT EXPIRATION AND CONTINUATION

- I.H.1. This Permit, and all conditions herein, will remain in effect beyond the Permit's expiration date until final Permit determination if the Permittee has submitted a timely, complete application (under 40 CFR, Section 270, Subpart B for HSWA provisions, 40 CFR §§761.65(d) and 761.60(e) for TSCA provisions, and WAC 173-303-806), and, through no fault of the Permittee, the Director or the Regional Administrator has not made a final Permit determination, through their respective authorities, as set forth in 40 CFR Section 270.51 for HSWA provisions, 40 CFR §§761.65(d) and 761.60(e) for TSCA provisions, and in WAC 173-303-840. This Permit may be modified or revoked and reissued as necessary in accordance with 40 CFR §§270.41, 761.65(d), and 761.60(e), and WAC 173-303-830(3). The Permittee is required to continue this Permit for any period

necessary to comply with the corrective action requirements of Module VIII of this Permit.

I.I. REPORTS, NOTIFICATIONS, AND SUBMISSIONS

- I.I.1. All reports, notifications, or other submissions that are required by this Permit to be submitted to the Director and/or the Regional Administrator shall be sent certified mail or hand-delivered to:

Department of Ecology
Nuclear Waste Program
3100 Port of Benton Blvd.
Richland, WA 99354
Telephone: (509) 372-7950

Environmental Protection Agency, Region 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140
Telephone: (206) 553-1253

These phone numbers and addresses may change with notice to the Permittee.

- I.I.2. The Permittee shall, in accordance with 40 CFR §761.60(f)(1)(i), provide a non-confidential, advance written notification at least thirty (30) days before the facility is first used for disposal of TSCA regulated PCBs to the Department, the Agency, the Yakima Indian Nation, the Confederated Tribes of the Umatilla, the Nez Perz, and the appropriate local governments within whose jurisdiction the facility is located.
- I.I.3. The Permittee shall, in accordance with 40 CFR §761.60(f)(1)(ii), at the request of any state, local government, the Yakama Indian Nation, the Confederated Tribes of the Umatilla Indian Reservation, or the Nez Perce Tribe provide an annual notice of the quantities and general description of PCBs disposed during the year. This annual notice shall be given no more than thirty (30) days after the end of the year covered.
- I.I.4. The Permittee shall provide notice to the Agency in accordance with 40 CFR §761.202 prior to the facility first being used for storage or disposal of mixed-TCSA regulated PCB waste.

I.J. CONFIDENTIAL INFORMATION

- I.J.1. Any information submitted by the Permittee to the Director may be claimed as confidential by the Permittee in accordance with applicable provisions of WAC 173-303-810(15).
- I.J.2. Any information submitted by the Permittee to the Regional Administrator may be claimed as confidential by the Permittee in

accordance with 40 CFR Part 2 and 40 CFR §§260.2 and 270.12, applicable provisions of the Freedom of Information Act, 5 USC 552, and the Toxic Substances Control Act, 15 USC §2613, and to any applicable state laws and regulations pertaining to the confidentiality of the information.

I.K. WASTE MINIMIZATION

- I.K.1. Waste Minimization Certification: In accordance with 40 CFR §264.73(b) (9), the Permittee shall place a certification in the operating record on an annual basis that:
- a. A program is in place to reduce the volume and toxicity of hazardous waste generated to the degree determined by the Permittee to be economically practicable; and
 - b. Proposed methods of treatment, storage, or disposal are those practicable methods currently available to the Permittee that minimize the present and future threat to human health and the environment.
- I.K.2. During even numbered years, the Permittee shall include information specified in 40 CFR §§264.75(h) and 264.75(i) in annual reports required by permit condition II.K.3.
- I.K.3. The Permittee shall also comply with the annual report requirements of WAC 173-303-390(2).

I.L. PERMIT REOPENER (WAC 173-303-680)

- I.L.1. If any emission standards specified in Modules VI and VII of this Permit do not comply with the standards, excluding the correction to 7% oxygen, in the final rule modifying 40 CFR Part 264, Subpart O and establishing 40 CFR Part 63, Subpart EEE specific to hazardous waste incinerators, the Permittee is required to submit a permit modification pursuant to 40 CFR §270.42 and permit conditions I.B.3 and I.B.4. This permit modification shall be submitted within one hundred and eighty (180) days of promulgation of the final rule stated above and shall address modification of design and/or operating limitations specified in Modules VI and VII of this Permit as necessary to comply with the emission standards in the final rule for hazardous waste incinerators.

I.M. TWENTY-FOUR (24) HOUR REPORTING

- I.M.1. The Permittee shall verbally report to the Regional Administrator and the Director any noncompliance with this Permit that might endanger human health or the environment immediately, and in any event, not more than twenty-four (24) hours from the time the Permittee becomes aware of the noncompliance in accordance with WAC 173-303-810(14) (f) and 40 CFR §270.30(1) (6). The report shall include:

- a. Information concerning release of dangerous or TSCA regulated PCB wastes that may cause an endangerment to public drinking water supplies;
 - b. Any information of a release or discharge of dangerous or TSCA regulated PCB wastes, or a fire or explosion from the facility, which could threaten human health or the environment outside the facility; and
 - c. The description of the occurrence and its cause shall include any information necessary to fully evaluate the situation and to develop an appropriate course of action.
- I.M.2. Within five (5) calendar days of the time that the Permittee becomes aware of noncompliance that might endanger human health or the environment, the Permittee shall provide to the Regional Administrator and the Director a written submission. The written submission shall contain a description of the noncompliance and its cause, the period of noncompliance including exact dates and times, the anticipated time noncompliance is expected to continue if the noncompliance has not been corrected, and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The Regional Administrator and/or the Director may waive their respective five (5) calendar day written notice requirement in favor of a written report within fifteen (15) calendar days. Upon the Regional Administrator's and Director's receipt of the verbal report from the Permittee under Permit condition I.N.1., the Regional Administrator and the Director will apprise the Permittee whether a written submission within five (5) calendar days or a written report within fifteen (15) calendar days is required.

I.N. OTHER NONCOMPLIANCE

- I.N.1. The Permittee shall report to the Director and the Regional Administrator all other instances of noncompliance with this Permit not reported under Permit condition I.M., at the time monitoring reports are submitted. The reports shall contain the applicable information listed in Permit condition I.M.

I.P. COMPLIANCE SCHEDULE EXTENSIONS

- I.P.1. To the extent that activities required by this Permit are not completed in accordance with the schedules contained therein, and the Permittee can demonstrate to the Director's and the Regional Administrator's satisfaction that the Permittee used best efforts to accomplish the activity within the required schedule, the Agencies may grant the Permittee an extension to the schedule.

TABLE I-1 - REGULATORY AUTHORITY MATRIX

(This table is provided for informational purposes only. Refer to Pages 7 and 8 of the Permit for Discussion of Authorities.)

CONDITIONS	ECOLOGY/RCRA DANGEROUS WASTE ¹	EPA/TSCA ²	EPA/HSWA
Introduction	X	X	X
I.A. Effects of Permit			
I.A.1.	X	X	X
I.B. Permit Actions			
I.B.1.	X	X	X
I.B.2.	X	X	X
I.B.3.	X	X	X
I.B.4.	X	X	X
I.C. Severability			
I.C.1.	X	X	X
I.D. Duties & Requirements			
I.D.1.	X	X	X
I.D.2.	X	X	X
I.D.3.	X	X	X
I.D.4.	X	X	X
I.D.5.	X	X	X
I.D.6.	X	X	X
I.D.7.	X	X	X
I.D.7.a.	X	X	X
I.D.7.b.	X	X	X
I.D.7.c.	X	X	X
I.D.7.d.	X	X	X
I.D.7.e.	X	X	
I.D.8.	X	X	X
I.D.9.	X	X	X
I.D.9.a.	X	X	X
I.D.9.b.	X	X	X
I.D.10.	X	X	X
I.E. Monitoring & Record			
I.E.1.	X	X	X

¹ Ecology authority applies to dangerous waste only.

² EPA/TSCA authority only applies to units that manage mixed-TSCA regulated PCBs and TSCA regulated PCBs as defined in permit conditions III.A.1.d., IV.A.1.d., VA.1.d., VI.A., and VII.A.

* State provision not part of state's authorized program.

** State promulgated analogous to HSWA but not yet authorized

CONDITIONS	ECOLOGY/RCRA DANGEROUS WASTE ¹	EPA/TSCA ²	EPA/HSWA
I.E.2.	X	X	X
I.E.2.a.	X	X	X
I.E.2.b.	X	X	X
I.E.2.c.	X	X	X
I.E.2.d.	X	X	X
I.E.2.e.	X	X	X
I.E.2.f.	X	X	X
I.F. Compliance Not Constituting Defense			
I.F.1.	X	X	X
I.G. Transfer of Permit			
I.G.1.	X		X
I.G.2.		X	
I.H. Permit Expiration & Continuation			
I.H.1.	X	X	X
I.I. Reports, Notifications, & Submissions			
I.I.1.	X	X	X
I.I.2.		X	
I.I.3.		X	
I.I.4.		X	
I.J. Confidential Information			
I.J.1.	X		
I.J.2.		X	X
I.K. Waste Minimization			
I.K.1.			X
I.K.1.a.			X
I.K.1.b.			X
I.K.2.			X
I.K.3.	X		
I.L. Permit Reopener [WAC 173-303-6801 CFR 761.60 (e)]			
I.L.1.	X	X	

¹ Ecology authority applies to dangerous waste only.

² EPA/TSCA authority only applies to units that manage mixed-TSCA regulated PCBs and TSCA regulated PCBs as defined in permit conditions III.A.1.d., IV.A.1.d., VA.1.d., VI.A., and VII.A.

* State provision not part of state's authorized program.

** State promulgated analogous to HSWA but not yet authorized

CONDITIONS	ECOLOGY/RCRA DANGEROUS WASTE ¹	EPA/TSCA ²	EPA/HSWA
I.M. Twenty-Four Hour Reporting			
I.M.1.	X	X	X
I.M.1.a.	X	X	X
I.M.1.b.	X	X	X
I.M.1.c.	X	X	X
I.M.2.	X	X	X
I.N. Other Noncompliance			
I.N.1.	X	X	X
I.P. Compliance Schedule Extensions			
I.P.1.	X	X	X
II.A. General Waste Management			
II.A.1.	X	X	
II.A.1.a.	X	X	
II.A.1.(i)	X		
II.A.1.(ii)	X		
II.A.1.b.	X	X	
II.A.1.c.	X	X	
II.A.2.	X	X	
II.A.3.	X	X	
II.A.4.	X		
II.A.5.	X	X	
II.A.6.	X	X	
II.A.6.a.	X	X	
II.A.6.b.	X	X	
II.A.6.c.	X	X	
II.A.7.	X	X	
II.B. Management of Foreign & Out-of-State			
Mixed Waste			
II.B.1.	X	X	X
II.B.2.	X		
II.B.2.a.	X		
II.B.2.b.	X		

¹ Ecology authority applies to dangerous waste only.

² EPA/TSCA authority only applies to units that manage mixed-TSCA regulated PCBs and TSCA regulated PCBs as defined in permit conditions III.A.1.d., IV.A.1.d., VA.1.d., VI.A., and VII.A.

* State provision not part of state's authorized program.

** State promulgated analogous to HSWA but not yet authorized

CONDITIONS	ECOLOGY/RCRA DANGEROUS WASTE ¹	EPA/TSCA ²	EPA/HSWA
II.C. Facility Contingency Plan			
II.C.1.	X	X	
II.C.2.	X	X	
II.C.3.	X	X	
II.C.4.	X	X	
II.C.5.	X	X	
II.C.6.	X	X	
II.C.7.	X	X	
II.C.8.	X		
II.C.9.	X	X	
II.C.9.a.	X	X	
II.C.9.b.	X	X	
II.C.9.c.	X	X	
II.C.9.d.	X	X	
II.C.9.e.	X	X	
II.C.9.f.	X	X	
II.C.9.g.	X	X	
II.C.9.h.	X	X	
II.C.9.i.	X	X	
II.C.9.j.	X	X	
II.C.9.k.	X	X	
II.C.9.l.	X	X	
II.C.9.m.	X	X	
II.C.9.n.	X	X	
II.D. Preparedness & Prevention			
II.D.1.	X	X	
II.D.2.	X	X	
II.D.3.	X	X	
II.D.4.	X		
II.D.5.	X	X	
II.D.6.	X	X	
II.D.7.	X	X	
II.E. Personnel Training			
II.E.1.	X	X	
II.E.2.	X	X	

¹ Ecology authority applies to dangerous waste only.

² EPA/TSCA authority only applies to units that manage mixed-TSCA regulated PCBs and TSCA regulated PCBs as defined in permit conditions III.A.1.d., IV.A.1.d., VA.1.d., VI.A., and VII.A.

* State provision not part of state's authorized program.

** State promulgated analogous to HSWA but not yet authorized

CONDITIONS	ECOLOGY/RCRA DANGEROUS WASTE ¹	EPA/TSCA ²	EPA/HSWA
II.F. Waste Analysis			
II.F.1.	X	X	X
II.F.2.	X	X	X
II.F.3.	X	X	X
II.F.4.	X	X	X
II.F.5.	X	X	X
II.F.5.a.	X	X	X
II.F.5.b.	X	X	X
II.F.5.c.	X	X	X
II.F.5.d.	X	X	X
II.F.5.e.	X	X	X
II.F.5.f.	X	X	X
II.F.5.g.	X	X	X
II.F.5.h.	X	X	X
II.F.5.i.	X	X	X
II.F.5.j.	X	X	X
II.F.5.k.	X	X	X
II.F.5.l.	X	X	X
II.F.5.m.	X	X	X
II.F.5.n.	X	X	X
II.F.5.o.	X	X	X
II.F.5.p.	X	X	X
II.F.5.q.	X	X	X
II.F.5.r.	X	X	X
II.F.5.s.	X	X	X
II.F.5.t.	X	X	X
II.F.5.u.	X	X	X
II.F.5.v.	X	X	X
II.F.5.w.	X	X	X
II.F.5.x.	X	X	X
II.F.5.y.	X	X	X
II.F.5.z.	X	X	X
II.F.5.aa.	X	X	X
II.F.5.bb.	X	X	X
II.F.5.cc.	X	X	X
II.F.5.dd.	X	X	X
II.F.5.ee.	X	X	X
II.F.5.ff.	X	X	X
II.F.5.gg.	X	X	X
II.F.5.hh.	X	X	X
II.F.5.ii.	X	X	X

¹ Ecology authority applies to dangerous waste only.

² EPA/TSCA authority only applies to units that manage mixed-TSCA regulated PCBs and TSCA regulated PCBs as defined in permit conditions III.A.1.d., IV.A.1.d., VA.1.d., VI.A., and VII.A.

* State provision not part of state's authorized program.

** State promulgated analogous to HSWA but not yet authorized

CONDITIONS	ECOLOGY/RCRA DANGEROUS WASTE ¹	EPA/TSCA ²	EPA/HSWA
II.F.5.jj.	X	X	X
II.F.5.kk.	X	X	X
II.F.5.ll.	X	X	X
II.F.5.mm.	X	X	X
II.F.5.nn.	X	X	X
II.G. Recording & Reporting			
II.G.1.	X	X	X
II.G.2.	X	X	X
II.G.2.a.	X	X	X
II.G.2.a.i.	X	X	X
II.G.2.a.ii.	X	X	
II.G.2.a.iii.	X	X	X
II.G.2.a.iv.	X	X	X
II.G.2.a.v.	X	X	X
II.G.2.a.vi.	X	X	X
II.G.2.a.vii.	X	X	X
II.G.2.a.viii.	X	X	X
II.G.2.a.viii.(a)	X	X	X
II.G.2.a.viii.(b)	X	X	X
II.G.2.a.viii.(c)	X	X	X
II.G.2.a.viii.(d)	X	X	X
II.G.2.a.viii.(e)	X	X	X
II.G.2.a.viii.(f)	X	X	X
II.G.2.a.viii.(g)	X	X	X
II.G.2.a.viii.(h)	X	X	X
II.G.2.a.ix.	X	X	X
II.G.2.a.x.			X
II.G.2.a.xi.		X	
II.G.2.b.	X	X	X
II.G.2.b.i.	X	X	X
II.G.2.b.ii.	X	X	X
II.G.2.b.iii.	X	X	X
II.G.2.b.iv.	X		
II.G.2.b.v.	X	X	X
II.G.2.b.v.(a)	X	X	X
II.G.2.b.v.(b)	X	X	X

¹ Ecology authority applies to dangerous waste only.

² EPA/TSCA authority only applies to units that manage mixed-TSCA regulated PCBs and TSCA regulated PCBs as defined in permit conditions III.A.1.d., IV.A.1.d., VA.1.d., VI.A., and VII.A.

* State provision not part of state's authorized program.

** State promulgated analogous to HSWA but not yet authorized

CONDITIONS	ECOLOGY/RCRA DANGEROUS WASTE ¹	EPA/TSCA ²	EPA/HSWA
II.G.2.b.v. (c)	X	X	X
II.G.2.b.vi.	X		
II.G.2.b.vii.	X		
II.G.2.b.viii.		X	
II.G.2.c.	X	X	
II.G.2.c.i.	X		
II.G.2.c.ii.	X	X	
II.G.2.c.iii.	X	X	
II.G.2.d.	X	X	X
II.G.2.d.i.	X	X	X
II.G.2.d.ii.	X	X	X
II.G.2.d.iii.	X	X	
II.G.2.d.iv.	X	X	
II.G.2.e.	X	X	
II.G.2.e.i.	X	X	
II.G.2.e.ii.	X	X	
II.G.2.e.iii.	X	X	
II.G.2.f.	X	X	
II.H. Security			
II.H.1.	X	X	
II.I. General Inspection Requirements			
II.I.1.	X	X	X
II.J. Equivalent Materials			
II.J.1.	X	X	X
II.J.2.	X	X	X
II.K. Land Disposal Restrictions			
II.K.1.	X**		X
II.L. Design & Construction of the Facility			
II.L.1.	X	X	X
II.L.2.	X	X	X
II.L.3.	X	X	X
II.L.4.	X	X	X
II.M. Closure & Financial Assurance			
II.M.1.	X	X	

¹ Ecology authority applies to dangerous waste only.

² EPA/TSCA authority only applies to units that manage mixed-TSCA regulated PCBs and TSCA regulated PCBs as defined in permit conditions III.A.1.d., IV.A.1.d., VA.1.d., VI.A., and VII.A.

* State provision not part of state's authorized program.

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CONDITIONS	ECOLOGY/RCRA DANGEROUS WASTE ¹	EPA/TSCA ²	EPA/HSWA
II.M.1.a.	X	X	
II.M.1.b.	X	X	
II.M.1.c.	X	X	
II.M.1.d.	X		
II.M.2.	X	X	
II.M.3.	X	X	
II.M.4.	X	X	
II.M.5.	X	X	
II.M.6.	X	X	
II.M.7.	X	X	
II.M.8.	X	X	
II.M.9.	X	X	
II.M.9.a.	X	X	
II.M.9.b.	X	X	
II.M.9.c.	X	X	
II.M.10.	X	X	
II.M.10.a.	X	X	
II.M.10.b.	X	X	
II.M.10.c.	X	X	
II.M.10.d.	X	X	
II.M.11.	X	X	
II.M.12.	X	X	
II.M.12.a.	X	X	
II.M.12.b.	X	X	
II.M.12.c.	X	X	
II.M.13.	X	X	
II.M.13.a.	X	X	
II.M.13.b.	X	X	
II.M.13.c.	X	X	
II.M.13.d.	X	X	
II.M.13.e.	X		
II.M.13.f.	X	X	
II.M.14.	X	X	
II.M.15.	X	X	
II.M.16.		X	
II.M.16.a		X	
II.N. Clean Up Of Released Materials			
II.N.1.	X*		
II.N.1.a.	X*		

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II.N.1.b.	X*		
II.N.1.c.	X*		
II.N.2.	X*		
II.O. Cost Estimate For Closure, Financial Assurance, & Liability Requirements			
II.O.1.	X	X	
II.O.2.	X	X	
II.O.3.	X	X	
II.O.4.	X	X	
II.O.5.	X	X	
II.O.6.	X	X	
II.O.7.	X		
II.O.8.	X	X	
II.O.9.	X	X	
II.O.10.	X	X	
II.O.11.	X	X	
II.P. Organic Air Emission Standards For Process Vents			
II.P.1.	X**		X
II.Q. Organic Air Emission Standards For Equipment Leaks			
II.Q.1.	X**		X
II.R. Organic Air Emission Standards for Tanks, Surface Impoundments, & Containers			
II.R.1.			X
II.S. Final Risk Assessment Report			
II.S.1.	X	X	
II.S.1.a.	X	X	
II.S.1.b.	X	X	
II.S.1.c.	X	X	

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CONDITIONS	ECOLOGY/RCRA DANGEROUS WASTE ¹	EPA/TSCA ²	EPA/HSWA
II.S.1.d.	X	X	
II.S.1.e.	X	X	
II.S.2.	X	X	
II.S.2.a.	X	X	
II.S.2.b.	X	X	
II.S.2.c.	X	X	
II.S.2.d.	X	X	
II.S.2.e.	X	X	
III.A. Container Management Areas & Accumulation Limits			
III.A.1.	X	X	
III.A.1.a.	X		
III.A.1.b.		X	
III.A.1.c.	X		
III.A.1.d.		X	
III.A.1.e.	X	X	
III.A.1.f.	X	X	
III.A.2.	X	X	
III.A.2.a.	X	X	
III.A.2.b.	X	X	
III.A.3.	X	X	
III.B. Container Management Areas: Design & Construction			
III.B.1.	X	X	
III.B.2.	X	X	
III.B.3.	X	X	
III.C. Container Management Practices			
III.C.1.	X	X	
III.D. Container Management Practices			
III.D.1.	X	X	
III.D.1.a.	X	X	
III.D.1.b.	X	X	
III.D.1.c.	X	X	
III.D.1.c.i.	X	X	
III.D.1.c.ii.	X	X	

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CONDITIONS	ECOLOGY/RCRA DANGEROUS WASTE ¹	EPA/TSCA ²	EPA/HSWA
III.D.1.d.	X	X	
III.D.1.e.	X	X	
III.D.1.f.	X	X	
III.D.1.g.	X	X	
III.D.1.g.i.	X	X	
III.D.1.g.ii.	X	X	
III.D.1.g.ii.(a)	X	X	
III.D.1.g.ii.(b)	X	X	
III.D.1.h.	X	X	
III.E. Condition of Containers			
III.E.1.	X	X	
III.F. Identification of Containers & Container Storage Areas			
III.F.1.	X		
III.F.2.	X		
III.F.3.		X	
III.F.4.	X	X	
III.F.4.a.	X	X	
III.F.4.b.	X	X	
III.F.4.c.	X	X	
III.F.4.d.	X	X	
III.F.5.	X		
III.F.6.		X	
III.F.7.		X	
III.G. Compatibility			
III.G.1.	X	X	
III.G.2.	X	X	
III.G.3.	X	X	
III.G.4.	X	X	
III.G.4.a.	X	X	
III.G.4.b.	X	X	
III.H. Containment System			
III.H.1.	X	X	
III.H.2.	X	X	
III.H.3.	X	X	

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CONDITIONS	ECOLOGY/RCRA DANGEROUS WASTE ¹	EPA/TSCA ²	EPA/HSWA
III.H.3.a.	X	X	
III.H.3.b.	X	X	
III.H.3.c.	X	X	
III.H.4.	X	X	
III.H.4.a.	X	X	
III.H.4.b.	X	X	
III.H.4.c.	X	X	
III.H.4.d.	X	X	
III.H.4.e.	X	X	
III.H.5.	X	X	
III.H.5.a.	X	X	
III.H.5.b.	X	X	
III.H.5.c.	X	X	
III.I. Closure			
III.I.1.	X	X	
IV.A. Tank Systems			
IV.A.1.	X	X	
IV.A.1.a.	X		
IV.A.1.b.		X	
IV.A.1.c.	X		
IV.A.1.d.		X	
IV.A.2.	X		
IV.A.3.	X		
IV.A.4.	X		
IV.A.5.		X	
IV.B. Tank System Design & Construction			
IV.B.1.	X	X	
IV.B.2.	X	X	
IV.C. Tank System Installation			
IV.C.1.	X	X	
IV.C.1.a.	X	X	
IV.C.1.b.	X	X	
IV.C.1.c.	X	X	
IV.C.1.d.	X	X	
IV.C.1.e.	X	X	
IV.C.1.f.	X	X	

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CONDITIONS	ECOLOGY/RCRA DANGEROUS WASTE ¹	EPA/TSCA ²	EPA/HSWA
IV.C.1.g.	X	X	
IV.C.1.h.	X	X	
IV.C.1.i.	X	X	
IV.D. Integrity Assessment			
IV.D.1.	X	X	
IV.D.2.	X	X	
IV.D.3.	X	X	
IV.E. Tank Management Practices			
IV.E.1.	X	X	
IV.E.2.	X	X	
IV.E.3.	X	X	
IV.E.4.	X	X	
IV.E.4.a.	X	X	
IV.E.4.b.	X	X	
IV.E.4.c.	X	X	
IV.E.5.	X	X	
IV.E.5.a.	X	X	
IV.E.5.b.	X	X	
IV.E.5.c.	X	X	
IV.E.5.d.	X		
IV.E.5.d.i.	X		
IV.E.5.d.ii.	X		
IV.E.5.e.	X	X	
IV.E.5.f.	X	X	
IV.E.6.	X		
IV.E.7.	X	X	
IV.E.7.a.	X		
IV.E.7.b.	X	X	
IV.E.7.c.	X	X	
V.A. Miscellaneous Units (Excluding GASVIT™ Process as Defined in Modules VI & VII of This Permit			

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CONDITIONS	ECOLOGY/RCRA DANGEROUS WASTE ¹	EPA/TSCA ²	EPA/HSWA
V.A.1.	X	X	
V.A.1.a.	X		
V.A.1.b.		X	
V.A.1.c.	X		
V.A.1.d.		X	
V.A.2.	X	X	
V.A.3.	X		
V.B. Miscellaneous Unit Design & Construction			
V.B.1.	X	X	
V.B.2.	X	X	
V.C. Miscellaneous Unit Installation			
V.C.1.	X	X	
V.C.1.a.	X	X	
V.C.1.b.	X	X	
V.C.1.c.	X	X	
V.C.1.d.	X	X	
V.C.1.e.	X	X	
V.C.1.f.	X	X	
V.C.1.g.	X	X	
V.C.1.h.	X	X	
V.C.1.i.	X	X	
V.D. Integrity Assessment			
V.D.1.	X	X	
V.D.2.	X	X	
V.D.3.	X	X	
V.E. Miscellaneous Unit Management Practices			
V.E.1.	X	X	
V.E.2.	X	X	
V.E.3.	X	X	
V.E.4.	X	X	
V.E.4.a.	X	X	
V.E.4.b.	X	X	

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CONDITIONS	ECOLOGY/RCRA DANGEROUS WASTE ¹	EPA/TSCA ²	EPA/HSWA
V.E.4.c.	X	X	
V.E.5.	X	X	
V.E.5.a.	X	X	
V.E.5.b	X	X	
V.E.5.c.	X	X	
V.E.5.d.	X	X	
V.E.5.d.i.	X	X	
V.E.5.d.ii.	X	X	
V.E.5.e.	X	X	
V.E.5.f.	X	X	
V.E.6.	X	X	
V.E.7.	X	X	
V.E.7.a.	X	X	
V.E.7.b.	X	X	
V.E.7.c.	X	X	
V.E.8.	X	X	
V.E.8.a.	X	X	
V.E.8.b.	X	X	
V.F. Compliance Schedule			
V.F.1.	X		
V.F.2.	X	X	
V.F.3.	X	X	
V.F.4.	X	X	
V.F.5.	X		
V.F.5.a.	X		
V.F.5.b.	X		
V.F.5.c.	X		
V.F.5.d.	X		
V.F.5.e.	X		
V.F.5.f.	X		
V.F.5.g.	X		
V.F.5.h.	X		
V.F.6.	X		
V.F.6.a.	X		
V.F.6.b.	X		
V.F.6.c.	X		
V.F.6.d.	X		
V.F.7.	X		

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CONDITIONS	ECOLOGY/RCRA DANGEROUS WASTE ¹	EPA/TSCA ²	EPA/HSWA
V.F.8.	X		
V.F.9.	X		
V.F.10.	X		X
V.F.10.a.	X		X
V.F.10.b.	X**		X
V.F.10.c.	X		X
V.F.10.c.i.	X		X
V.F.10.c.ii.	X		X
V.F.10.c.iii.	X		X
V.F.10.c.iv.	X		X
V.F.10.c.v.	X		X
V.F.10.d.	X**		X
V.F.11.	X	X	
V.I. Long Term Miscellaneous Thermal Treatment Unit-Normal Operation			
VI.A.1.	X	X	
VI.A.1.a.	X	X	
VI.A.1.a.i.	X	X	
VI.A.1.a.ii.	X	X	
VI.A.1.a.iii.	X	X	
VI.A.1.a.iv.	X	X	
VI.A.1.a.v.	X	X	
VI.A.1.a.vi.	X	X	
VI.A.1.a.vii.	X	X	
VI.A.1.a.viii.	X	X	
VI.A.1.a.ix.	X	X	
VI.A.1.a.x.	X	X	
VI.A.1.a.xi.	X	X	
VI.A.1.a.xii.	X	X	
VI.A.1.a.xii.(a)	X	X	
VI.A.1.a.xii.(b)	X	X	
VI.A.1.a.xii.(c)	X	X	
VI.A.1.a.xiii.	X	X	
VI.A.1.a.xiii.(a)	X	X	
VI.A.1.a.xiii.(b)	X	X	
VI.A.1.a.xiii.(c)	X	X	

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CONDITIONS	ECOLOGY/RCRA DANGEROUS WASTE ¹	EPA/TSCA ²	EPA/HSWA
VI.A.1.a.xiii. (d)	X	X	
VI.A.1.a.xiii. (d) (1)	X	X	
VI.A.1.a.xiii. (d) (2)	X	X	
VI.A.1.a.xiii. (e)	X	X	
VI.A.1.a.xiii. (f)	X	X	
VI.A.1.a.ix.	X	X	
VI.A.1.b.	X	X	
VI.A.1.b.i.	X		
VI.A.1.b.ii.		X	
VI.A.1.b.iii.	X	X	
VI.A.1.b.iv.	X	X	
VI.A.1.b.iv. (a)	X	X	
VI.A.1.b.v.	X	X	
VI.A.1.b.vi.	X	X	
VI.A.1.b.vi. (a)	X	X	
VI.A.1.b.vi. (b)	X	X	
VI.A.1.b.vi. (c)	X	X	
VI.A.1.b.vii.	X	X	
VI.A.1.c.	X	X	
VI.A.1.c.i.	X	X	
VI.A.1.c.ii.	X	X	
VI.A.1.c.iii.	X	X	
VI.A.1.c.iv.	X	X	
VI.A.1.c.v.	X	X	
VI.A.1.c.vi.	X	X	
VI.A.1.c.vii.	X	X	
VI.A.1.c.viii.	X	X	
VI.A.1.c.viii. (a)	X	X	
VI.A.1.c.viii. (b)	X	X	
VI.A.1.c.viii. (c)	X	X	
VI.A.1.c.viii. (d)	X	X	
VI.A.1.c.ix.		X	
VI.A.1.c.x.		X	
VI.A.1.c.xi.	X	X	
VI.A.1.c.xii.	X	X	
VI.A.1.d.	X	X	
VI.A.1.d.i.	X	X	
VI.A.1.d.ii.	X	X	
VI.A.1.d.iii.	X	X	
VI.A.1.e.	X	X	

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VI.A.1.e.i.	X	X	
VI.A.1.e.ii.	X	X	
VI.A.1.e.iii.	X	X	
VI.A.1.f.	X	X	
VI.A.1.f.i.	X	X	
VI.A.1.f.ii.	X	X	
VI.A.1.f.iii.	X	X	
VI.A.1.f.iii.(a)	X	X	
VI.A.1.f.iii.(b)	X	X	
VI.A.1.f.iii.(c)	X	X	
VI.A.1.f.iii.(d)	X	X	
VI.A.1.f.iv.	X	X	
VI.A.1.f.v.	X	X	
VI.A.1.f.vi.	X	X	
VI.A.1.g.	X	X	
VI.A.1.g.i.	X	X	
VI.A.1.g.i.(a)	X	X	
VI.A.1.g.i.(a)(1)	X	X	
VI.A.1.g.i.(a)(2)	X	X	
VI.A.1.g.i.(b)	X	X	
VI.A.1.g.i.(c)	X	X	
VI.A.1.g.i.(d)	X	X	
VI.A.1.g.i.(d)(1)	X	X	
VI.A.1.g.i.(d)(2)	X	X	
VI.A.1.g.i.(d)(3)	X	X	
VI.A.1.h.	X	X	
VI.A.1.h.i.	X	X	
VI.A.1.h.ii.	X	X	
VI.A.1.h.iii.	X	X	
VI.A.1.h.iv.	X	X	
VI.A.1.h.iv.(a)	X	X	
VI.A.1.h.iv.(b)	X	X	
VI.A.1.h.iv.(c)	X	X	
VI.A.1.h.iv.(d)	X	X	
VI.A.1.h.v.	X	X	
VI.A.1.h.v.(a)	X	X	
VI.A.1.h.v.(b)	X	X	
VI.A.1.h.v.(c)	X	X	

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CONDITIONS	ECOLOGY/RCRA DANGEROUS WASTE ¹	EPA/TSCA ²	EPA/HSWA
VII.A. GASVIT™ System			
Description			
VII.A.1.	X	X	
VII.A.1.a.	X	X	
VII.A.1.a.i.	X	X	
VII.A.1.a.ii.	X	X	
VII.A.1.a.iii.	X	X	
VII.A.1.a.iii.(a)	X	X	
VII.A.1.a.iii.(b)	X	X	
VII.A.1.a.iii.(c)	X	X	
VII.A.1.a.iii.(d)	X	X	
VII.A.1.a.iii.(e)	X	X	
VII.A.1.a.iii.(f)	X	X	
VII.A.1.a.iii.(g)	X	X	
VII.A.1.a.iii.(h)	X	X	
VII.A.1.a.iii.(i)	X	X	
VII.A.1.a.iv.	X	X	
VII.A.1.a.v.	X	X	
VII.A.1.a.vi.	X	X	
VII.A.1.a.vii.	X	X	
VII.A.1.a.viii.	X	X	
VII.A.1.a.ix.	X	X	
VII.A.1.a.x.	X	X	
VII.A.1.a.xi.	X	X	
VII.A.1.a.xii.	X	X	
VII.A.1.a.xiv.	X	X	
VII.A.1.a.xv.	X	X	
VII.A.1.a.xv.(a)	X	X	
VII.A.1.a.xv.(b)	X	X	
VII.A.1.a.xv.(c)	X	X	
VII.A.1.a.xvi.	X	X	
VII.A.1.a.xvi.(a)	X	X	
VII.A.1.a.xvi.(b)	X	X	
VII.A.1.a.xvi.(c)	X	X	
VII.A.1.a.xvi.(d)	X	X	
VII.A.1.a.xvi.(d)(1)	X	X	
VII.A.1.a.xvi.(d)(2)	X	X	
VII.A.1.a.xvi.(e)	X	X	
VII.A.1.a.xvi.(f)	X	X	

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** State promulgated analogous to HSWA but not yet authorized

CONDITIONS	ECOLOGY/RCRA DANGEROUS WASTE ¹	EPA/TSCA ²	EPA/HSWA
VII.A.1.a.xvii.	X	X	
VII.A.1.b.	X	X	
VII.A.1.b.i.	X		
VII.A.1.b.ii.	X	X	
VII.A.1.b.iii.	X	X	
VII.A.1.b.iv.	X	X	
VII.A.1.b.iv.(a)	X	X	
VII.A.1.b.iv.(b)	X	X	
VII.A.1.b.v.	X	X	
VII.A.1.b.vi.	X	X	
VII.A.1.b.vii.	X	X	
VII.A.1.b.viii.	X	X	
VII.A.1.c.	X	X	
VII.A.1.c.i.	X	X	
VII.A.1.c.ii.	X	X	
VII.A.1.c.iii.	X	X	
VII.A.1.c.iv.	X	X	
VII.A.1.c.v.	X	X	
VII.A.1.c.vi.	X	X	
VII.A.1.c.vii.	X	X	
VII.A.1.c.viii.	X	X	
VII.A.1.c.viii.(a)	X	X	
VII.A.1.c.viii.(b)	X	X	
VII.A.1.c.viii.(c)	X	X	
VII.A.1.c.viii.(d)	X	X	
VII.A.1.c.ix.	X		
VII.A.1.c.x.	X		
VII.A.1.c.xi.	X	X	
VII.A.1.c.xii.	X	X	
VII.A.1.d.	X	X	
VII.A.1.d.i.	X	X	
VII.A.1.d.ii.	X	X	
VII.A.1.d.iii.	X	X	
VII.A.1.e.	X	X	
VII.A.1.e.i.	X	X	
VII.A.1.e.ii.	X	X	
VII.A.1.e.iii.	X	X	
VII.A.1.f.	X	X	
VII.A.1.f.i.	X	X	
VII.A.1.f.ii.	X	X	

¹ Ecology authority applies to dangerous waste only.

² EPA/TSCA authority only applies to units that manage mixed-TSCA regulated PCBs and TSCA regulated PCBs as defined in permit conditions III.A.1.d., IV.A.1.d., VA.1.d., VI.A., and VII.A.

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CONDITIONS	ECOLOGY/RCRA DANGEROUS WASTE ¹	EPA/TSCA ²	EPA/HSWA
VII.A.1.f.iii.	X	X	
VII.A.1.f.iii.(a)	X	X	
VII.A.1.f.iii.(b)	X	X	
VII.A.1.f.iii.(c)	X	X	
VII.A.1.f.iii.(d)	X	X	
VII.A.1.f.iv.	X	X	
VII.A.1.f.v.	X	X	
VII.A.1.f.vi.	X	X	
VII.A.2.	X	X	
VII.A.2.a.	X	X	
VII.A.2.b.	X	X	
VII.A.2.b.i.	X	X	
VII.A.2.b.ii.	X	X	
VII.A.2.c.	X	X	
VII.A.2.c.i.	X		
VII.A.2.c.ii.	X	X	
VII.A.2.c.ii.(a)	X		
VII.A.2.c.ii.(b)		X	
VII.A.2.c.ii.(c)	X		
VII.A.2.c.ii.(d)		X	
VII.A.2.c.iii.	X	X	
VII.A.2.c.iv.	X	X	
VII.A.2.c.v.	X	X	
VII.A.3.a.	X	X	
VII.A.3.a.i.	X	X	
VII.A.3.a.ii.	X	X	
VII.A.3.a.iii.	X	X	
VII.A.3.b.	X	X	
VII.A.3.c.	X	X	
VII.A.3.c.i.	X	X	
VII.A.3.c.ii.	X	X	
VII.A.3.c.iii.	X	X	
VII.A.3.c.iv.	X	X	
VII.A.3.c.v.	X	X	
VII.A.3.d.	X	X	
VII.A.3.d.i.	X	X	
VII.A.3.d.ii.	X		
VII.A.3.d.iii.	X		

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² EPA/TSCA authority only applies to units that manage mixed-TSCA regulated PCBs and TSCA regulated PCBs as defined in permit conditions III.A.1.d., IV.A.1.d., VA.1.d., VI.A., and VII.A.

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CONDITIONS	ECOLOGY/RCRA DANGEROUS WASTE ¹	EPA/TSCA ²	EPA/HSWA
VII.A.3.d.iii. (a)	X		
VII.A.3.d.iv.		X	
VII.A.3.d.iv. (a)		X	
VII.A.3.d.v.	X	X	
VII.A.3.d.v. (a)	X	X	
VII.A.3.d.v. (b)	X	X	
VII.A.3.d.vi.	X	X	
VII.A.3.d.vi. (a)	X	X	
VII.A.3.d.vi. (b)	X	X	
VII.A.3.d.vi. (c)	X	X	
VII.A.3.d.vi. (d)	X	X	
VII.A.3.d.vii.	X	X	
VII.A.3.d.vii. (a)	X	X	
VII.A.3.d.vii. (b)	X	X	
VII.A.3.d.vii. (c)	X	X	
VII.A.4.	X	X	
VII.A.4.a.	X	X	
VII.A.4.a.i.	X	X	
VII.A.4.a.ii.	X	X	
VII.A.4.a.iii.	X	X	
VII.A.4.a.iv.	X	X	
VII.A.5.	X	X	
VII.A.5.a.	X	X	
VII.A.5.a.i.	X	X	
VII.A.5.a.ii.	X	X	
VII.A.5.a.iii.	X	X	
VII.A.5.b.	X	X	
VII.A.5.c.	X	X	
VII.A.5.c.i.	X	X	
VII.A.5.c.ii.	X	X	
VII.A.5.c.iii.	X	X	
VII.A.5.c.iv.	X	X	
VII.A.5.d.	X	X	
VII.A.5.d.i.	X	X	
VII.A.5.d.ii.	X	X	
VII.A.5.d.iii.	X	X	
VII.A.5.e.	X	X	

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CONDITIONS	ECOLOGY/RCRA DANGEROUS WASTE ¹	EPA/TSCA ²	EPA/HSWA
VII.A.5.e.i.	X	X	
VII.A.5.e.ii.	X	X	
VII.A.5.e.iii.	X	X	
VII.A.5.e.iv.	X	X	
VII.A.5.e.v.	X	X	
VII.A.5.f.	X	X	
VII.A.5.g.	X	X	
VII.A.5.g.i.	X	X	
VII.A.5.g.ii.	X	X	
VII.A.5.g.iii.	X	X	
VII.A.5.g.iv.	X	X	
VII.A.5.g.v.	X	X	
VII.A.5.g.vi.	X	X	
VII.A.5.g.vii.	X	X	
VII.A.5.g.viii.	X	X	
VII.A.5.g.ix.	X	X	
VII.A.5.g.x.	X	X	
VII.A.5.g.xi.	X	X	
VII.A.5.g.xii.	X	X	
VII.A.5.g.xiii.	X	X	
VII.A.5.g.xiv.	X	X	
VII.A.5.g.xv.	X	X	
VII.A.5.g.xvi.	X	X	
VII.A.5.g.xvii.	X	X	
VII.A.5.g.xviii.	X	X	
VII.A.5.g.xix.	X	X	
VII.A.5.g.xx.	X	X	
VII.A.5.g.xxii.	X	X	
VII.A.5.g.xxiii.	X	X	
VII.A.5.g.xxiv.	X	X	
VII.A.5.g.xxv.	X	X	
VII.A.5.g.xxv. (a)	X	X	
VII.A.5.g.xxv. (b)	X	X	
VII.A.5.g.xxv. (c)	X	X	
VII.A.5.g.xxvi.	X	X	
VII.A.5.g.xxvi. (a)	X	X	
VII.A.5.g.xxvi. (b)	X	X	
VII.A.5.g.xxvi. (c)	X	X	

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CONDITIONS	ECOLOGY/RCRA DANGEROUS WASTE ¹	EPA/TSCA ²	EPA/HSWA
VII.A.5.g.xxvii.	X	X	
VII.A.5.g.xxvii. (a)	X	X	
VII.A.5.g.xxvii. (b)	X	X	
VII.A.5.g.xxvii. (b) (1)	X	X	
VII.A.5.g.xxvii. (b) (2)	X	X	
VII.A.5.g.xxvii. (b) (3)	X	X	
VII.A.5.g.xxvii. (c)	X	X	
VII.A.5.g.xxviii.	X	X	
VII.A.5.g.xxix.	X	X	
VII.A.5.g.xxix. (a)	X	X	
VII.A.5.g.xxix. (b)	X	X	
VII.A.5.g.xxix. (c)	X	X	
VII.A.5.g.xxix. (d)	X	X	
VII.A.5.g.xxix. (e)	X	X	
VII.A.5.g.xxx.	X	X	
VII.A.5.g.xxxi.	X	X	
VII.A.5.g.xxxii.	X	X	
VII.A.5.g.xxxiii.	X	X	
VII.A.5.g.xxxiii. (a)	X	X	
VII.A.5.g.xxxiii. (b)	X	X	
VII.A.5.g.xxxiv.	X	X	
VII.A.5.g.xxxv.	X	X	
VII.A.5.g.xxxv. (a)	X	X	
VII.A.5.g.xxxv. (b)	X	X	
VII.A.5.g.xxxv. (c)	X	X	
VII.A.5.g.xxxv. (d)	X	X	
VII.A.5.g.xxxv. (e)	X	X	
VII.A.5.g.xxxv. (f)	X	X	
VII.A.5.g.xxxv. (g)	X	X	
VII.A.5.g.xxxvi.	X	X	
VII.A.5.g.xxxvi. (a)	X	X	
VII.A.5.g.xxxvi. (b)	X	X	
VII.A.5.g.xxxvi. (c)	X	X	
VII.A.5.g.xxxvi. (d)	X	X	
VII.A.5.g.xxxvi. (e)	X	X	
VII.A.5.g.xxxvi. (f)	X	X	
VII.A.5.g.xxxvi. (g)	X	X	
VII.A.5.g.xxxvii.	X	X	
VII.A.5.g.xxxvii. (a)	X	X	

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CONDITIONS	ECOLOGY/RCRA DANGEROUS WASTE ¹	EPA/TSCA ²	EPA/HSWA
VII.A.5.g.xxxvii.(b)	X	X	
VII.A.5.g.xxxvii.(b)(1)	X	X	
VII.A.5.g.xxxvii.(b)(2)	X	X	
VII.A.5.g.xxxvii.(b)(3)	X	X	
VII.A.5.g.xxxviii.	X	X	
VII.A.5.g.xxxviii.(a)	X	X	
VII.A.5.g.xxxviii.(b)	X	X	
VII.A.5.g.xxxviii.(c)	X	X	
VII.A.5.h.	X	X	
VII.A.5.h.i.	X	X	
VII.A.5.h.ii.	X	X	
VII.A.5.h.iii.	X	X	
VII.A.5.h.iv.	X	X	
VII.A.5.h.v.	X	X	
VII.A.5.h.vi.	X	X	
VII.A.5.i.	X	X	
VII.A.5.j.	X	X	
VII.A.5.k.	X	X	
VII.A.5.l.	X	X	
VII.A.5.m.	X	X	
VII.A.5.n.	X	X	
VIII.A. Applicability			
VIII.A.1.	X		
VIII.B. Corrective Action Requirements			
VIII.B.1.	X		
VIII.B.1.a.	X		
VIII.B.1.b.	X		
VIII.B.1.c.	X		
VIII.B.1.c.i.	X		
VIII.B.1.c.ii.	X		
VIII.B.1.d.	X		
VIII.B.2.	X		
VIII.C.	X		
VIII.C.1.	X		
VIII.C.2.	X		
VIII.C.3.	X		
VIII.C.4.	X		
VIII.C.5.	X		

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CONDITIONS	ECOLOGY/RCRA DANGEROUS WASTE ¹	EPA/TSCA ²	EPA/HSWA
VIII.C.6.	X		
VIII.C.7.	X		
VIII.C.8.	X		
VIII.D.	X		
VIII.D.1.	X		
VIII.D.2.	X		
VIII.E.	X		
VIII.E.1.	X		
VIII.E.2.	X		
VIII.F.	X		
VIII.F.1.	X		
VIII.F.2.	X		
VIII.F.3.	X		
VIII.G. Discovery of New Solid Waste Management Units			
VIII.G.1.	X		
VIII.G.1.a.	X		
VIII.G.1.b.	X		
VIII.G.1.c.	X		
VIII.G.2.	X		
VIII.G.3.	X		
VIII.G.4.	X		
VIII.G.5.	X		
VIII.H. Financial Assurance			
VIII.H.1.	X		
VIII.H.2.	X		
VIII.I. Dispute Resolution			
VIII.I.1.	X		
VIII.I.2.	X		
VIII.I.3.	X		
VIII.I.4.	X		
VIII.I.5.	X		

¹ Ecology authority applies to dangerous waste only.

² EPA/TSCA authority only applies to units that manage mixed-TSCA regulated PCBs and TSCA regulated PCBs as defined in permit conditions III.A.1.d., IV.A.1.d., VA.1.d., VI.A., and VII.A.

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MODULE II - GENERAL FACILITY CONDITIONS

II.A. GENERAL WASTE MANAGEMENT

- II.A.1. The Permittee is authorized to accept from off-site generators the wastes specified in Attachment BB (Part A Permit Forms) of this Permit and which meet the waste acceptance criteria in Attachment CC of this Permit. Wastes shall be accepted only from generators with a valid State/EPA identification number, and small quantity generators as defined in WAC 173-303-070(8).
- a. In emergency situations, the Permittee may accept mixed waste generated by generators who do not have a State/EPA identification number. The Permittee shall not accept mixed-TSCA regulated PCB waste generated by generators who do not have a State/EPA identification number.
 - (i) Emergency acceptance shall require prior written authorization, which may be via telecommunications (i.e., facsimiles) from the Director.
 - (ii) If written authorization, pursuant to (i) above, is not possible, and if delay of acceptance of such waste may result in harm to human health or the environment, the Permittee may accept the wastes without prior authorization. In such cases, the Permittee shall notify the Director, of the emergency situation within twenty-four (24) hours of the arrival of the waste at the facility.
 - b. All mixed waste and mixed-TSCA regulated PCB waste shall be managed only in areas authorized for mixed waste and mixed-TSCA regulated PCB waste management under the conditions of this Permit.
 - ~~(i) The Permittee may sample PCB demonstration material, for eventual off site disposal, in the HAZMAT enclosure in Waste Storage Bay #4 cabinets C-4 and E-4 following procedures in the WAP.~~
 - c. Managing wastes, including small quantity generator wastes, at the facility shall in no way hamper the Permittee in meeting the requirements of this Permit, and shall comply with performance standards in WAC 173-303-283, for any area or activity subject to this Permit.
- II.A.2. Before receiving a waste from a particular off-site source, the Permittee shall inform the generator in writing that the Permittee has the appropriate permits for and will accept the mixed waste and mixed-TSCA regulated PCB waste the generator is shipping as required by WAC 173-303-290(3). The Permittee shall keep a copy of this written notice as part of the operating record.

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- II.A.3. The Permittee shall receive and ship out waste, treated and untreated, and treatment equipment through the Access Control Building (Figure 6, building 17), Gate D (trucks), or Gate E (rail spur) as shown in Figure 6 of Attachment GG. All other gates shown in Figure 6 will be used strictly for emergency and maintenance purposes only.
- a. Gate F may be used from November 9, 2010 to May 1, 2011 to ship and receive waste and treatment equipment. After May 1, 2011 gate F will be used strictly for emergency and maintenance purposes only.
- II.A.4. The Permittee shall shut down waste management operations in the Stabilization Building, with the exception of storage, in the event that the Stabilization Building ceases to be maintained under negative air pressure venting through the Stabilization Building Confinement System sufficient to recover fugitive emissions within the building.
- II.A.5. The Permittee shall shut down waste management operations in the GASVIT™ Building, with the exception of storage, in the event that the GASVIT™ Building ceases to be maintained under negative air pressure venting through the GASVIT™ Building Confinement System sufficient to recover fugitive emissions within the building.
- II.A.6. Containment systems for all waste management operations shall be constructed, operated, and maintained to ensure no spilled waste or storm water migrates outside of the containment areas. In particular, the following waste management operations must be within such containment areas:
- a. Loading and unloading of mixed waste and mixed-TSCA regulated PCB wastes;
- b. Staging and processing of mixed waste and mixed-TSCA regulated PCB wastes; and
- c. Transport or movement of mixed waste and mixed-TSCA regulated PCB wastes in open devices, including open container, front end loader bucket, back hoe bucket, uncovered truck, and any others.
- II.A.7.i The Permittee may manage TSCA-regulated PCB remediation waste and/or PCB bulk product waste in the Stabilization Building in the following units: In-container Mixing (TT-03), Low Capacity Mixing (TT-02), Super Compaction/In-drum Compactor (TP-07), Extraction Mixing System (TP-10), Low Capacity Mixing (TT-02), Cutting and Shearing (TP-02), and Sorting (TP-03). The terms and abbreviations used herein shall have the meanings as defined in 40 CFR 761.3 unless otherwise defined within this approval.
- II.A.7.ii The Permittee shall not manage prohibited TSCA material in the Super Compactor/In-Drum Compactor (TP-07), Extraction Mixing

System (TP-10), or Cutting and Shearing (TP-02) systems. Prohibited TSCA materials include, but are not limited to, light ballasts, large and small capacitors, and PCB Articles containing liquid PCBs. The Permittee shall not manage TSCA-regulated PCB remediation waste and/or PCB bulk product waste in the Size Reduction and Screening Unit TP-01 in the STB.

- II.A.7.iii The Permittee shall only manage TSCA-regulated PCB remediation waste and/or PCB bulk product waste in the Stabilization Building that has undergone 100% visual verification to ensure that no prohibited TSCA materials are present. Visual verification must be conducted in a ventilated area of the facility.
- II.A.7.iv The Permittee shall maintain a detailed inventory of the materials observed during the visual verification in accordance with Section C-4 of the WAP.
- II.A.7.iv The Permittee shall not process, dilute, or blend TSCA-regulated PCB waste or bulk product waste in order to meet PCB concentration limits for compliance with WAC 173-303-140. Wastes that initially contain greater than or equal to 50 ppm PCBs prior to processing shall remain regulated as greater than or equal to 50 ppm and subject to TSCA regulation even if the PCB concentrations are less than 50 ppm after processing. 40 C.F.R. 761.20(c)(2)(iii), 761.1(b)(5)
- II.A.7.vi The Permittee shall monitor the indoor air continuously during processing of TSCA-regulated PCB remediation waste or PCB bulk product waste in accordance with Appendix F of Attachment 1, Section F-7 of the Waste Analysis Plan.
- II.A.7.vii After processing TSCA-regulated PCB remediation wastes or PCB bulk product waste in any of the waste treatment units in the STB, the Permittee shall ensure that the equipment, sumps, and/or surfaces that have been in contact with TSCA-regulated PCB or PCB bulk product wastes are decontaminated according to 40 CFR 761.79.

II.B. MANAGEMENT OF FOREIGN AND OUT-OF-STATE MIXED WASTE

- II.B.1. The Permittee shall notify the Director and/or Regional Administrator, as applicable, in writing at least four (4) weeks in advance of the date the Permittee expects to receive mixed waste from a foreign source, as required by WAC 173-303-290(1) and 40 CFR §264.12(a). Notice of subsequent shipments of the same waste, from the same foreign source, in the same calendar year is not required. Pursuant to 40 CFR §761.93, the Permittee shall not import PCBs or PCB items from outside of the customs territory of the United States as defined in 40 CFR §720.3, without an exemption issued under the authority of TSCA Section 6(e)(3).
- II.B.2. The Permittee shall notify the Director, in writing, at least four (4) weeks in advance of the date the Permittee expects to receive any mixed waste from an out-of-state generator.
- a. This notification must include the name and address of the generator, the expected total volume of mixed waste to be received by the Permittee, and the waste shipment schedule.
 - b. The Permittee must also certify in this notification that the generator will be shipping the waste in compliance with the applicable state and federal transportation requirements.

II.C. FACILITY CONTINGENCY PLAN

- II.C.1. The Permittee shall carry out the provisions of the Contingency Plan, Attachment GG of this Permit, pursuant to WAC 173-303-360(2), 40 CFR §761.60(e), and 40 CFR §761.65(d)(4)(iv), whenever there is a release of mixed waste or mixed-TSCA regulated PCB waste or mixed waste and mixed-TSCA regulated PCB waste constituents, or other emergency circumstance, any of which threatens human health or the environment.
- II.C.2. The Permittee shall comply with the requirements of WAC 173-303-350(4), 40 CFR §§761.65(d)(4)(iv) and 761.60(e) for maintaining copies of the Contingency Plan, Attachment GG of this Permit, at the Facility and providing copies to the authorities listed therein.
- II.C.3. The Permittee shall review and amend, if necessary, the Contingency Plan, Attachment GG of this Permit, pursuant to WAC 173-303-350(5), 40 CFR §761.60(e), and 40 CFR §§761.65(d)(4)(iv) and 270.42, Permit conditions I.B.3. and I.B.4., and in accordance with the provisions of WAC 173-303-830, Appendix 1,A,6.

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- II.C.4. The Permittee shall complete and provide to the Agency and the Department signed emergency coordination agreements, as specified in Attachment GG of this Permit, with the local special nuclear facilities and support services to be placed in Appendix C of the Contingency Plan, Attachment GG of this Permit, before start of operation of the facility.
- II.C.5. The Permittee shall comply with requirements for waste analysis specified in Appendix E of the Contingency Plan, Attachment GG of this Permit, for all mixed waste and mixed-TSCA regulated PCB waste accepted by the facility.
- II.C.6. The Permittee shall note in the facility operating record the time, date, and details of any incident that requires implementing the Contingency Plan, Attachment GG of this Permit. Within fifteen (15) days after the incident, the Permittee shall submit a written report on the incident to the Director and Administrator. Such a report shall at a minimum include all items specified in WAC 173-303-360(2)(k).
- II.C.7. All wastes described as "RCRA wastes" or "RCRA contaminated wastes" in the Contingency Plan, Attachment GG of this Permit, for the purpose of this Permit, shall mean "dangerous waste."
- II.C.8. All references in Attachment GG of this Permit made to "PCB contaminated wastes" or "PCB wastes" shall mean "mixed TSCA regulated PCB wastes" as defined in Module I of this Permit.

II.D. PREPAREDNESS AND PREVENTION

- II.D.1. In accordance with WAC 173-303-340 and 40 CFR §§761.60(e) and 761.65(d)(4)(iv), the Facility shall be designed, constructed, maintained, and operated to minimize the possibility of fire, explosion, or any unplanned sudden or non-sudden release of mixed waste and mixed-TSCA regulated PCB waste to air, soil, or ground water that could threaten human health or the environment.
- II.D.2. The Permittee shall follow the procedures in the Preparedness and Prevention Measures Plan included as Attachment II of this Permit.
- II.D.3. The Permittee shall test and maintain the equipment specified in Permit condition II.D.1. as necessary to ensure proper operation in the event of emergency.
- II.D.4. The Permittee shall comply with WAC 173-303-340(4) and WAC 173-303-355(1) pertaining to arrangements with local authorities.
- II.D.5. The Permittee shall ensure all safety equipment, such as eyewash units and emergency showers, remain operable at all time, including during periods of subfreezing temperatures.

- II.D.6. The Permittee shall obtain and submit to the Director and Regional Administrator a permit modification to request an amendment to Attachment II of this Permit, which addresses procedures for reporting and managing (including storage) of contaminated equipment, within sixty (60) days of the effective date of this Permit pursuant to Permit conditions I.B.3. and I.B.4. The Permittee shall not commence management of mixed waste or mixed-TSCA regulated PCB waste at the facility until this modification request is approved by the Director and the Administrator.
- II.D.7. The Permittee shall ensure all containment areas are inspected and maintained such that they are free of cracks, gaps, loss of integrity, corrosion and are impervious to leaks, spills, and accumulation of rainfall until the collected material is removed.

II.E. PERSONNEL TRAINING

- II.E.1. The Permittee shall conduct personnel training in accordance with the Training Plan, Attachment FF of this Permit, pursuant to WAC 173-303-330 and 40 CFR §§761.60(e) and 761.65(d)(4)(iv). The Permittee shall maintain documents in accordance with WAC 173-303-330(2) and (3). Training records shall be maintained in the Facility Operating Record until the facility is fully closed and certified.
- II.E.2. The Permittee shall establish a training and certification program, for each person who has responsibilities for operations that may affect emissions from the GASVIT™ System that conforms to the American Society of Mechanical Engineers Standard Number QHO-1-1994. The Permittee shall ensure that the source is operated and maintained at all times by persons who are trained and certified to perform these and any other duties that may affect emissions from the GASVIT™ System [WAC 173-303-815(2)(b)(ii) and 40 CFR §761.60(e)].

II.F. WASTE ANALYSIS

- II.F.1. The Permittee shall maintain full knowledge of any wastes to be managed by the Facility before acceptance, after receipt, and during treatment and storage of these wastes. The Permittee will ensure this knowledge through compliance with the requirements of WAC-173-303-300, 40 CFR §264.13, and with the provisions of the Waste Analysis Plan, Attachment CC of this Permit, as amended by condition II.F.5.
- II.F.2. The Permittee shall allow independent sampling and sample splitting when requested by the Director or the Agency. At the Permittee's request, the Director or the Agency will inform the Permittee of all analyses to be performed on split samples.
- II.F.3. The Permittee shall submit samples for analysis by an independent, accredited laboratory upon request by the Director or Administrator.

Such submittals shall be limited to two (2) events per year, and twelve (12) samples per event.

- II.F.4. The Action Limits listed in table B-1a, "Methods Detection Limits and Limits of Quantitation" of the Quality Assurance Plan, Appendix B of the Waste Analysis Plan, Attachment CC of this Permit, are for informational purposes only. The exact and accurate limits to be used can be found in 40 CFR §268.40.

II.G. RECORD KEEPING AND REPORTING

- II.G.1. In addition to the record keeping and reporting requirements specified elsewhere in this Permit, the Permittee shall comply with all the applicable notification, certification, and record keeping requirements described in WAC 173-303-380(1)(j), (k), (n), and (o), 40 CFR §§268.7, 761.65(e), 761.65(f), 761.65(g), and 761.180.
- II.G.2. The Permittee shall maintain a written or electronic operating record at the Facility consisting of records kept for the length of time specified below. Also, the Permittee shall record all information referenced in this Permit in the operating record within forty-eight (48) hours of the information becoming available. The operating record shall include, but is not limited to, the information listed below:
- a. The following records shall be maintained until final closure certification and corrective action certification pursuant to Module VIII of this Permit are accepted by the agencies:
- (i) An up-to-date map showing the locations where mixed waste and mixed-TSCA regulated PCB waste are managed within the facility;
 - (ii) Assessment reports pursuant to Permit Condition II.C.6. and WAC 173-303-360(2)(k) of all incidents that require implementation of the Contingency Plan, Attachment GG of this Permit;
 - (iii) Record of spills and releases;
 - (iv) Written reports and records of verbal notification to the Director and the Regional Administrator to address releases, fires, and explosions;
 - (v) Summaries of all records of corrective action;
 - (vi) All other environmental permits;
 - (vii) Corrective action deed notification;
 - (viii) Records and results of waste analyses required by Waste Analysis Plan, Attachment CC of this Permit, and WAC 173-303-380(1)(c) that include at a minimum:

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- (a) The date(s), exact location, and times of sampling or measurements;
 - (b) The name(s) of the individual(s) who performed the sampling or measurements;
 - (c) The date(s) analyses were performed demonstrating that EPA SW-846 holding times were satisfied;
 - (d) The name of the individual(s) who performed the analyses;
 - (e) The analytical techniques or methods used;
 - (f) The analytical results;
 - (g) The QA/QC summary; and
 - (h) The unique identity of the equipment or instrument used for the analysis including, the type/model number and either the serial number or the inventory number.
- (ix) Training records of facility personnel;
 - (x) Certifications pursuant to 40 CFR §264.73(b) (9), Annual Waste Reduction Plan; and
 - (xi) Records to document compliance with the storage and disposal timeframe requirements of 40 CFR §761.65(a).
- b. The following records shall be maintained for a minimum of five (5) years. This time period may be extended by the Director or Regional Administrator, in the event of enforcement action or notification by the Director or Regional Administrator, that an investigation is ongoing. In the case of notification of investigation, the Permittee will not be required to keep the records longer than one (1) year past the normal time frame unless an enforcement action is issued.
- (i) Facility operation and maintenance records and reports prepared pursuant to this Permit;
 - (ii) Date(s) and method(s) of treatment used for waste process operation including name(s) of personnel performing actual operation;
 - (iii) Progress reports and any required notifications prepared pursuant to this Permit;
 - (iv) The notice and certification required of a generator under WAC 173-303-140 and 40 CFR Part 268 (Land Disposal Restrictions);

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- (v) Records of all inspection and monitoring information meeting requirements of WAC 173-303-320(2)(d), 40 CFR §264.15, and this Permit including, at a minimum, the following calibration and maintenance records:
 - (a) The date and time of data recording;
 - (b) The name of the person taking and recording the information; and
 - (c) The recorded information itself whether consisting of observation, data measurement, instrument reading, or any other monitoring method.
 - (vi) Records of all inspections meeting the requirements in WAC 173-303-395(1)(d); and
 - (vii) Annual reports submitted in compliance with WAC 173-303-220(1), Generator Report - Form 4. However, if the reports are necessary to supplement the facility operating record, they must be retained until final closure and corrective action is complete and certified.
 - (viii) Annual reports submitted in compliance with 40 CFR §761.180(b).
- c. The following records shall be maintained for a minimum of three (3) years. This time period may be extended by the Director or Regional Administrator in the event of enforcement action or notification by the Director or Regional Administrator, that an investigation is ongoing. In the case of notification of investigation, the Permittee will not be required to keep the records longer than one (1) year past the normal time frame unless an enforcement action is issued:
- (i) Annual reports submitted in compliance with WAC 173-303-390(2), TSD Facility Report - Form 5. However, if the reports are necessary to supplement the facility operating record, they must be retained until final closure and corrective action is complete and certified;
 - (ii) Manifests and any required unmanifested shipment or exception reports; and
 - (iii) Training records of former facility personnel.
- d. Up-to-date copies of the following documents as amended, revised, and modified shall be maintained at the facility until final closure certification and corrective action certification pursuant to Module VIII of this Permit is accepted by the agencies:

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- (i) The Permit and all Attachments;
 - (ii) The Part B Permit Application;
 - (iii) Documentation of arrangements made with local authorities pursuant to WAC 173-303-340; and
 - (iv) All closure, interim measures, and final corrective action cost estimates, financial assurance documents prepared pursuant to this Permit, as well as the company names and addresses of facility insurers.
- e. For all new tank systems and components, pursuant to WAC 173-303-640(3) and 40 CFR §761.65(d) (4) (iv):
- (i) An assessment by an independent, registered, professional engineer or by an independent, qualified tank installation inspector not affiliated with the tank vendor and certified by an independent, registered, professional engineer, that the tank system was installed properly and that all discrepancies have been repaired as required by WAC 173-303-640(3) (c);
 - (ii) Results of tightness testing and integrity assessments; and
 - (iii) For all tanks that require corrosion protection, a written statement from a corrosion expert that attests to the proper design and installation of any corrosion protection measures.
- f. The results of periodic tightness testing and integrity assessments of all tank systems.

II.H. SECURITY

- II.H.1. The Permittee shall comply with the security provisions specified in Security Procedures and Equipment, Attachment DD of this Permit, pursuant to WAC 173-303-310, 40 CFR 761.60(e), and 40 CFR §761.65(d) (4) (iv), except reference to permit application, Attachment 15, Figure 1 is hereby replaced with reference to permit application, Attachment 15, Figure 2. The Permittee may comply with the requirements of WAC 173-303-310(2) on a unit-by-unit basis.

II.I. GENERAL INSPECTION REQUIREMENTS

- II.I.1. The Permittee shall inspect the Facility to prevent malfunctions and deterioration, operator errors, and discharges that may cause or lead to the release of mixed waste or mixed-TSCA regulated PCB waste constituents to the environment, or a threat to human health. Inspections must be conducted in accordance with the Facility Inspection Plan, Attachment EE, pursuant to WAC 173-303-320, 40 CFR §761.60(e), and 40 CFR §761.65(d) (4) (iv).

II.J. EQUIVALENT MATERIALS

- II.J.1. If certain equipment, materials, and administrative information (such as names, phone numbers, addresses) are specified in this Permit, the Permittee may use an equivalent or superior substitutes. Use of such equivalent or superior items within the limits (e.g., ranges, tolerances, and alternatives) already clearly specified in sufficient detail in the attachments to this Permit are not considered a modification of the Permit; however, the Permittee must place documentation of the substitution, accompanied by a narrative explanation and the date the substitution became effective, in the operating record within seven (7) days of putting the substitution into effect, and submit documentation of the substitution to the agencies. Upon review of the documentation of the substitution, if deemed necessary, the agencies may require the Permittee to submit a permit modification in accordance with Permit conditions I.B.3. and I.B.4.
- II.J.2. If the Agencies determine that a substitution was not equivalent to the original, it will notify the Permittee that the Permittee's claim of equivalency has been denied, of the reasons for the denial, and that the original material or equipment must be used. If the product substitution is denied, the Permittee shall comply with the original approved product specification, find an acceptable substitution, or apply for a permit modification in accordance with Permit conditions I.B.3. and I.B.4.

II.K. LAND DISPOSAL RESTRICTIONS

- II.K.1. The Permittee shall comply with all Land Disposal Restriction requirements as set forth in WAC 173-303-140 and 40 CFR Part 268.

II.L. DESIGN AND CONSTRUCTION OF THE FACILITY

- II.L.1. The Permittee shall conduct all construction subject to this Permit in accordance with the approved designs, plans, and specifications that are required by this Permit, except as specified in Conditions II.L.2. or II.L.3. For purposes of Conditions II.L.2. and II.L.3., a Department construction inspector or TSD unit manager are designated representatives of the Department.
- II.L.2. The Permittee shall submit a nonconformance report (NCR) to the Regional Administrator and Director, as applicable, within five (5) calendar days of the Permittee becoming aware of incorporation of minor nonconformance from the approved designs, plans, and specifications into the construction of critical systems, as defined in Module I of this Permit. Such minor nonconformance shall be defined for the purposes of this permit condition, as

nonconformance that is necessary to accommodate proper construction and the substitution of the use of equivalent or superior materials or equipment that do not substantially alter the permit conditions or reduce the capacity of the facility to protect human health or the environment. Such minor nonconformance shall not be considered a modification of this Permit. If the Department and/or the Agency determine that the nonconformance is not minor, it will notify the Permittee in writing that a permit modification is required for the deviation and notify the Permittee in writing whether prior approval is required from the Department and/or the Agency before work proceeds which affects the nonconforming item.

- II.L.3. The Permittee shall formally document with a nonconformance report incorporation of minor nonconformance from the approved designs, plans, and specifications into the construction of noncritical systems subject to this Permit. Such minor nonconformance shall not be considered a modification of this Permit. All nonconformance reports shall be maintained in the Facility Operating Record and shall be made available to the Department and the Agency upon request or during the course of an inspection. If the Department and/or the Agency determine that the nonconformance is not minor, it will notify the Permittee in writing that a permit modification is required for the deviation and whether prior approval is required from the Department and/or the Agency before work proceeds which affects the nonconforming item.
- II.L.4. Upon completion of the Facility construction subject to this Permit, the Permittee shall produce as-built drawings of the project which incorporate the design and construction modifications resulting from all nonconformance reports as well as modifications made pursuant to Permit conditions I.B.3. and I.B.4. The Permittee shall place the as-built drawings into the operating record within twelve (12) months of completing construction.

II.M. CLOSURE

- II.M.1. The Permittee shall close the Facility in a manner that:
- a. Minimizes the need for further maintenance;
 - b. Controls, minimizes, or eliminates to the extent necessary to protect human health and the environment, postclosure escape of mixed waste and mixed-TSCA regulated PCB waste constituents, leachate, contaminated run-off, or mixed waste and mixed-TSCA regulated PCB waste decomposition products to the ground, surface water, ground water, or the atmosphere;
 - c. Returns the land to the appearance and use of surrounding land areas to the degree possible given the nature of the previous mixed waste and mixed-TSCA regulated PCB waste activity; and
 - d. Meets the requirements of WAC 173-303-610(2)(b).

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- II.M.2. The Permittee shall provide to the Agency and Department a Notification of Closure pursuant to in WAC 173-303-610(3)(c), 40 CFR §§761.60(e), 761.65(e), and 761.65(d)(4)(iv) at least sixty (60) calendar days prior to the date closure is expected to begin.
- II.M.3. After the Notification of Closure pursuant to WAC 173-303-610(3)(c), 40 CFR §§761.60(e), 761.65(e), and 761.65(d)(4)(iv), the Permittee shall provide the Department and the Agency with reasonably available results of previous analyses of soil samples from the facility, if such results are requested by the Agency and the Department.
- II.M.4. The Permittee shall close all waste management areas within one hundred and eighty (180) calendar days of the date the Permittee receives the final volume of wastes.
- II.M.5. The Permittee shall commence closure of the unit(s) no later than thirty (30) calendar days after the date on which the unit received its final quantity of waste.
- II.M.6. Closure shall be conducted according to Attachment HH of this Permit, as modified by Permit conditions II.M.7. through II.M.15.
- II.M.7. The Permittee shall submit to the Director and the Regional Administrator a detailed sampling and analysis plan, including a quality assurance project plan, at least eight (8) weeks in advance of scheduled collection of samples to support final closure. This submittal shall be made pursuant to Permit conditions I.B.3. and I.B.4. as a Class 1 Permit Modification with approval of the Director and the Regional Administrator. That plan shall include information outlined for it in Attachment HH of this Permit.
- II.M.8. Sampling and analysis at the time of closure shall be conducted in accordance with the closure plan in Attachment HH of this Permit and the detailed sampling and analysis plan submitted and approved pursuant to Permit Condition II.M.7.
- II.M.9. At the time of final closure, the Permittee shall inspect the integrity of all subsurface drainage piping that is, or had been, connected to any secondary containment area, and collection sumps within the Facility.
- a. The Permittee shall take a bias soil sample at each secondary containment area low spots, surface collection sump, at the location of any break, crack, or gap in subsurface drainage piping, and at all drainage pipe discharge locations. As specified in Attachment HH of this Permit for other soil samples, these soil samples shall be analyzed for volatile organic constituents, semivolatile organic constituents, total metals, PCBs, pesticides, cyanides, sulfides, and pH.
- b. If the Permittee upgrades or closes any area in which mixed waste or mixed-TSCA regulated PCB waste have been managed before final closure of the facility, the Permittee shall

inspect subsurface drainage piping for breaks, cracks, or gaps. The Permittee shall sample and analyze soils as specified in Permit condition II.M.9.a.

- c. Records of inspections and sampling of soil associated with secondary containment low spots, surface collection sumps, and subsurface drainage piping that occurs prior to final closure of the facility shall be maintained in the facility operating record until final closure and corrective action are complete and certified.
- II.M.10. The Director and Regional Administrator may require additional investigation after the Permittee implements the approved sampling and analysis plan if the Director and Regional Administrator as applicable determine that the sampling and analyses have not adequately demonstrated that clean closure has been achieved. Additional sampling and analysis may be required for the following reasons:
- a. Specialized sample collection or analytical techniques are required to ensure adequate quantitation limits for chemical constituents of concern;
 - b. Results indicate additional constituents should be analyzed at certain locations of the facility;
 - c. Results indicate additional soil sampling and analysis are required at certain locations of the facility; or
 - d. Other reasons that indicate the sampling and analysis plan has not adequately demonstrated whether clean closure has been achieved.
- II.M.11. The standards for clean closure of soils are numeric cleanup levels calculated using residential exposure assumptions according to the Model Toxics Control Act (MTCA) regulations (Chapter 173-340 WAC), under taken in order to satisfy the requirements of WAC 173-303-610, and for PCBs the more stringent of the Model Toxics Control Act (MTCA) regulations (Chapter 173-340 WAC) and 40 CFR §761.61. For soils, clean closure means removal or remediation of all mixed waste and mixed-TSCA regulated PCB waste or mixed waste and mixed-TSCA regulated PCB waste constituents or residues to or below these numeric cleanup levels.
- II.M.12. If the value from a soil sample analysis is above the clean closure level for any constituent, then the area represented by the sample will be considered to be above the standard for clean closure and the Permittee shall propose additional actions. The Director and Regional Administrator, as applicable, will determine whether the additional actions proposed are adequate considering the circumstances at the facility. If the Director or Regional Administrator, as applicable, determines the actions proposed by the Permittee are not adequate, then the Director or Regional Administrator, as applicable, will specify additional actions to be

taken. Examples of additional actions include, but are not limited to, the following:

- a. Removing or remediating soil that has contamination above the cleanup levels followed by confirmational sampling to ensure clean closure standards are met.
- b. Reanalyzing soils of the area represented by the sample that has contamination above the cleanup levels using other samples taken within the area and applying approved statistical methods. Approved statistical methods include calculating the upper ninety five (95) percent confidence interval about the mean for sample data. If this parameter value is lower than the soil clean closure level for the constituent in question, no single sample level is greater than two (2) times the soil clean closure level, and less than ten (10) percent of all samples are above the clean closure level, then the area represented by the sample will be considered to meet the clean closure standards for that constituent. Samples included in this statistical analysis must be randomly selected and the distribution of their concentrations must fit a lognormal or normal distribution. This approach would not be applied to soil sample analysis which exceeds the clean-up levels for PCBs pursuant to 40 CFR §761.61.
- c. Establishing post closure care/restricted access for the areas not able to attain clean closure standards.

II.M.13. Activities of an independent registered professional engineer to assure that closure is conducted in accordance with the approved plan and requirements of this Permit shall specifically include, but not be limited to, field observation and record review of the following:

- a. Sampling procedures;
- b. Locations of soil sampling to ensure locations were as specified in the sampling and analysis plan;
- c. Sample labeling and handling including chain of custody procedures;
- d. Tank decontamination procedures to ensure that closure plan requirements for decontamination and rinsate management were followed and that tanks were adequately cleaned;
- e. Procedures to achieve a "clean debris surface" were as specified in 40 CFR §268.45, Table 1 for metal and concrete surfaces; and

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- f. Inspection of secondary containment low spots, surface collection sumps and subsurface drainage piping and sampling of soil as required by Permit Condition II.M.9.
- II.M.14. Documentation supporting the independent registered professional engineer's certification of closure shall be submitted to the Director and Regional Administrator, with the closure certification pursuant to WAC 173-303-610(6), 40 CFR §761.60(e), and 40 CFR §761.65(e)(8) within sixty (60) calendar days after completion of closure.
- II.M.15. The Director and Regional Administrator may require modification of the closure plan if the facility begins receiving different mixed waste and mixed-TSCA regulated PCB waste that require different management practices or changes to the Part A Permit Forms or if additional significant releases occur at the facility prior to the time of closure.
- II.M.16. The following amendment to the Closure Plan, Attachment HH of this Permit, is hereby made. The Permittee shall submit the revised pages reflecting these amendments to the Director and Regional Administrator, within sixty (60) days of the effective date of this Permit:
- a. All references to "40 CFR §761.125" shall be replaced with "40 CFR §761.61".

II.N. CLEAN UP OF RELEASED MATERIAL

- II.N.1. The Permittee shall comply with the requirements of WAC 173-303-145 including, but not limited to, notification, mitigation, and control measures specified in WAC 173-303-145(2) and (3) under the following circumstances:
- a. A spill or non-permitted discharge of dangerous waste or hazardous substance occurs onto the ground, into the ground water, or into the surface water;
- b. A spill or non-permitted discharge of dangerous waste or hazardous substance results in emission into the air such that human health or the environment is threatened; and
- c. Other spills or discharges occur which threaten human health or the environment.
- II.N.2. In consideration of health and safety risks to personnel, the Permittee shall remove spilled or leaked waste within secondary containment immediately upon detection.

II.O. COST ESTIMATE FOR CLOSURE, FINANCIAL ASSURANCE, AND LIABILITY REQUIREMENTS

- II.O.1. The Permittee shall maintain a current closure cost estimate for each unit identified in Parts III, IV, V, VI, and VII of this

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- Permit. The costs shall be summarized by the Permittee for final closure of the entire facility.
- II.O.2. The Permittee shall adjust the closure cost estimate for inflation on an annual basis pursuant to WAC 173-303-62093)(c), 40 CFR §761.65(f)(2), and 40 CFR §761.60(e). The adjusted closure cost estimate shall be submitted to the Director, Regional Administrator, and guarantor, if applicable.
- II.O.3. The Permittee shall furnish certification of partial or final closure before requesting authorization from the Director and/or Regional Administrator, as applicable, to reduce cost estimates pursuant to WAC 173-303-610(6), 40 CFR §§264.115, 761.60(e), and 761.65(h).
- II.O.4. The Permittee shall keep, at the facility, the most current closure cost estimate pursuant to WAC 173-303-610(6), 40 CFR §§264.142(d), 761.60(e), and 761.65(f)(4).
- II.O.5. The Permittee shall demonstrate continuous compliance with WAC 173-303-620(4), 40 CFR §§264.143, 761.60(e), and 761.65(g) by providing documentation of financial assurance in at least the amount of the current cost estimate. A copy of the required documentation shall be submitted to the Director and the Regional Administrator at least sixty (60) calendar days prior to the initial receipt of mixed waste or mixed-TSCA regulated PCB waste subject to this Permit.
- II.O.6. Changes in financial assurance mechanisms or cost estimates for closure must be approved by the Director and the Regional Administrator pursuant to WAC 173-303-620(4), 40 CFR §§264.143, 761.60(e), and 761.65(g).
- II.O.7. The Permittee shall demonstrate continuous compliance pursuant to WAC 173-303-620(8) with the requirements to have and maintain liability coverage for sudden accidental occurrences in the amount of at least \$1 million per occurrence, with an annual aggregate of at least \$2 million, exclusive of legal defense costs. A copy of the required documentation shall be submitted to the Director and the Regional Administrator at least sixty (60) calendar days prior to the initial receipt of mixed waste or mixed-TSCA regulated PCB waste subject to this Permit.
- II.O.8. The Permittee shall comply with WAC 173-303-620(9) and 40 CFR §264.148, whenever necessary, including for financial assurance required by this Permit pursuant to 40 CFR §§761.60(e), 761.65(d)(4)(iv), and 761.65(g).
- II.O.9. During the active life of the facility, the Permittee shall submit a revised closure cost estimate to the Director and the Regional Administrator within thirty (30) calendar days of an approved modification to the closure plan if such modification results in an increase in the closure cost estimate.

- II.O.10. Prior to placement of waste in any new mixed waste or mixed-TSCA regulated PCB waste unit, the Permittee must amend, as necessary, the summary of current closure costs to reflect the estimated closure cost of the new unit.
- II.O.11. Upon closure certification of any mixed waste or mixed-TSCA regulated PCB waste units and after the Regional Administrator and Director, as applicable, has released the Permittee from the financial responsibility requirements for that unit, the Permittee may adjust the summary of current closure cost of that unit. The Permittee shall submit to the Regional Administrator and Director a current version of the closure cost estimate for the facility indicating cost estimates for each remaining unit to be closed along with the closure certification statements for each closed unit.

II.P. ORGANIC AIR EMISSION STANDARDS FOR PROCESS VENTS

- II.P.1. The Permittee shall reduce the total organic emissions from the dryer system (TP-8) to below 3 lbs/hr and 3.1 tons/year in accordance with WAC 173-303-690, 40 CFR §264.1032, and Permit Condition V.F.10. of this Permit. Prior to installing or using any additional equipment subject to the requirements of WAC 173-303-690 and 40 CFR Part 264, Subpart AA, the Permittee shall obtain a permit modification pursuant to Permit conditions I.B.3. and I.B.4.

II.Q. ORGANIC AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS

- II.Q.1. The Permittee shall comply with the organic air emission standards for equipment leaks in WAC 173-303-691 and 40 CFR Part 264, Subpart BB and as specifically set forth in Attachments EE and KK of this Permit.

II.R. ORGANIC AIR EMISSION STANDARDS FOR TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS

- II.R.1. The Permittee shall comply with the organic air emission standards for tanks, containers, and miscellaneous treatment units as set forth in 40 CFR Part 264, Subpart CC. The Permittee shall obtain a permit modification in accordance with Permit conditions I.B.3. and I.B.4. to incorporate 40 CFR Part 264, Subpart CC standards into the permit application and this Permit prior to commencing operation of the facility with non-mixed wastes pursuant to Module VII of this Permit.

II.S. FINAL RISK ASSESSMENT REPORT

- II.S.1. The Permittee shall submit, within sixty (60) days of submittal of the completed Demonstration Test Report required pursuant to Permit condition VII.A.3.d.1., a Final Risk Assessment Report (FRAR)

incorporating the emission test results from the GASVIT™ System Demonstration Test, prepared in accordance with the Agency approved Risk Assessment Work Plan, Attachment ZZ of this Permit, except that the following updates to Attachment ZZ of this Permit are hereby incorporated:

- a. Toxicity data updated based on a reevaluation of toxicity data sources identified in the RAWP;
- b. Compounds newly identified during the Demonstration Test are added;
- c. Compound and mass of unidentified emission rates updated based on Demonstration Test results;
- d. Stack gas parameters (i.e., flowrates, temperatures) updated based on Demonstration Test results; and
- e. The human health and ecological risk evaluation will address the chemical and radiological risks from processing uranyl acetate.

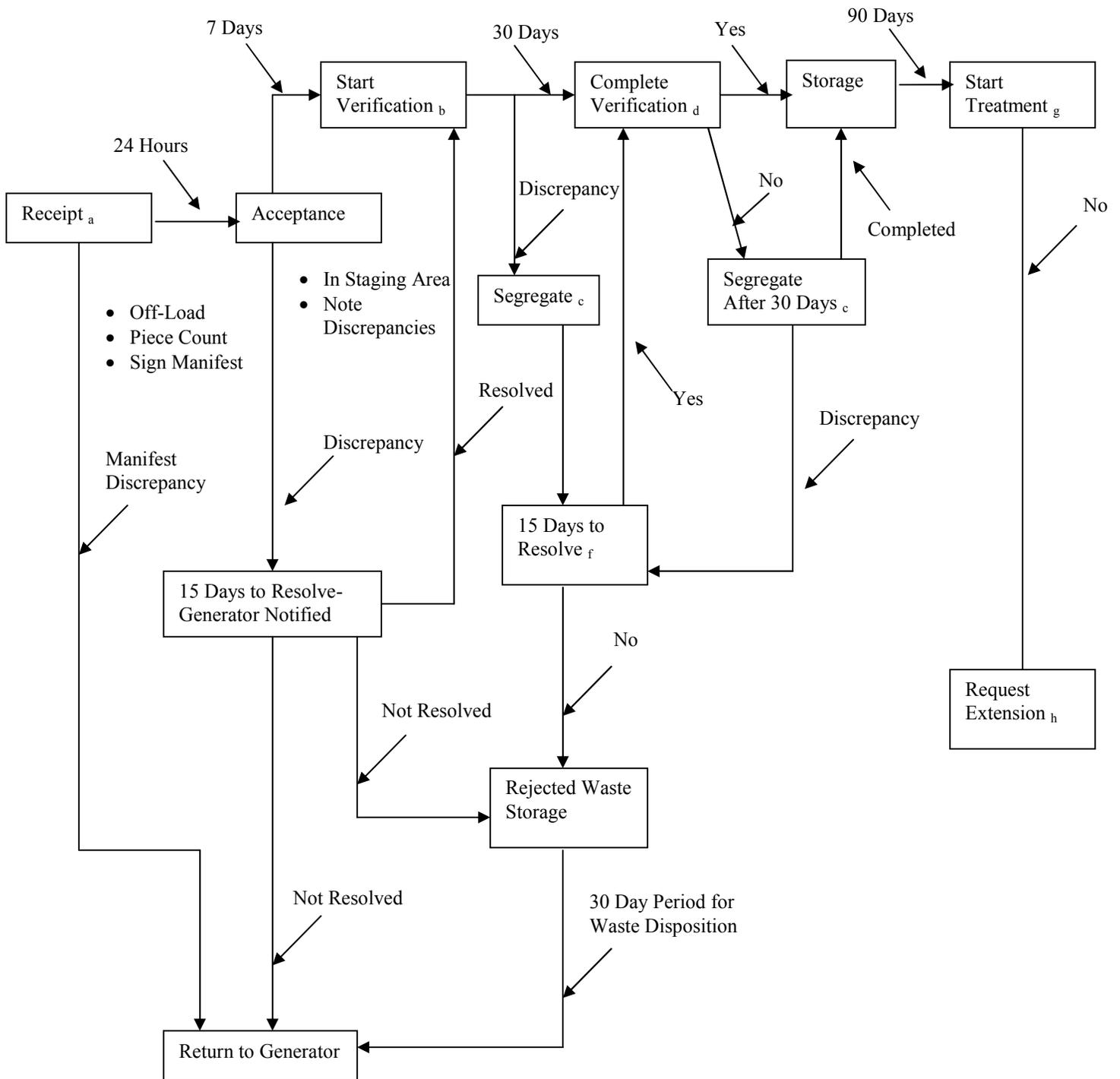
II.S.2. The Permittee shall submit, within sixty (60) days of submittal of the completed Demonstration Test Report required pursuant to Permit condition VI.A.1.h., a revised FRAR incorporating the emission test results from the GASVIT™ System Demonstration Test, prepared in accordance with the Agency approved Risk Assessment Work Plan, Attachment ZZ of this Permit, except that the following updates to Attachment ZZ of this Permit are hereby incorporated:

- a. Toxicity data updated based on a reevaluation of toxicity data sources identified in the RAWP;
- b. Compounds newly identified during the Demonstration Test are added;
- c. Compound and mass of unidentified emission rates updated based on Demonstration Test results;
- d. Stack gas parameters (i.e., flowrates, temperatures) updated based on Demonstration Test results; and
- e. The human health and ecological risk evaluation will address the chemical and radiological risks from processing uranyl acetate.

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Figure II-1
Waste Receipt Flow Diagram

For steps linked to subscript letters, see Permit Condition II.F.5.f



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III.A. CONTAINER MANAGEMENT AREAS AND ACCUMULATION LIMITS

III.A.1. APPROVED WASTES AND STORAGE LIMITS

- a. The Permittee may place and store mixed and/or TSCA regulated wastes only in the areas listed below in accordance with Module III of this Permit and Attachments LL, PP, QQ(1), RR, TT, UU, VV, and WW(1) of this Permit. The Permittee shall limit the total volume of wastes to quantities specified for the individual areas listed in the following table identified as Mixed Waste Staging/Storage Areas. Total containerized mixed/TSCA-regulated waste storage at the facility shall not exceed 30,886 ft.³ for solids and 4,433 ft.³ for liquids.

Mixed Waste Staging/Storage Areas ^a	Maximum Capacity (Solids)	Maximum Capacity (Liquids)
Stabilization Building (STB)		
Containerized Waste Staging (Room 2)	1134 ft. ³	1144 ft. ³
Container Inspection (Room 4)	288 ft. ³	29 ft. ³
Cutting and Shearing (Room 5)	140 ft. ³	
Size Reduction and Screening (Room 6)	557 ft. ³	
Sorting and Stabilization (Room 7)	3600 ft. ³	225 ft. ³
Compaction and Liquid Handling (Room 8)	3600 ft. ³	516 ft. ³
Container Rinsing (Room 9)		184 ft. ³
GASVIT™ Building (GVB)		
Staging (Room 1)	1422 ft. ³	61 ft. ³
Solid Storage (Room 3)	560 ft. ³	
HAZMAT Enclosure (Room 4)		54 ft. ³

Waste Storage Building (WSB)		
Raw Waste Storage (Room 1)	Up to 24,223 cubic feet total for all five (5) areas and shall not exceed 12,000 cubic feet for any one storage area for storage of solids.	644 ft. ³
Solid Waste Storage - North (Room 2)		
Solid Waste Storage - South (Room 3)		
Covered Storage Pad (Room 4)		1576 ft. ³
Stabilization Building (STB)		
Bulk Container Staging (Room 3)/Truck Bay		

^a All material within the secondary containment will be considered waste for the purposes of calculating free volume, where free volume is the amount of space available in secondary containment (i.e., free volume = total capacity of secondary containment minus volume occupied by equipment and containers within secondary containment).

- b. The Permittee must maintain a free volume within secondary containment at a minimum equal to 10% of the total volume of liquid mixed wastes within any area identified in Permit Condition III.A.1.a. and 25% of the total volume of mixed-TSCA regulated PCB wastes within any area identified in Permit condition III.A.1.a when PCB wastes are stored in such areas.
- c. The Permittee must maintain a daily operating log that, at a minimum, includes current capacity of each area listed in Permit condition III.A.1. The operating log must be readily available to regulatory inspectors.

III.A.2. In addition to compliance with other requirements for container management specified in Attachments LL, PP, QQ(1), all applicable drawings in Attachment RR, all applicable drawings and specifications in Attachments TT, UU, VV, WW(1), and XX of this Permit, the Permittee shall comply with the following container management conditions:

- a. The Permittee shall not place or store mixed waste or mixed-TSCA regulated PCB waste in any part of the facility except waste that has been accepted by the facility pursuant to Permit conditions II.A.1. and II.F.
- b. The Permittee shall not place or store containerized mixed

wastes or mixed-TSCA regulated PCB wastes accepted by the facility pursuant to Permit conditions II.A.1. and II.F. in any area other than those areas identified in Permit condition III.A.1. for longer than twenty-four (24) hours.

- III.A.3. For the purpose of determining compliance with capacity limits and secondary containment requirements, every waste container shall be considered to be full.

III.B. CONTAINER MANAGEMENT AREAS: DESIGN AND CONSTRUCTION

- III.B.1. The Permittee shall design and construct the areas identified in Permit condition III.A. as specified in all applicable drawings in Attachment RR of this Permit and all applicable drawings and specifications in Attachments TT, UU, VV, WW(1), and XX of this Permit.
- III.B.2. The Permittee shall design and construct all containment systems including applicable secondary and tertiary containment for each area listed in Permit Condition II.A.1. as specified in all applicable drawings in Attachment RR of this Permit and all applicable drawings and specifications in Attachments TT, UU, VV, WW(1), and XX of this Permit.
- III.B.3. All areas identified in Permit condition III.A.1. must be designed and constructed to protect containers from contact with accumulated liquids resulting from leaks, spills, or precipitation.

III.C. CONTAINER MANAGEMENT AREAS: INSTALLATION

- III.C.1. The Permittee shall obtain and submit to the Agencies within thirty (30) days of completion of each container management area identified in Permit condition III.A.1. a written certification from an independent, qualified, registered professional engineer attesting that proper installation procedures were used for each area.

III.D. CONTAINER MANAGEMENT PRACTICES

- III.D.1. The Permittee shall manage all containerized mixed wastes and mixed-TSCA regulated PCB wastes in accordance with procedures specified in Attachments LL, PP, and QQ(1) of this Permit and the following conditions:
- a. Verified wastes must be stored in designated storage areas unless treatment is initiated within twenty-four (24) hours after removal from a designated storage area. If treatment is not initiated within twenty-four (24) hours, then wastes must be returned to a designated storage area. The operating records and waste tracking procedures specified in Attachment

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- LL of this Permit must indicate the time at which verified wastes were removed from and returned to designated storage areas.
- b. The operating records and waste tracking procedures specified in Attachment LL of this Permit shall indicate all times at which containerized mixed waste and mixed-TSCA regulated PCB wastes were removed from and returned to designated staging, storage, segregation, and treatment areas.
 - c. Containers shall be placed and stored in accordance with Uniform Fire Code restrictions on height. In addition:
 - (i) At no time shall any container be stacked greater than three (3) high.
 - (ii) At all times when containers are stacked three (3) high, equipment (e.g., library ladders) which are dedicated to each storage area must be readily available to allow for inspection.
 - d. All areas identified in Permit condition III.A.1. must be operated to protect containers from contact with accumulated liquids resulting from leaks, spills, or precipitation.
 - e. The Permittee shall place and store ignitable and reactive mixed or mixed-TSCA regulated PCB wastes in accordance with procedures in the Attachments LL, PP, and QQ (1) of this Permit and WAC 173-303-630 (8). The Permittee shall also place and store these wastes in compliance with relevant requirements of the Uniform Fire Code unless the Permittee receives written authorization for different management procedures from the City of Richland Fire Department. In addition, the Permittee must comply with the requirements specified in WAC 173-303-395(1) (d).
 - f. The integrity of containment systems for all mixed waste and mixed-TSCA regulated PCB wastes container management areas specified in Permit condition III.A.1. must be maintained. Cracks, gaps, loss of integrity, deterioration, corrosion, or erosion of containment pads, joints in containment pads, berms, curbs, trenches, sumps, and coatings must be repaired in accordance with Permit condition II.D.7. and Attachment EE of this Permit.
 - g. Any loading and unloading of containerized wastes outside of the areas specified in Permit condition III.A.1. shall occur only in a containment area constructed and maintained in accordance with all requirements in WAC 173-303-395(4), Attachment LL of this Permit, and applicable drawings in Attachment RR of this Permit. Containers from loading/unloading operations shall be placed

directly into an area identified in Permit Condition III.A.1. or III.A.2. In addition, the loading/unloading areas that are outside of the areas specified in Permit condition III.A.1. must meet the following requirements:

- (i) The Permittee shall conduct inspections and response actions for the loading/unloading areas as follows:
 - (a) Daily inspections to check containment systems for evidence of cracks, stains, residues, and any evidence of a spill or leak. The Permittee must remove or repair the source of any leakage or spill immediately upon its detection. The Permittee will inspect the Rail Loading Area and Truck Loading Area daily to verify that any accumulated liquid is less than the one (1) inch mark on the containment wall and that the accumulated liquids do not have an oily sheen.
 - 1. The Permittee shall remove and characterize for disposal any accumulated liquids with an oily sheen from the containment system.
 - 2. The Permittee shall remove any accumulated liquid greater than the one (1) inch mark on the containment wall. The Permittee will sample the accumulated liquid for radioactive components and verify the results are less than the "Investigation and Action Levels" for Environmental Water shown in Attachment 217-1.1 of Low-Level Operating Procedure 217 Environmental Data Review and Reporting prior to discharging the liquid to the ground.
 - 3. The Permittee will characterize for disposal any accumulated liquids with sample results that are greater than or equal to the "Investigation and Action levels" for Environmental Water shown in Attachment 217-1.1 of Low-Level Operating Procedure 217 Environmental Data Review and Reporting.
- h. All temporary in-transport containers (TICs) shall have secondary containment with a free volume equal to the volume of the TIC.

III.E. CONDITION OF CONTAINERS

III.E.1. If a container holding mixed waste or mixed-TSCA regulated PCB wastes is not in good condition (e.g., exhibits

excessive rusting, structural defects, or any other condition that could lead to container rupture or leakage) or is leaking, the Permittee shall transfer immediately after discovery the wastes from that container to a compatible container which is in good condition or to an overpack container. The damaged container shall be managed as a mixed waste unless it is empty pursuant to WAC 173-303-160. If the damaged container was used for mixed-TSCA regulated PCB wastes, then it shall be managed as mixed waste and Mixed-TSCA regulated PCB wastes unless it is empty pursuant to WAC 173-303-160 and decontaminated pursuant to 40 CFR §761.79.

III.F. IDENTIFICATION OF CONTAINERS AND CONTAINER STORAGE AREAS

- III.F.1. Pursuant to WAC 173-303-630(3), the Permittee shall ensure that all containers of mixed waste are labeled in a manner that adequately identifies the major risk(s) associated with the contents.
- III.F.2. The Permittee shall ensure that all containers of mixed waste are marked in accordance with the requirements specified in WAC 173-303-190(3)(b).
- III.F.3. The Permittee shall ensure that all containers of mixed-TSCA regulated PCB wastes are marked and labeled in accordance with the requirements specified in 40 CFR §§761.40 and 761.45.
- III.F.4. For all mixed waste and mixed-TSCA regulated PCB waste containers, the Permittee shall ensure that:
- a. All labels are printed with indelible (waterproof) ink;
 - b. All labels are placed on the upper portion of the container's side as close to the top as the container design allows;
 - c. Labels are not obscured or otherwise unreadable; and
 - d. Waste containers are oriented so as to allow inspection of the labels identified in Permit condition III.F.1., III.F.2., and III.F.3., the container tracking number, and, to the extent possible, any labels which the generator placed upon the container.
- III.F.5. Empty containers, as defined by WAC 173-303-160(2), must have their mixed waste labels destroyed or otherwise removed immediately upon being rendered empty.
- III.F.6. Empty containers that are decontaminated in accordance with requirements specified in 40 CFR §761.79 must have their PCB labels destroyed or otherwise removed immediately upon being decontaminated.

III.F.7. Pursuant to 40 CFR §§761.65(c)(3), 761.65(c)(1), and 761.65(b) all container staging/storage areas specified in Permit condition III.A.1.(d) shall be marked in accordance with 40 CFR §761.40.

III.G. COMPATIBILITY

III.G.1. The Permittee shall ensure that all containers used for mixed waste and mixed-TSCA regulated PCB waste management are made of or lined with materials which will not react with and are otherwise compatible with the waste to be stored.

III.G.2. Except for lab packs assembled in compliance with WAC 173-303-161 requirements, the Permittee shall not place incompatible wastes, or incompatible wastes and materials, in the same container. Pursuant to WAC 173-303-630 (9) and 40 CFR §761.65(d), the Permittee shall not place mixed waste and mixed-TSCA regulated PCB waste in an unwashed container that previously held an incompatible waste or material.

III.G.3. The Permittee shall ensure that all dedicated and non-dedicated equipment used for transfer of mixed waste and mixed-TSCA regulated PCB wastes to or from containers (pumps, hoses, piping, valves, etc.) is compatible with the wastes and is decontaminated as defined in WAC 173-303-395(1)(b) and 40 CFR §761.79 before it is used for the transfer of incompatible wastes.

III.G.4. Containerized wastes and other materials that are incompatible shall be separated as follows:

- a. Incompatible materials, including wastes, shall not be staged, segregated, or stored within the same containment system (i.e., metal pan, concrete berm);
- b. Incompatible materials, including wastes, in check-in areas shall be segregated according to compatibility groups specified in Attachment LL of this Permit.

III.H. CONTAINMENT SYSTEM

III.H.1. The Permittee shall obtain and submit to the Agencies within thirty (30) days of completion of each container management area identified in Permit condition III.A. a written certification from an independent, qualified, registered professional engineer attesting that proper installation procedures for all containment systems including applicable secondary and tertiary containment for each area were used.

III.H.2. Pursuant to WAC 173-303-630(7) and 40 CFR §§761.65(b) and 761.65(d), the Permittee must ensure the containment systems for each storage/staging area identified in Permit Condition III.A.1.

are free of cracks or gaps and impervious to prevent any migration of waste or accumulated liquid out of the containment system at any time. Any indication that a crack or gap may extend into the containment systems shall be investigated and repaired in accordance with Attachment EE of this Permit.

- III.H.3. An impermeable coating, as specified in Attachment LL(1), applicable drawings in Attachment RR of this Permit, and applicable specifications in Attachment XX of this Permit shall be maintained for all containment systems made of concrete for each storage/staging area identified in Permit condition III.A.1. and shall meet the following performance standards:
- a. The coating must seal the containment surface such that no cracks, seams, or other pathways through which liquid could migrate are present;
 - b. The coating must be of adequate thickness and strength to withstand the normal operation of equipment and personnel within the given area such that degradation or physical damage to the coating or lining can be identified and remedied before wastes could migrate from the containment system; and
 - c. The coating must be compatible with the waste managed in the secondary containment system.
- III.H.4. The Permittee must inspect all containment systems specified in Permit condition III.A.1. in accordance with procedures specified in Attachment EE of this Permit and take the following actions if liquid is detected in these containment systems:
- a. Immediately remove the liquid from the containment area in accordance with procedures specified in Attachments EE and GG of this Permit. The liquid removed from containment areas identified in permit condition III.A.1.c. shall be managed as a mixed waste. The liquid removed from containment areas identified in permit condition III.A.1.d. shall be managed as mixed-TSCA regulated PCB wastes.
 - b. Determine the source of the liquid.
 - c. If the source of the liquid is determined to be a leak in a container, the Permittee must follow the procedures specified in Permit Condition III.E.1.
 - d. The Permittee must take action to ensure the incident that caused liquid to enter the containment system of these areas will not reoccur.
 - e. The Permittee shall notify and report releases to the environment to the Director and Regional Administrator in accordance with the conditions of this Permit.

- III.H.5. Containment systems for all waste management operations shall be constructed, operated, and maintained to ensure no spilled waste or storm water migrates outside of the containment areas. In particular, the following waste management operations must be within such containment areas:
- a. Loading and unloading of mixed waste and mixed-TSCA regulated PCB wastes;
 - b. Staging and processing of mixed waste and mixed-TSCA regulated PCB wastes; and
 - c. Transport or movement of mixed waste and mixed-TSCA regulated PCB wastes in open devices, including open container, front end loader bucket, back hoe bucket, uncovered truck, and any others.

III.I. CLOSURE

- III.I.1. Pursuant to WAC 173-303-630 (10) and 40 CFR §§761.65(d) and 761.65(e) at closure, the Permittee must remove all mixed waste and mixed-TSCA regulated PCB wastes and mixed residue and mixed-TSCA regulated PCB residues from all areas identified in Permit condition III.A.1. in accordance with the procedures specified in Permit condition II.M. Remaining containers, liner, bases, and soil containing or contaminated with mixed waste and/or mixed-TSCA regulated PCB wastes or mixed waste residues and/or mixed-TSCA regulated PCB waste residues must be decontaminated or removed in accordance with the procedures specified in Permit condition II.M.

MODULE IV - TANK SYSTEMS

IV.A. TANK SYSTEMS

IV.A.1. APPROVED WASTES AND STORAGE LIMITS

- a. The Permittee may store in tanks all mixed wastes listed in the Part A Forms, Attachment BB of this Permit, except that the limitations specified in Tables 1, 2A, 2B, 2C, 2D, 2E, and 2F of Section C of Attachment CC of this Permit and Permit condition II.F. also applies to mixed wastes stored in tanks.
- b. The Permittee may store in tanks which meet the requirements of 40 CFR Part 761, mixed-TSCA regulated PCB wastes except that the limitations specified in Tables 1, 2A, 2B, 2C, 2D, 2E, and 2F of Section C of Attachment CC of this Permit and Permit condition II.F. also applies to mixed-TSCA regulated PCB wastes stored in tanks.
- c. In accordance with requirements within Attachments CC, PP, QQ(1), RR, TT, UU, VV, and WW(1) and Permit conditions IV.B. through IV.E., the Permittee may process mixed wastes in the following units. The Permittee shall limit the total volume stored in the tanks to the quantities specified for the individual units listed below:

<u>Mixed Waste Tank Systems</u> <u>Name</u>	<u>Unit</u> <u>Designation</u>	<u>Unit</u> <u>Description</u>	<u>Maximum</u> <u>Capacity</u> <u>(gallons)</u>
Liquid Treatment Tank #1 and Accessories (Liquid Treatment System)	TP-04	Table G ^a of Attachment TT of this Permit and Drawings 31001-P-004 and 31001-P-016 of Attachment RR of this Permit.	1200
Liquid Treatment Tank #2 and Accessories (Liquid Treatment System)	TP-04	Table G ^a of Attachment TT of this Permit and Drawings 31001-P-004 and 31001-P-016 of Attachment RR of this Permit	1200
Liquid Holding Tank #1 and Accessories (Liquid Holding System)	TP-06	Table H of Attachment TT of this Permit and Drawings 31001-P-004 and 31001-P-018 of Attachment RR of this Permit.	1200
Liquid Holding Tank #2 and Accessories	TP-06	Table H of	1200

<u>Mixed Waste Tank Systems</u> <u>Name</u>	<u>Unit</u> <u>Designation</u>	<u>Unit</u> <u>Description</u>	<u>Maximum</u> <u>Capacity</u> <u>(gallons)</u>
(Liquid Holding System)		Attachment TT of this Permit and Drawings 31001-P-004 and 31001-P-018 of Attachment RR of this Permit	
Feed Tank and Pump Assembly	GV-02	Table E of Attachment UU of this Permit and Drawings 31001-P-050 and 31001-P- 072-01 of Attachment RR of this Permit	375
Distillate Tank (Secondary Waste Treatment System)	GV-11	Table DD of Attachment UU of this Permit and Drawings 31001-P-054 and 31001-P- 081 of Attachment RR of this Permit	1200
Scrubber Bottoms Tank (Secondary Waste Treatment System)	GV-11	Table DD of Attachment UU of this Permit and Drawings 31001-P-054 and 31001-P-	1200

<u>Mixed Waste Tank Systems</u> <u>Name</u>	<u>Unit</u> <u>Designation</u>	<u>Unit</u> <u>Description</u>	<u>Maximum</u> <u>Capacity</u> <u>(gallons)</u>
		081 of Attachment RR of this Permit	
Wash Tank for Tote/Bin Washer	TT-06	Table Q ^b , Drawings 31001-P-005 and 31001-P-027 of Attachment RR of this Permit	425

^aSpecification #15179 listed in Table G of Attachment TT of this Permit and in Tables E and DD of Attachment UU of this Permit is hereby renumbered #15176.^bSee Permit condition IV.E.7. for compliance schedule for installation of Tank TT-06.

- d. In accordance with requirements within Attachments CC, PP, QQ (1), RR, TT, UU, VV, and WW(1) and Permit conditions IV.B. through IV.E., the Permittee may process mixed-TSCA regulated PCB wastes in the following units. The Permittee shall limit the total volume stored in the tanks to the quantities specified for the individual units listed below:

<u>Mixed-TSCA Regulated PCB Waste Tank Systems Name</u>	<u>Unit Designation</u>	<u>Unit Description</u>	<u>Maximum Capacity (gallons)</u>
Feed Tank and Pump Assembly (Liquid Feed System)	GV-02	Table E ^a of Attachment UU of this Permit and Drawings 31001-P-050 and 31001-P- 072-01 of Attachment RR of this Permit.	375
Distillate Tank (Secondary Waste Treatment System)	GV-11	Table DD of Attachment UU of this Permit and Drawings 31001-P-054 and 31001-P- 081 of Attachment RR of this Permit	1200
Scrubber Bottoms Tank (Secondary Waste Treatment System)	GV-11	Table DD of Attachment UU of this Permit and Drawings 31001-P-054 and 31001-P- 081 of Attachment RR of this Permit	1200

^a Specification #15179 listed in Tables E and DD of Attachment UU of this Permit is hereby renumbered #15176.

IV.A.2. The Permittee shall manage ignitable and reactive wastes in accordance with WAC 173-303-395(1) (d). Any unit specified in Permit condition IV.A.1. in which ignitable or reactive wastes will be managed shall meet the requirements specified in WAC 173-303-640(9) and WAC 173-303-395(1) (d).

IV.A.3. The secondary containment for the liquid treatment system (TP-04) shall include a catch pan that is installed under the

two (2) tanks with a free volume equal to the entire volume of the largest tank within the TP-04 system.

IV.A.4. The secondary containment for the liquid holding system (TP-06) shall include a catch pan installed under the two (2) tanks with a free volume equal to the entire volume of the largest tank within TP-06 system.

IV.A.5. The secondary containment for the liquid feed system (GV-02) shall meet the requirements of 40 CFR §761.65.

IV.B. TANK SYSTEM DESIGN AND CONSTRUCTION

IV.B.1. The Permittee shall design and construct the tank systems identified in Permit condition IV.A.1. as specified in all applicable drawings in Attachment RR of this Permit and all applicable drawings and specifications in Attachments TT, UU, VV, WW(1), and XX of this Permit.

IV.B.2. The Permittee shall design and construct all containment systems including applicable secondary and tertiary containment for tank systems identified in Permit condition IV.A. as specified in all applicable drawings in Attachment RR of this Permit and all applicable drawings and specifications in Attachments TT, UU, VV, WW(1), and XX of this Permit.

IV.C. TANK SYSTEM INSTALLATION

IV.C.1. The Permittee shall obtain and submit to the Agencies within thirty (30) days of completing installation of

each tank system a written certification from an independent, qualified, installation inspector or an independent, qualified, registered professional engineer attesting that proper installation procedures were used for each tank system listed in Permit condition IV.A.1. including for the applicable containment for the tank systems identified in Permit condition IV.A. The independent tank system installation inspection and subsequent written certification shall comply with all requirements of WAC-173-303-640(3)(h) and include:

- a. Field installation report with date of installation;
- b. Approved welding procedures;
- c. Welder qualification and certifications;
- d. Hydro-test reports in accordance with the American Society of Mechanical Engineers Boiler and Pressure Vessel Code, Section VIII, Division 1;
- e. Tester Credentials;

- f. Field inspector credentials;
- g. Field inspector reports;
- h. Field waiver reports; and
- i. Non-compliance reports and corrective action (including field waiver reports) and repair reports.

IV.D. INTEGRITY ASSESSMENT

- IV.D.1. The Permittee shall ensure periodic integrity assessments are conducted on all mixed waste and mixed-TSCA regulated PCB waste tanks over the term of this Permit pursuant to WAC 173-303-640(3)(b) and 40 CFR §761.65(d) using procedures in Attachment EE of this Permit. The schedule and conditions for revising the schedule, provided in Attachment EE of this Permit, shall be used for these integrity assessments. The starting date for scheduling shall be the date of the most recent integrity assessment or tank certification, whichever is later. Results of the integrity assessments shall be included in the facility operating record until final closure and corrective action are complete and certified.
- IV.D.2. The Permittee shall address problems detected during the tank integrity assessment specified in Permit condition IV.D.1. in accordance with procedures specified in Attachment EE of this Permit.
- IV.D.3. The Permittee shall immediately remove from service any mixed waste or mixed-TSCA regulated PCB wastes in any tank system that does not meet or exceed its design standard as specified in tank data sheets or professional engineer's certification in Attachments VV(2) and WW(2) of this Permit.

IV.E. TANK MANAGEMENT PRACTICES

- IV.E.1. The Permittee shall not place mixed waste, mixed-TSCA regulated PCB waste, treatment reagents, or other materials in the tank systems if these substances could cause the tank system(s) to rupture, leak, corrode, or otherwise fail.
- IV.E.2. The Permittee shall operate the tank systems to prevent spills and overflows using the procedures and equipment described in Attachments II, PP, QQ(1), RR, TT, UU, VV, WW, and XX of this Permit.
- IV.E.3. The Permittee shall ensure that the containment systems for each tank listed in Permit condition IV.A.1. is free of cracks or gaps to prevent any migration of waste or accumulated liquid out of the system to the soil, ground water, or surface water at any time. Any indication that a crack or gap may exist in the containment systems shall be

investigated and repaired in accordance with Attachment EE of this Permit.

IV.E.4. An impermeable coating, as specified in Attachment PP of this Permit, applicable drawings in Attachment RR of this Permit, and applicable specifications in Attachment XX of this Permit, shall be maintained for all concrete containment systems for each tank listed in Permit condition IV.A.1. The coating shall prevent migration of any wastes into the concrete. All coating shall meet the following performance standards:

- a. The coating must seal the containment surface such that no cracks, seams, or other avenues through which liquid could migrate are present;
- b. The coating must be of adequate thickness and strength to withstand the normal operation of equipment and personnel within the given area such that degradation or physical damage to the coating or lining can be identified and remedied before wastes could migrate from the system; and
- c. The coating must be compatible with the waste managed in the containment system.

IV.E.5. The Permittee must inspect all containment systems for tanks specified in Permit condition IV.A.1. in accordance with the procedures specified in Attachment EE of this Permit and take the following actions if liquid is detected in these containment systems:

- a. Remove the liquid from the containment area pursuant to WAC 173-303-640(7)(b). The liquid removed from containment areas of tanks identified in Permit condition IV.A.1.c. shall be managed as a mixed waste. The liquid removed from containment areas of tanks identified in Permit condition IV.A.1.d. shall be managed as a mixed-TSCA regulated PCB waste.
- b. Determine the source of the liquid.
- c. If the cause of the release was a spill or uncontaminated water that has not damaged the integrity of the tank, the Permittee may return the tank system to service pursuant to WAC 173-303-640(7)(e)(ii) and 40 CFR §761.65(d). In such a case, the Permittee shall take action to ensure the incident that caused liquid to enter the containment systems of these tanks will not reoccur.
- d. If the source of the liquid is determined to be a leak in a primary tank system, or if the source of the liquid cannot be determined, the Permittee shall take the following actions:

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- (i) Close the tank system according to procedures in WAC 173-303-640(7)(e)(i); or
 - (ii) Repair and recertify the tank in accordance with procedures in WAC 173-303-640(7)(e)(iii) and (f) before the tank is placed back into service.
- e. In accordance with requirements in WAC 173-303-640(6)(d) and 40 CFR §§761.65(d), 761.180(b), and 761.180(c) the Permittee shall document in the operating record procedures taken to comply with a. through d. above.
 - f. In accordance with requirements in WAC 173-303-640(7)(d) and 40 CFR §§761.65(d) and 761.125 the Permittee shall notify and report releases to the environment to the Director and Regional Administrator.
- IV.E.6. The Permittee shall meet the requirements of WAC 173-303-640(5)(e).
- IV.E.7. COMPLIANCE SCHEDULE
- a. The Permittee shall obtain and submit to the Department as a permit modification request pursuant to Permit conditions I.B.3. and I.B.4., to add to Attachment VV(2) of this Permit a written certification from an independent, qualified, installation inspector or an independent, qualified, registered professional engineer as specified in WAC 173-303-640(3)(a) for Wash Tank for Tote/Bin Washer (TT-06), including the information and level of detail provided in Tank Certification D-2i-029, Attachment WW(2) of this Permit. Tank System TT-06 shall not be constructed until the Department approves the permit modification to add this tank system certification to Attachment VV(2) of this Permit.
 - b. The Permittee shall obtain and submit to the Department and the Agency as a permit modification request pursuant to Permit conditions I.B.3. and I.B.4., an amendment to the applicable portions of Attachments MM, RR, UU, and WW of this Permit to reflect a secondary containment system for the Secondary Waste Treatment System (GV-11) which includes a catch pan that is installed under the two (2) tanks with a minimum free volume equal to twice the volume of the largest tank within the Secondary Waste Treatment System (GV-11) consistent with the requirements of 40 CFR §761.65. The Secondary Waste Treatment System (GV-11) shall not be constructed until the Department and Agency approves this Permit modification.

- c. The Permittee shall obtain and submit to the Department and the Agency as a permit modification request pursuant to Permit conditions I.B.3. and I.B.4., to amend Attachment CC of this Permit to include waste limitations for the Secondary Waste Treatment System Tanks in the Secondary Waste Treatment System (GV-11), and to amend Attachments RR and QQ(1) of this Permit to remove all references to sending material contained in Building 5 floor drains to the Secondary Waste Treatment System (GV-11). No waste shall be placed in the Secondary Waste Treatment System (GV-11) until the Department and Agency have approved this permit modification request.

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**MODULE V- MISCELLANEOUS UNITS (EXCLUDING GASVIT™ SYSTEM AS DEFINED IN
MODULES VI AND VII OF THIS PERMIT)**

**V.A. MISCELLANEOUS UNITS (EXCLUDING GASVIT™ SYSTEM AS DEFINED IN
MODULES VI AND VII OF THIS PERMIT)**

V.A.1. APPROVED WASTES

- a. The Permittee may process in the miscellaneous units listed in Permit condition V.A.1.c. all mixed wastes listed in the Part A Forms (Attachment BB of this Permit) except that the limitations specified in Tables 1, 2A, 2B, 2C, 2D, 2E, 2F, 5, 6, 7, 9, 10, 12, 13, 15, 16, 18, and 19 and Figures 4, 5, 6, 7, and 8 of Section C of Attachment CC of this Permit and Permit condition II.F. also applies to mixed wastes processed in these units.

- b. In accordance with requirements within Attachments CC, NN, OO, PP, QQ, RR, SS, TT, UU, VV, WW(1), WW(3), and XX and Permit conditions V.B. through V.F., the Permittee may process mixed wastes in the following units:

Mixed Waste Miscellaneous Units

1. STABILIZATION BUILDING

<u>Description</u>	<u>Unit Designation</u>	<u>Unit Description</u> Drawings	Tables	Narrative Description
Size Reduction and Screening System	TP-01	31001-P-003 & 31001-P-013 of Attachment RR of this Permit	Table D of Attachment TT of this Permit	Section 3.1 of Attachment PP of this Permit
Cutting and Shearing System	TP-02	31001-P-005 & 31001-P-014 of Attachment RR of this Permit	Table E of Attachment TT of this Permit	Section 3.2 of Attachment PP of this Permit
Sorting System	TP-03	31001-P-006 & 31001-P-015 of Attachment RR of this Permit	Table F of Attachment TT of this Permit	Section 3.3 ^b of Attachment PP of this Permit
Liquid Holding Tank System ^a (Carbon Filter, UV Oxidation, Ion Exchange)	TP-06	31001-P-004 & 31001-P-018 of Attachment RR of this Permit	Table H of Attachment TT of this Permit	Section 3.6 of Attachment PP of this Permit
Compaction/Macro-encapsulation System (In-Drum Compactor)	TP-07	31001-P-006 & 31001-P-019 of Attachment RR of this Permit	Table I of Attachment TT of this Permit	Section 3.7 of Attachment PP of this Permit
Compaction/Macro-encapsulation System (Super Compactor)	TP-07	31001-P-006 & 31001-P-019 of Attachment RR of this Permit	Table I of Attachment TT of this Permit	Section 3.7 of Attachment PP of this Permit
Dryer System	TP-08	31001-P-003 & 31001-P-020 of Attachment RR of this Permit	Table J of Attachment TT of this Permit	Section 3.8 of Attachment PP of this Permit
Liquid Consolidation System	TP-09	31001-P-004 & 31001-P-021 of Attachment RR of this Permit	Table K of Attachment TT of this Permit	Section 3.9 of Attachment PP of this Permit
Extraction System	TP-10	DWG-TP10-001 of Attachment PP of this Permit		Section 3.5 of Attachment PP of this permit

<u>Description</u>	<u>Unit Designation</u>	<u>Unit Description</u>		Narrative Description
		Drawings	Tables	
Aerosol Can Puncture	TP-15	Attachment TT	Table Z of Attachment TT of this Permit	Section 5.4 of Attachment CC of this Permit
High-Capacity Mixing System	TT-01	31001-P-003 & 31001-P-022 of Attachment RR of this Permit	Table L of Attachment TT of this Permit	Section 3.10 of Attachment PP of this Permit
Low-Capacity Mixing System	TT-02	31001-P-003 & 31001-P-023 of Attachment RR of this Permit	Table M of Attachment TT of this Permit	Section 3.10 of Attachment PP of this Permit
In-Container Mixing System	TT-03	31001-P-004 & 31001-P-024 of Attachment RR of this Permit	Table N of Attachment TT of this Permit	Section 3.11 of Attachment PP of this Permit
Polymer Mixing System	TT-04	31001-P-005 & 31001-P-025 of Attachment RR of this Permit	Table O of Attachment TT of this Permit	Section 3.12 of Attachment PP of this Permit
Decontamination Unit (Physical Extraction)	TT-05	31001-P-005 & 31001-P-026 of Attachment RR of this Permit	Table P of Attachment TT of this Permit	Section 3.13 of Attachment PP of this Permit
Container Rinse System (Drum Rinse Assembly)	TT-06	31001-P-005 & 31001-P-027 of Attachment RR of this Permit	Table Q of Attachment TT of this Permit	Section 3.14 of Attachment PP of this Permit
Container Rinse System (Container Rinse Assembly)	TT-06	31001-P-005 & 31001-P-027 of Attachment RR of this Permit	Table Q of Attachment TT of this Permit	Section 3.14 of Attachment PP of this Permit
STB Process Vent System	SB-09	31001-P-028-01, 02, 03A, and 03B of Attachment RR of this Permit	Tables V,W, and X of Attachment TT of this Permit	Section 3.18 ^{c,d,e} of Attachment PP of this Permit

^a Requirements pertaining to the feed tanks for the Liquid Holding Tank System (TP-06) are specified in Module IV of this Permit.

^b Reference to drawing 31001-P-017 in section 3.3 of Attachment PP of this Permit for the sorting system is hereby changed to reference drawing 31001-P-015.

^c Reference to drawings 31001-P-028-04A and 04B are hereby deleted from Section 3.18 of Attachment PP of this Permit for the STB Process Vent System.

^d Reference to drawing 31001-P-028-02A in section 3.18 of Attachment PP of this Permit is hereby replaced with reference to drawing 31001-P-028-02 for the STB Process Vent System.

^e Section 3.18 of Attachment PP of this Permit is hereby amended to also reference drawing 31001-P-028-01 for the STB Process Vent System.

2. GASVIT™ BUILDING

<u>Description</u>	<u>Unit Designation</u>	<u>Unit Description</u> Drawings	Tables	Narrative Description
Feed Preparation Subsystem	GV-01	31001-P-050, 31001-P-071-01 and 02 of Attachment RR of this Permit	Table D of Attachment UU of this Permit	Section 3.1 of Attachment QQ(1) of this Permit
GVB Process Vent System	GV-09	31001-P-053 of Attachment RR of this Permit 31001-P-079	Table AA of Attachment UU of this Permit	Section 3.9 of Attachment QQ(1) of this Permit
Secondary Waste Treatment System (Evaporator) ^b	GV-11	31001-P-054 and 31001-P-081 of Attachment RR of this Permit	Table DD of Attachment UU of this Permit	Section 3.11 of Attachment QQ(1) of this Permit

^bRequirements pertaining to the tanks in the Secondary Waste Treatment System (GV-11) are specified in Module IV of this Permit.

- c. In accordance with requirements within Attachments CC, OO, QQ, SS, RR, UU, WW(1), WW(3), and XX and Permit conditions V.B. through V.F., the Permittee may process mixed-TSCA regulated PCB wastes in the following units:

Mixed-TSCA Regulated PCB Waste Miscellaneous Units

1. GASVIT™ BUILDING

<u>Description</u>	<u>Unit Designation</u>	<u>Unit Description Drawings</u>	<u>Tables</u>	<u>Narrative Description</u>
Feed Preparation Subsystem	GV-01	31001-P-050 31001-P-071-01 and 02 of Attachment RR of this Permit	Table D of Attachment UU of this Permit	Section 3.1 of Attachment QQ(1) of this Permit
GVB Process Vent System	GV-09	31001-P-053 and 31001-P-079 of Attachment RR of this Permit	Table AA of Attachment UU of this Permit	Section 3.9 of Attachment QQ(1) of this Permit

2. STABILIZATION BUILDING

TP-02, TP-03, TP-07, TP-10, TT-01, TT-02, and TT-03 described in condition V.A.1.b.

V.A.2. The table in Permit condition V.A.1.c. hereby replaces Table D-11-1 Equipment Classified as Miscellaneous Units in Attachment NN of this Permit.

V.A.3. The Permittee shall manage ignitable and reactive wastes in accordance with WAC 173-303-395(1)(d). Any unit specified in Permit condition V.A.1. in which ignitable or reactive wastes will be managed shall meet the requirements specified in WAC 173-303-640(9), substituting the term "miscellaneous unit" for "tank" in accordance with WAC 173-303-680(2).

V.B. MISCELLANEOUS UNIT DESIGN AND CONSTRUCTION

V.B.1. The Permittee shall design and construct the miscellaneous units identified in Permit condition V.A.1. as specified in all applicable drawings in Attachments RR and SS of this Permit and all applicable drawings and specifications in Attachments TT, UU, VV, WW(1), WW(3), and XX of this Permit.

V.B.2. The Permittee shall design and construct all containment systems for miscellaneous units identified in Permit condition V.A.1. as specified in all applicable drawings in Attachments RR and SS of this Permit and all applicable drawings and

specifications in Attachments TT, UU, VV, WW(1), WW(3), and XX of this Permit.

V.C. MISCELLANEOUS UNIT INSTALLATION

- V.C.1. The Permittee shall obtain and submit to the Agencies within thirty (30) days of completing installation of each miscellaneous unit, a written certification from an independent, qualified, registered professional engineer attesting that proper installation procedures were used for each miscellaneous unit listed in Permit Condition V.A.1. and their corresponding containment systems. The independent miscellaneous unit installation inspection and subsequent written certification, shall comply with all requirements of WAC 173-303-640(3)(h), substituting the term "miscellaneous unit" for "tank" in accordance with WAC 173-303-680(2) and 40 CFR 761.60(e) and include:
- a. Field installation report with date of installation;
 - b. Approved welding procedures;
 - c. Welder qualification and certifications;
 - d. Hydro-test reports, as applicable, in accordance with the American Society of Mechanical Engineers Boiler and Pressure Vessel Code, Section VIII, Division 1;
 - e. Tester Credentials;
 - f. Field inspector credentials;
 - g. Field inspector reports;
 - h. Field waiver reports; and
 - i. Non-compliance reports and corrective action (including field waiver reports) and repair reports.

V.D. INTEGRITY ASSESSMENT

- V.D.1. The Permittee shall ensure periodic integrity assessments are conducted on all mixed waste and mixed-TSCA regulated PCB waste miscellaneous units specified in V.A.1. over the term of this Permit pursuant to WAC 173-303-680(2) and (3) and 40 CFR §761.65(d) as specified in WAC 173-303-640(3)(b) substituting the term "miscellaneous unit" for "tank" using procedures in Attachment EE. The schedule and conditions for revising the schedule, provided in Attachment EE of this Permit shall be used for these integrity assessments substituting the term "miscellaneous unit" for "tank". The starting date for scheduling shall be the date of the most

recent integrity assessment. Results of the integrity assessments shall be included in the facility operating record until final closure and corrective action are complete and certified.

- V.D.2. The Permittee shall address problems detected during the miscellaneous unit integrity assessment specified in Permit Condition V.D.1. in accordance with procedures specified in Attachment EE of this Permit.
- V.D.3. The Permittee shall immediately remove from mixed waste or mixed-TSCA regulated PCB waste service any miscellaneous unit that does not meet or exceed its design standard as specified in the unit data sheets in Attachments VV(1), WW(1), WW(3), and XX of this Permit.

V.E. MISCELLANEOUS UNIT MANAGEMENT PRACTICES

- V.E.1. The Permittee shall not place mixed waste, mixed-TSCA regulated PCB waste, treatment reagents, or other materials in a miscellaneous unit if these substances could cause the unit to rupture, leak, corrode, or otherwise fail.
- V.E.2. The Permittee shall operate the miscellaneous units to prevent spills and overflows using the procedures and equipment described in Attachments II, NN, OO, PP, QQ, RR, SS, TT, UU, VV(1), WW(1), WW(2), and XX of this Permit.
- V.E.3. The Permittee shall ensure that the containment systems for each miscellaneous unit identified in Permit Condition V.A.1. are free of cracks or gaps to prevent any migration of waste or accumulated liquid out of the system to the soil, ground water, or surface water at any time. Any indication that a crack or gap may exist in the containment systems shall be investigated and repaired in accordance with Attachment EE of this Permit.
- V.E.4. An impermeable coating as specified in Attachment PP of this Permit, applicable drawings in Attachment RR of this Permit, and applicable specifications in Attachment XX of this Permit, shall be maintained for all concrete containment systems for each miscellaneous unit identified in Permit Condition V.A.1. The coating shall prevent migration of any wastes into the concrete. All coatings shall meet the following performance standards:
- a. The coating must seal the containment surface such that no cracks, seams, or other avenues through which liquid could migrate are present;
 - b. The coating must be of adequate thickness and strength to withstand the normal operation of equipment and personnel

within the given area such that degradation or physical damage to the coating or lining can be identified and remedied before wastes could migrate from the system; and

- c. The coating must be compatible with the waste managed in the containment system.

V.E.5. The Permittee shall inspect all containment systems for units specified in Permit Condition V.A.1. in accordance with the procedures specified in Attachment EE of this Permit and take the following actions if liquid is detected in these containment systems:

- a. Remove the liquid from the containment area pursuant to WAC 173-303-680(2), WAC 173-303-680 (3), 40 CFR §761.60(e), and 40 CFR 761.65(d)(iv)(4) as specified in WAC 173-303-640(7)(b) substituting the term "miscellaneous unit" for "tank". The liquid removed from containment areas of units identified in Permit Condition V.A.1.c. shall be at a minimum managed as mixed waste. The liquid removed from containment areas identified in Permit Condition V.A.1.d. shall be at a minimum managed as mixed-TSCA regulated PCB waste.
- b. Determine the source of the liquid.
- c. If the cause of the release was a spill or uncontaminated water that has not damaged the integrity of the unit, the Permittee may return the unit to service pursuant to WAC 173-303-680(2), WAC 173-303-680(3), 40 CFR §761.60(e), and 40 CFR §761.65(d)(iv)(4) as specified in WAC 173-303-40(7)(e)(ii) substituting the term "miscellaneous unit" for "tank". In such a case, the Permittee shall take action to ensure the incident that caused the liquid to enter the containment system of the unit will not reoccur.
- d. If the source of the liquid is determined to be a leak in a primary containment of the unit, or if the source of the liquid is not determined, the Permittee shall take the following actions:
- (i) Close the unit according to Permit condition II.M.; or
 - (ii) Repair and certify the miscellaneous unit pursuant to WAC 173-303-680(2) and (3) and 40 CFR §761.60(e) in accordance with procedures in WAC 173-303-640(7)(e)(iii) and (f), substituting the term "miscellaneous unit" for "tank", before the miscellaneous unit is placed back into service.

- e. The Permittee shall document in the operating record procedures taken to comply with a. through d. above.
 - f. Pursuant to WAC 173-303-680(2), WAC 173-303-680 (3), 40 CFR §761.65(d), and 40 CFR §761.125(a)(1) the Permittee shall notify and report releases to the environment to the Director and Regional Administrator as specified in WAC 173-303-640(7)(d) and National Response Center.
- V.E.6. The Permittee shall ensure that for all units specified in Permit condition V.A., the process ventilation system and ancillary equipment, including but not limited to vents, filters, and monitoring instruments used to control fugitive emissions shall be in operation prior to wastes being handled within the unit. At any time the process ventilation system or ancillary equipment controlling fugitive emissions ceases to operate or produces insufficient vacuum to recover fugitive emissions from the unit, the Permittee shall cease all activity within the unit and shall ensure activities remain inoperative until the process ventilation and/or ancillary equipment is operational and producing sufficient vacuum to recover fugitive emissions.
- V.E.7. a. Treatment effectiveness, feedrates, and operating rates for the miscellaneous units listed in Permit condition V.A.1. shall be as specified in Tables 8, 11, 14, and 17 of Attachment CC of this Permit, Attachment NN, OO, PP, QQ(1), SS, VV(1), and WW(1) of this Permit and shall be consistent with the assumptions and basis which were reflected in Attachment AAA of this Permit.
- b. Compliance with Permit Condition V.E.7.a. and Modules VI and VII of this Permit shall be regarded as operating within the emission limits specified in Tables V-1 and V-2 of this Permit.
- c. All air pollution control devices and capture systems for which this Permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants and to minimize process upsets. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants and process upsets shall be established.
- V.E.8. The Permittee shall ensure that the carbon filters within the STB process vent system (SB-09) and the GASVIT™ building process vent system (GV-09) are maintained and operated in accordance with Attachments NN, OO, PP, QQ, VV, and WW, of this Permit, hereby modified as follows:

- a. Background levels shall be established only after construction of the facility, but prior to commencement of operations.
- b. Between carbon change-outs, the organic vapor and mercury monitoring instruments are zeroed according to manufacturer's specifications using compressed gas containing no organic vapors or mercury.

V.F. COMPLIANCE SCHEDULES

- V.F.1. The Permittee shall submit to the Department as a permit modification request pursuant to Permit conditions I.B.3. and I.B.4., an amendment to Attachment NN of this Permit to include a general description of the Container Rinse System (TT-06). The Container Rinse System shall not be operated until the Department approves this Permit modification.
- V.F.2. The Permittee shall submit to the Department and Agency as a permit modification request pursuant to Permit Conditions I.B.3. and I.B.4., an amendment to Attachments VV and WW to include specifications for the organic vapor meters and mercury sensors for the Stabilization Building process vent system (SB-09) and the GASVIT™ building process vent system (GV-09). The stabilization building process vent system (SB-09) and the GASVIT™ building process vent system (GV-09) shall not be operated until the Department and Agency have approved the permit modification.
- V.F.3. The Permittee shall obtain and submit to the Department and the Agency as a permit modification request pursuant to Permit Conditions I.B.3. and I.B.4., an amendment to Attachment CC of this Permit to include waste limitations for the Evaporator in the Secondary Waste Treatment System (GV-11), and to amend Attachments RR and QQ(1) of this Permit to remove all references to sending material contained in Building 5 floor drains to the Secondary Waste Treatment System (GV-11). No waste shall be placed in the Secondary Waste Treatment System (GV-11) until the Department and Agency have approved this permit modification request.
- V.F.4. The Permittee shall obtain and submit to the Department and the Agency as a permit modification request pursuant to Permit conditions I.B.3. and I.B.4., an amendment to applicable portions of Attachments NN, OO, PP, QQ, RR, SS, VV(1), WW(1), WW(3), and QQ(1) of this Permit to reflect the installation of catch pans beneath all miscellaneous units listed in Permit condition V.A., with a containment volume equal to the entire internal volume of the miscellaneous unit excluding the volume occupied by process equipment. No miscellaneous unit listed in Permit condition V.A. shall be constructed until the

Department and Agency have approved this permit modification request.

- V.F.5. The Permittee shall obtain and submit to the Department as a permit modification request pursuant to Permit conditions I.B.3. and I.B.4., an amendment to applicable portions of Attachments TT, UU, and VV(1) of this Permit to include addition of the following to the miscellaneous units specified below. The following miscellaneous units shall not be constructed until the Department has approved this permit modification request:
- a. Cutting and Shearing System (TP-02)-Specification for High Pressure Water Cutter (Tag Number TP-Z-0215)
 - b. Sorting System (TP-03)-Specifications for Dump Area Vent Hood (Tag Number TP-03-Z-0306), Transportable in-Process Container (Tag Number TP-03-C-0307), and Aerosol Canister Tool (Tag Number TP-03-Z-309).
 - c. Liquid Holding Tank System (TP-06)-Specifications for Air Filter (Tag Number TP-06-FLT-0604), Air Filter (Tag Number TP-FLT-0608), and Liquid Drip Pan (Tag Number TP-06-Z-0607).
 - d. Compaction/Macro-Encapsulation System (In-Drum Compactor) (TP-07)-Specifications for Air Filter (Tag Number TP-07-FLT-0704), Compaction Process Vent Filter Bank (Tag Number TP-07-FLT-0712), 85 Gallon Overpack with Basket (TP-07-C-0708), and 85 Gallon Overpack Vent Hood (Tag Number TP-07-A-0714).
 - e. Dryer System (TP-08)-Specifications for Filter (Tag Number TP-08-FLT-0801), Condensate Trap (Tag Number TP-08-Z-0807), and Air Filter (Tag Number TP-08-FLT-0809).
 - f. Decontamination Unit (Physical Extraction) (TT-05)- Specifications for Liquid Drip Pan (Tag Number TT-05-Z-0506), Demister Filter (Tag Number TT-05-FLT-0511), Air Filter (Tag Number TT-05-FLT-0514), and CO₂ Jet Pump (Tag Number TT-05-PMP-0515).
 - g. Container Rinse Assembly (TT-06)-Specification for Air Filter (Tag Number TT-06-FLT-0607).
 - h. STB Process Vent System (SB-09)-Specifications for Dust Collector (Tag Number SB-09-DC-0919), Blower (SB-09-BLO-0925), Dust Collector (Tag Number SB-09-DC-0920), and Blower (SB-09-BLO-0926).
- V.F.6. The Permittee shall obtain and submit to the Department as a Class 1 permit modification request pursuant to Permit Conditions I.B.3. and I.B.4., an amendment to Specification

No. 11100 in Attachment VV(1) of this Permit to include the following Tag Numbers for the Dryer System (TP-08) within sixty (60) days of the effective date of this Permit:

- a. Air Recirculation Blower - Tag Number TP-08-BLO-0802.
- b. Heater - Tag Number TP-08-HT-0803.
- c. Waste Dryer Enclosure - Tag Number ZP-08-Z-0805.
- d. Condenser - Tag Number TP-08-Z-0807.

V.F.7. The Permittee shall obtain and submit to the Department as a Class 1 permit modification request pursuant to Permit conditions I.B.3. and I.B.4., an amendment to Tables L and M in Attachment TT of this Permit to revise the Tag Numbers for the High-Capacity Mixing System (TT-01) and the Low-Capacity Mixing System (TT-02) Reagent Container Lift as Tag Numbers TT-01-E-0107 and TT-02-E-0207, respectively, within sixty (60) days of the effective date of this Permit.

V.F.8. The Permittee shall obtain and submit to the Department as a Class 1 permit modification request pursuant to Permit Conditions I.B.3. and I.B.4., an amendment Specification No. 15885 in Attachment VV(1) of this Permit to include for the STB Process Vent System (SB-09) the Tag Number for the Demister Filter of SB-09-FLT-0931, within sixty (60) days of the effective date of this Permit.

V.F.9. The Permittee shall obtain and submit to the Department as a permit modification request pursuant to Permit Conditions I.B.3. and I.B.4., an amendment to applicable portions of Attachments NN, PP, TT, and VV(1) of this Permit to include the Liquid Consolidation System (TP-09)'s nitrogen purge line specified on drawings 31001-P-004 and 31001-P-021 of Attachment RR of this Permit. The Liquid Consolidation System (TP-09) shall not be constructed until the Department has approved this permit modification request.

V.F.10. The Permittee shall obtain and submit to the Department and Agency as a permit modification request pursuant to Permit Conditions I.B.3. and I.B.4., an amendment to address the following requirements for the Dryer System (TP-08). The Dryer System (TP-08) shall not be constructed until the Department and Agency have approved this permit modification request:

- a. Correction of all typographical errors contained in Specification Number 11100 of Attachment VV(1) of this Permit.

- b. Amendment of Specification 11100 of Attachment VV(1) of this Permit to state that the performance test specified in Section 2.3 of Specification 11100 will not be conducted at the Permittee's facility covered under this Permit.

 - c. Amendment of applicable portions of Attachments VV(1), RR, TT, NN, and PP of this Permit to include the following for the Dryer System (TP-08):
 - (i) Process flow diagrams (PFD's) with mass balance calculations;
 - (ii) Piping and instrumentation diagrams (P&IDs) which shall follow ANSI standards and project legend/format;
 - (iii) Equipment general arrangement and assembly drawings with weights, anchor bolts, piping, and other interface requirements;
 - (iv) Electrical wiring and power connection requirements and alarm interface with supervisory control and data acquisition (SCADA) computer system; and
 - (v) Operation manuals including safety procedures to be used during unit operation.

 - d. Results of the performance test referenced in Specification 11100 of Attachment VV(1) of this Permit demonstrating that the unit will produce less than three (3) pounds/hour total air emissions in accordance with Permit condition II.P. and WAC 173-303-690.
- V.F.11. The Permittee shall develop and maintain on-site, as part of the operating record, surveillance, maintenance, and calibration event lists for the equipment control/instrument devices for the following units as specified in Permit condition V.A.2. prior to operation of these miscellaneous units:
- GV-01
 - GV-11

**TABLE V-1 - STABILIZATION BUILDING STACK
 ESTIMATED EMISSION RATES**

Chemicals Constituents	CAS NUMBER	Emission Rates (g/sec)
1,1,1-Trichloroethane (Methylchloroform)	71-55-6	9.28E-05
1,1,2,2-Tetrachloroethane	79-34-5	1.68E-09
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	76-13-11	1.05E-05
1,1-Dichloroethylene (Vinylidene Chloride)	75-35-4	1.57E-09
1,2 Butylene oxide	106-88-7	4.12E-08
1,2,3-Trichlorobenzene	87-61-6	1.55E-10
1,2,4-Trichlorobenzene	120-82-1	8.40E-08
1,2,4-Trimethylbenze (Pseudocumene)	95-63-6	5.32E-06
1,2-Dichlorobenzene	95-50-1	8.96E-08
1,2-Dichloroethane	107-06-2	3.36E-08
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	1.40E-09
1,3-Butadiene	106-99-0	3.84E-07
1,4-Dioxane	123-91-1	1.41E-05
1-Chloro-2,3-Epoxy propane	106-89-8	7.44E-09
1-Methoxy-2-Propanol	107-98-2	3.80E-09
2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	3.10E-11
2-Butanone (Methyl ethyl ketone)	78-93-3	2.96E-05
2-Butoxyethanol (Butoxyethanol) (Butyl cellosolve: Ethylene glycol, monobutyl ether)	111-76-2	7.20E-07
2-Ethoxyethanol (Ethoxyethanol) (Ethylene glycol monoethyl ether) cellosolve, Z-Ethoxyethanol)	110-80-5	9.87E-08
2-Methoxyethanol (2-Methoxymethanol [sic]) (Methyl Cellosolve, ethylene glycol, monobutyl ether)	109-86-4	5.27E-08
2-Propanone (Acetone)	67-64-1	5.08E-05
4-Methyl-2-pentanone (Isopropyl acetone, Hexone, Methyl Isobutyl Ketone - MIBK)	108-10-1	7.22E-05
Acenaphthene	83-32-9	6.59E-09
Acetonitrile	75-05-8	3.94E-05
Acetophenone	98-86-2	1.01E-08
Acrylonitrile	107-13-1	1.62E-07
Aniline	62-53-3	1.12E-09
Anthracene	120-12-7	6.59E-09
Arsenic	7440-38-2	1.66E-11
Azobenzene	103-33-3	3.72E-09
Barium	7440-39-3	1.26E-10
Benzene	71-43-2	2.45E-06

Chemicals Constituents	CAS NUMBER	Emission Rates (g/sec)
Benzo (a) anthracene	56-55-3	6.59E-09
Benzo (a) pyrene	50-32-8	6.59E-09
Benzo (b) fluoranthene	205-99-2	6.59E-09
Benzo (e) pyrene	192-97-2	6.59E-09
Benzo (g, h, i) perylene	191-24-2	6.59E-09
Benzo (k) fluoranthene	207-08-9	6.59E-09
Benzoic acid	65-85-0	1.55E-10
Cadmium	7440-43-9	6.47E-11
Cadmium oxide	1306-19-0	7.75E-12
Carbon disulfide	75-15-0	1.90E-06
Carbon tetrachloride	56-23-5	1.90E-05
Chlorobenzene	108-90-7	8.96E-08
Chloroethylene (Vinyl Chloride)	75-01-4	1.23E-07
Chloroform	67-66-3	1.49E-06
Chrome (Chromium: Total) (Hexavalent by METHOD 7109)	7440-47-3	4.23E-09
Chrysene	218-01-9	6.59E-09
Coal tar	8007-45-2	1.37E-07
Copper chloride	1344-67-8	3.10E-11
Cyclohexanone	108-94-1	1.04E-06
Cysteine	52-90-4	1.55E-09
Di(2-Ethylhexyl) phthalate (Bis(2-ethyl hexyl)phthalate, Di-sec-octyl phthalate)	117-81-7	4.75E-07
Dibenzo (a, h) anthracene	55-70-3	6.59E-09
Dichlorodifluoromethane	75-71-8	6.16E-08
Dichloromethane (Methylene chloride)	75-09-02	1.06E-06
Diethyl dithio carbamate (Dithiocarb)	148-18-5	3.10E-12
Diethylene glycol monobutylether	112-34-5	6.59E-09
Diethylene glycol monoethylether	111-90-0	2.05E-08
Dimethyl phthalate	131-11-3	2.09E-09
Di-n-butyl phthalate	84-74-2	1.54E-08
Di-n-octyl phthalate	117-84-0	1.29E-07
Diphenyl	92-52-4	2.95E-09
Ethyl acetate	141-78-6	4.25E-07
Ethyl benzene	100-41-4	1.57E-06
Ethylene glycol	107-21-1	6.05E-05
Ethylenediamine	107-15-3	1.09E-08
Ferric chloride	7705-08-0	1.09E-11
Formaldehyde (Formalin)	50-00-0	2.73E-06
Furfuryl-alcohol	98-00-0	4.11E-09
Hexachlorobenzene	118-74-1	2.87E-09
Hexane (n-Hexane)	110-54-3	4.55E-07
Hydrochloric acid	7647-01-0	1.00E-08
Indeno (1, 2, 3-cd) pyrene	193-39-5	6.59E-09

Chemicals Constituents	CAS NUMBER	Emission Rates (g/sec)
Isobutanol (Isobutyl alcohol)	78-83-1	4.61E-07
Kerosene	8008-20-6	7.75E-10
Lead	7439-92-1	3.65 E-04
Mercury	7439-97-6	8.34E-08
Methanol (Methyl alcohol)	67-56-1	1.15E-04
Methylnaphthalene	90-12-0	6.82E-09
Monobutyl ether	Mix	5.12E-09
m-Xylene	108-38-3	1.02E-06
N,N-Dimethyl formamide	68-12-2	4.63E-08
Napthalene	91-20-3	6.75E-08
N-Butyl acetate (Butyl acetate)	123-86-4	1.33E-08
N-butyl alcohol (1-Butanol)	71-36-3	7.73E-07
Nitrobenzene	98-95-3	3.00E-06
O-cresol (2-Methylphenol)	95-48-7	5.04E-08
o-Xylene	95-47-6	1.65E-06
p-Cresol (4-Methylphenol)	106-44-5	1.12E-09
Perchloric acid	7601-90-3	2.28E-08
Phenol	108-95-2	3.54E-06
Phosphoric acid (Hydrogen phosphate)	7664-38-2	9.78E-07
Phthalic acid	88-99-3	8.82E-10
Potassium chloride	7447-40-7	4.96E-09
Potassium cyanide	151-50-8	2.02E-08
p-Xylene	106-42-3	8.71E-05
Pyrene	129-00-0	6.59E-09
Pyridine	110-86-1	2.59E-06
Quinoline	91-22-5	1.55E-10
Selenium	7782-49-2	6.35E-11
Silver	7440-22-4	1.45E-11
Sodium chloride	7647-14-5	1.18E-09
Styrene	100-42-5	3.00E-06
Tert butyl methyl ether	1634-04-4	3.35E-06
Tetrachloroethylene (PERC)	127-18-4	7.28E-06
Tetrahydrofuran	109-99-9	3.72E-11
Toluene	108-88-3	2.06E-04
Tributyl phosphates	126-73-8	4.61E-07
Trichloroethene (TCE) (Trichloroethylene)	79-01-6	1.07E-05
Trichloroflouromethane	75-69-4	6.00E-07
Vinyl acetate	108-05-4	1.12E-07
Zirconium	7440-67-7	1.55E-12

**TABLE V-2 - GASVIT™ BUILDING STACK EMISSION
 RATE ESTIMATES**

Chemical Constituents	CAS NUMBER	Emission Rate (g/sec)
1,1,1-Trichloroethane (Methylchloroform)	71-55-6	1.70E-05
1,1,2,2-Tetrachloroethane	79-34-5	1.00E-06
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	76-13-11	2.18E-07
1,1,2-Trichloroethane	79-00-5	4.40E-06
1,1-Dichloroethane (Ethylidene dichloride)	75-34-3	4.40E-06
1,1-Dichloroethylene (Vinylidene Chloride)	75-35-4	9.30E-07
1,2 Butylene oxide	106-88-7	2.28E-10
1,2,3-Trichlorobenzene	87-61-6	8.58E-13
1,2,3-Trichloropropane	96-18-4	2.2E-06
1,2,4-Trichlorobenzene	120-82-1	5.30E-06
1,2,4-Trimethylbenzene (Pseudocumene)	95-63-6	6.24E-05
1,2-Dichlorobenzene	95-50-1	1.10E-05
1,2-Dichloroethane (Ethylene dichloride)	107-06-2	4.42E-06
1,2-Dichloropropane (Propylene dichloride)	78-87-5	4.42E-06
1,3,5-Trimethylbenzene (Mesitylene)	108-67-8	2.90E-11
1,3-Butadiene	106-99-0	7.96E-09
1,3-Dichlorobenzene	541-73-1	5.30E-06
1,4-Dichlorobenzene	106-46-7	5.30E-06
1,4-Dioxane	123-91-1	2.93E-07
1-Chloro-2,3-Epoxy propane	106-89-8	4.12E-11
1-Methoxy-2-Propanol	107-98-2	2.10E-11
2,4,5-Trichlorophenol	95-95-4	5.30E-06
2,4,6-Trichlorophenol	88-06-2	5.30E-06
2,4-Dichlorophenol	120-83-2	5.30E-06
2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	1.72E-13
2,4-Dimethylphenol	105-67-9	5.30E-06
2,4-Dinitrophenol	51-28-5	5.30E-06
2,4-Dinitrotoluene	121-14-2	5.30E-06
2,6-Dinitrotoluene	606-20-2	5.30E-06
2-Butanone (Methyl ethyl ketone)	78-93-3	6.14E-07
2-Butoxyethanol (Butoxyethanol (Butyl cellosolve: Ethylene glycol, monobutyl ether)	111-76-2	3.98E-09
2-Chloronaphthalene (beta-chloronaphthalene)	91-58-7	5.30E-06

Chemical Constituents	CAS NUMBER	Emission Rate (g/sec)
2-Chlorophenol	95-57-8	5.30E-06
2-Ethoxyethanol (Ethoxyethanol) (Ethylene glycol monoethyl ether; cellosolve, Z-Ethoxyethanol)	110-80-5	5.46E-10
2-Methoxyethanol (2-Methoxymethanol [sic]) (Methyl Cellosolve, ethylene glycol monobutyl ether)	109-86-4	2.92E-10
2-Nitroaniline (o-Nitroaniline)	88-74-4	5.30E-06
2-Propanone (Acetone)	67-64-1	5.50E-06
3,3'-Dichlorobenzidine	91-94-1	5.30E-06
3-Nitroaniline (m-Nitroaniline)	99-09-2	5.30E-06
4-Chloroaniline (p-Chloroaniline)	106-47-8	5.30E-06
4-Methyl-2-pentanone (Isopropyl acetone, Hexone, Methyl Isobutyl Ketone - MIBK)	108-10-1	1.50E-06
4-Nitroaniline (p-Nitroaniline)	100-01-6	5.30E-06
4-Nitrophenol	100-02-7	5.30E-06
Acenaphthene	83-32-9	2.22E-08
Acetonitrile	75-05-8	8.18E-07
Acetophenone	98-86-2	5.57E-11
Acrylonitrile	107-13-1	4.43E-06
Aniline	62-53-3	2.32E-11
Anthracene	120-12-7	2.22E-08
Antimony	7440-36-0	3.70E-06
Arsenic	7440-38-2	1.10E-05
Azobenzene	103-33-3	2.06E-11
Barium	7440-39-3	3.60E-06
Benzene	71-43-2	8.85E-06
Benzo (a) anthracene	56-55-3	2.22E-08
Benzo (a) pyrene	50-32-8	2.22E-08
Benzo (b) fluoranthene	205-99-2	2.22E-08
Benzo (e) pyrene	192-97-2	3.64E-11
Benzo (g, h, i) perylene	191-24-2	2.22E-08
Benzo (k) fluoranthene	207-08-9	2.22E-08
Benzoic acid	65-85-0	3.30E-06
Benzyl alcohol	100-51-6	5.30E-06
Benzyl chloride	100-44-7	4.42E-06
Beryllium	7440-41-7	1.80E-06
Bis (2-chloroethoxy) methane	111-91-1	5.30E-06
Bis (2-chloroethyl) ether	111-44-4	5.30E-06
Bis (2-chloroisopropyl) ether (2,2-Oxybis (1-Chloropropane))	108-60-1	5.30E-06
Bromodichloromethane	75-27-4	4.42E-06
Bromoform	75-25-2	4.42E-06
Bromomethane	74-83-9	4.42E-06
Butylbenzyl phthalate	85-68-7	5.30E-06

Chemical Constituents	CAS NUMBER	Emission Rate (g/sec)
Cadmium	7440-43-9	1.80E-06
Cadmium oxide	1306-19-0	4.29E-14
Carbon disulfide	75-15-0	4.44E-06
Carbon tetrachloride	56-23-5	4.81E-06
Chlorine/Chloride (Total)	7782-50-5	6.42E-03
Chlorobenzene	108-90-7	8.83E-06
Chlorobenzilate	510-15-6	5.30E-06
Chloroethane	75-00-3	4.42E-06
Chloroethylene (Vinyl Chloride)	75-01-4	4.43E-06
Chloroform	67-66-3	4.43E-06
Chloromethane	74-87-3	4.42E-06
Chrome (Chromium: Total) (Hexavalent by METHOD 7109)	7440-47-3	2.20E-06
Chrysene	218-01-9	2.22E-08
cis-1,3-Dichloropropene	10061-01-5	4.42E-06
Coal tar	8007-45-2	7.55E-10
Copper	7440-50-8	9.11E-05
Copper chloride	1344-67-8	1.72E-13
Cyclohexanone	108-94-1	2.15E-08
Cysteine	52-90-4	8.58E-12
Di(2-Ethylhexyl) phthalate (Bis(2-ethyl hexyl)phthalate, Di-sec-octyl phthalate)	117-81-7	5.30E-06
Dibenzo(a,h)anthracene	53-70-3	2.22E-08
Dibenzofuran	132-64-9	5.30E-06
Dibromochloromethane	124-48-1	4.42E-06
Dichlorodifluoromethane	75-71-8	4.42E-06
Dichloromethane (Methylene chloride)	75-09-02	6.84E-05
Diethyl dithio carbamate (Dithiocarb)	148-18-5	1.72E-14
Diethyl phthalate	84-66-2	5.30E-06
Diethylene glycol monobutylether	112-34-5	3.65E-11
Diethylene glycol monoethylether	111-90-0	1.13E-10
Dimethyl phthalate	131-11-3	5.30E-06
Di-n-butyl phthalate	84-74-2	5.30E-06
Di-n-octyl phthalate	117-84-0	5.30E-06
Diphenyl	92-52-4	1.63E-11
Ethyl acetate	141-78-6	8.83E-09
Ethyl benzene	100-41-4	4.43E-06
Ethylene glycol	107-21-1	1.25E-06
Ethylenediamine	107-15-3	6.00E-11
Ferric chloride	7705-08-0	6.00E-14
Fluoranthene	206-44-0	2.21E-08
Fluorene	86-73-7	2.21E-08
Formaldehyde (Formalin)	50-00-0	1.51E-08
Furfuryl-alcohol	98-00-0	2.27E-11
Hexachlorobenzene	118-74-1	5.30E-06

Chemical Constituents	CAS NUMBER	Emission Rate (g/sec)
Hexachlorobutadiene	87-68-3	5.30E-06
Hexachlorocyclopentadiene	77-47-4	5.30E-06
Hexachloroethane	67-72-1	5.30E-06
Hexane (n-Hexane)	110-54-3	2.52E-09
Hydrochloric acid	7647-01-0	9.30E-03
Indeno(1,2,3-cd)pyrene	193-39-5	2.20E-08
Isobutanol (Isobutyl alcohol)	78-83-1	9.57E-09
Isophorone	78-59-1	5.30E-06
Kerosene	8008-20-6	4.29E-12
Lead	7439-92-1	1.80E-04
Manganese	7439-96-5	2.20E-06
m-Cresol (3-methylphenol)	108-39-4	5.30E-06
Mercury	7439-97-6	2.10E-04
Methanol (Methyl alcohol)	67-56-1	2.39E-06
Methylnaphthalene	90-12-0	3.77E-11
Monobutyl ether	Mix	2.83E-11
m-Xylene	108-38-3	4.49E-06
N,N-Dimethyl formamide	68-12-2	2.56E-10
Napthalene	91-20-3	1.06E-05
N-Butyl acetate (Butyl acetate)	123-86-4	7.36E-11
N-butyl alcohol (1-Butanol)	71-36-3	1.60E-08
Nickel	7440-02-0	1.80E-04
Nitrobenzene	98-95-3	5.37E-06
N-nitroso-di-n-propylamine	621-64-7	5.30E-06
N-nitroso-di-phenylamine	86-30-6	5.30E-06
O-cresol (2-Methylphenol)	95-48-7	5.30E-06
o-Xylene	95-47-6	4.44E-06
PCB ^a	13029-08-8	7.25E-07
PCDD/PCDF	-	-
TCDD, 2, 3, 7, 8-	1746-01-6	3.67E-11
OCDD, 1, 2, 3, 4, 5, 7, 8, 9-	3268-87-9	3.67E-13
HxCDD, 1, 2, 3, 7, 8, 9-	19408-74-3	1.83E-11
OCDF, 1, 2, 3, 4, 5, 6, 7, 8, 9-	39001-02-0	3.67E-13
HxCDD, 1, 2, 3, 4, 7, 8-	39227-28-6	1.83E-11
PeCDD, 1, 2, 3, 7, 8-	40321-76-4	8.80E-11
TCDF, 2, 3, 7, 8-	51207-31-9	3.67E-12
HpCDF, 1, 2, 3, 4, 7, 8, 9-	55673-89-7	1.83E-12
PeCDF, 2, 3, 4, 7, 8-	57117-31-4	8.80E-11
PeCDF, 1, 2, 3, 7, 8-	57117-41-6	8.80E-12
HxCDF, 1, 2, 3, 6, 7, 8-	57117-44-9	1.83E-11
HxCDD, 1, 2, 3, 6, 7, 8-	57653-85-7	1.83E-11
HxCDF, 2, 3, 4, 6, 7, 8-	60851-34-5	1.83E-11
HpCDF, 1, 2, 3, 4, 6, 7, 8-	67562-39-4	1.83E-12
HxCDF, 1, 2, 3, 4, 7, 8-	70648-26-9	8.80E-12
HxCDF, 1, 2, 3, 8, 7, 9-	72918-21-9	1.83E-11

Chemical Constituents	CAS NUMBER	Emission Rate (g/sec)
HpCDD, 1, 2, 3, 4, 6, 7, 8-	99999-99-9	1.83E-12
p-Cresol (4-Methylphenol)	106-44-5	6.60E-07
Pentachlorophenol	87-86-5	5.30E-06
Perchloric acid	7601-90-3	1.26E-10
Phenol	108-95-2	5.38E-06
Phosphoric acid (Hydrogen phosphate)	7664-38-2	5.41E-09
Phthalic acid	88-99-3	4.88E-12
Potassium chloride	7447-40-7	2.74E-11
Potassium cyanide	151-50-8	1.12E-10
p-Xylene	106-42-3	1.59E-05
Pyrene	129-00-0	2.22E-08
Pyridine	110-86-1	5.37E-08
Quinoline	91-22-5	8.58E-13
Selenium	7782-49-2	2.60E-05
Silver	7440-22-4	3.70E-05
Sodium chloride	7647-14-5	6.52E-12
Styrene	100-42-5	4.47E-06
Tert butyl methyl ether	1634-04-4	6.95E-08
Tetrachloroethylene (PERC)	127-18-4	8.96E-06
Tetrahydrofuran	109-99-9	2.06E-13
Thallium	7440-28-0	1.00E-06
Toluene	108-88-3	3.85E-05
trans-1,2-Dichloroethene	156-60-5	4.42E-06
trans-1,3-Dichloropropene	10061-02-6	4.42E-06
Tributyl phosphates	126-73-8	2.55E-09
Trichloroethene (TCE) (Trichloroethylene)	79-01-6	4.63E-06
Trichloroflouromethane	75-69-4	4.40E-06
Vanadium	7440-62-2	3.70E-05
Vinyl acetate	108-05-4	4.43E-06
Zirconium	7440-67-7	8.58E-15

^a Includes Total Mono CBs, Total Di CBS, Total Tri CBs, Total Tetra CBs, Total Penta CBs, Total Hexa CBs, Total Hepta CBs, Total Octa CBs, Total Nona CBs, Total Deca CBs, 3,4,3',4' - TeCB, 3,4,5,3',4' - PeCB, 3,4,5,3',4',5' - HxCB, 2,3,4,3',4' - PeCB, 2,3,4,5,4' - PeCB, 2,4,5,3',4' - PeCB, 3,4,5,2',4' - PeCB, 2,3,4,5,3',4' - HxCB, 2,3,4,3',4',5' - HxCB, 2,4,5,3',4',5' - HxCB, 2,3,4,5,3',4',5' HpCB, 2,3,4,5,2'3',4' - HpCB, 2,3,4,5,2',4',5' - HpCB

MODULE VI - LONG TERM MISCELLANEOUS THERMAL TREATMENT
UNIT-NORMAL OPERATION CONDITIONS

GASVIT™ SYSTEM DESCRIPTION

Description	Subsystem Designation	Unit Description Drawings	Tables	Narrative Description
Feed Subsystems: Liquid Feeder, Continuous Solid Feeder, Solid Batch Feeder, and Flux Feeder	GV-02	31001-P-050, 31001-P-072-01 and 31001-P-072-02 of Attachment RR of this Permit and, 31001-P-072-03 and 04 of Attachment SS of this Permit	Tables F, G and H of Attachment UU of this Permit	Section 3.2 of Attachment QQ of this Permit
Process Chamber and Thermal Residence Chamber	GV-03	31001-P-051 and 31001-P-073-01 through 09 of Attachment SS of this Permit	Tables I, J, K, L, M, N, O, P, and Q.	Section 3.3
Product Handling	GV-04	31001-P-051, 31001-P-074-01, 02 of Attachment SS of this Permit	Tables R and S	Section 3.4
First Stage Syngas Processing (High Temperature Filter)	GV-05	31001-P-051 and 31001-P-075 of Attachment SS of this Permit	Table T	Section 3.5
Second Stage Syngas Processing (Primary Scrubber, Secondary Scrubber, High Efficiency Mist	GV-06	31001-P-052-01, 31001-P-076-01, 31001-P-076-02, 31001-P-076-03, and 31001-P-076-04 of Attachment SS of this	Tables U, V, W, and X	Section 3.6

Description	Subsystem Designation	Unit Description Drawings	Tables	Narrative Description
Eliminator (HEME), High Efficiency Particulate (HEPA) Air Filter) and Carbon Filter)		Permit		
Third Stage Syngas Processing (Syngas Converter, and Quench)	GV-07	31001-P-052-02 and 31001-P-077 of Attachment SS of this Permit.	Table Y	Section 3.7
Syngas Processing for Process Control	GV--08	31001-P-051 of Attachment SS of this Permit and 31001-P-078 of Attachment RR of this Permit	Table Z	Section 3.8
GASVIT™ Main Process Controls	GV-10	31001-P-080-01 and 31001-P-080-02 of Attachment RR of this Permit.	Tables BB and CC	Section 3.10

Requirements pertaining to the tank in the Liquid Feed Subsystem (GV-02) are specified in Module IV of this Permit.

VI.A.1. Requirements For GASVIT™ System Beginning Normal Operation [WAC 173-303-680, WAC 173-303-340, WAC 173-303-670(2)(7), WAC 173-303-815(2)(b)(ii), WAC 173-303-807, 40 CFR §§761.60(e), 761.65(d), 761.70, and 761.180].

Prior to commencing normal operations provided in Module VI of this Permit, all requirements in Module VII of this Permit shall have been met by the Permittee and approved by the Agencies, the Demonstration Test results and the revised Final Risk Assessment provided for in Permit conditions II.S. and VII.A. shall have been evaluated and approved by the Agencies, as required by this Permit, and the applicable numerical values represented with an asterisk (*) in the conditions and tables of Module VI of this Permit shall have

been established.

- a. Construction and Maintenance [WAC 173-303-340, WAC 173-303-680(2), and 40 CFR §761.60(e)].
- (i) The Permittee shall design and construct the GASVIT™ System as specified in all applicable drawings in Attachments RR and SS of this Permit and all applicable drawings and specifications in Attachments OO, QQ, UU, WW(1), WW(3), and XX of this Permit.
 - (ii) The Permittee shall design and construct all containment systems for the GASVIT™ System as specified in all applicable drawings in Attachments RR of this Permit and all applicable drawings and specifications in Attachments OO, QQ, RR, UU, WW(1), and XX of this Permit.
 - (iii) The Permittee shall ensure periodic integrity assessments are conducted on the GASVIT™ System over the term of this Permit pursuant to WAC 173-303-680(2) and (3) and 40 CFR §761.65(d) as specified in WAC 173-303-640(3)(b) substituting the term "GASVIT™ System" for "tank" using procedures in Attachment EE. The schedule and conditions for revising the schedule, provided in Attachment EE of this Permit shall be used for these integrity assessments substituting the term "GASVIT™ System" for "tank". The starting date for scheduling shall be the date of the most recent integrity assessment. Results of the integrity assessments shall be included in the facility operating record until final closure and corrective action are complete and certified.
 - (iv) The Permittee shall address problems detected during the GASVIT™ System integrity assessment specified in Permit condition VI.A.1.a.(iii). in accordance with procedures specified in Attachment EE of this Permit.
 - (v) The Permittee shall immediately remove the GASVIT™ System from mixed waste and mixed-TSCA regulated PCB waste service if the GASVIT™ System does not meet or exceed its design standard as specified in the unit data sheets in Attachments UU, WW(1), WW(3), and XX of this

Permit.

- (vi) All process monitors required, pursuant to Permit condition VI.A.1.c. shall be equipped with operational alarms to warn of deviation, or imminent deviation from the limits specified in Tables VI-1 and VI-3 of this Permit.
- (vii) Modifications to design plans and specifications for the GASVIT™ System shall be allowed only in accordance with Permit conditions I.B.3., I.B.4., and II.L.
- (viii) The Permittee shall install and test all process monitoring and control instrumentation for the GASVIT™ System in accordance with Attachments EE, QQ, UU, WW(1), WW(3), and YY of this Permit prior to treating mixed waste or mixed-TSCA regulated PCB waste in the GASVIT™ System.
- (ix) The Permittee shall not place mixed waste, mixed-TSCA regulated PCB waste, treatment reagents, or other materials in the GASVIT™ System if these substances could cause the unit to rupture, leak, corrode, or otherwise fail.
- (x) The Permittee shall operate the GASVIT™ System to prevent spills and overflows using the procedures and equipment described in Attachments II, OO, QQ, RR, SS, UU, WW(1), WW(3), and XX of this Permit.
- (xi) The Permittee shall ensure that the containment systems for the GASVIT™ System is free of cracks or gaps to prevent any migration of waste or accumulated liquid out of the system to the soil, ground water, or surface water at any time. Any indication that a crack or gap may exist in the containment systems shall be investigated and repaired in accordance with Attachment EE of this Permit.
- (xii) An impermeable coating as specified in Attachment OO of this Permit, applicable drawings in Attachment RR of this Permit, and applicable specifications in Attachment XX of this Permit, shall be maintained for all concrete containment systems for the GASVIT™ System. The coating shall prevent migration of any wastes into the concrete. All coatings shall meet the following performance standards:

- (a) The coating must seal the containment surface such that no cracks, seams, or other avenues through which liquid could migrate are present;
 - (b) The coating must be of adequate thickness and strength to withstand the normal operation of equipment and personnel within the given area such that degradation or physical damage to the coating or lining can be identified and remedied before wastes could migrate from the system; and
 - (c) The coating must be compatible with the waste managed in the containment system.
- (xiii) The Permittee shall inspect all containment systems for the GASVIT™ System in accordance with the procedures specified in Attachment EE of this Permit and take the following actions if liquid is detected in these containment systems:
- (a) Remove the liquid from the containment area pursuant to WAC 173-303-680(2) and (3) and 40 CFR §761.60(e) as specified in WAC 173-303-640(7)(b) substituting the term "GASVIT™ System" for "tank". The liquid removed from containment areas of the GASVIT™ System shall be at a minimum managed as mixed waste and mixed-TSCA regulated PCB waste.
 - (b) Determine the source of the liquid.
 - (c) If the cause of the release was a spill or uncontaminated water that has not damaged the integrity of the GASVIT™ System, the Permittee may return the GASVIT™ System to service pursuant to WAC 173-303-680(2) and (3) and 40 CFR §761.60(e) as specified in WAC 173-303-640(7)(e)(ii) substituting the term "GASVIT™ System" for "tank". In such a case, the Permittee shall take action to ensure the incident that caused the liquid to enter the containment system of the unit will not reoccur.

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- (d) If the source of the liquid is determined to be a leak in a primary containment of the unit, or if the source of the liquid is not determined, the Permittee shall take the following actions:
- (1) Close the GASVIT™ System according to Permit condition II.M.; or
 - (2) Repair and certify the GASVIT™ System pursuant to WAC 173-303-680(2) and (3) and 40 CFR §761.60(e) in accordance with procedures in WAC 173-303-640(7)(e)(iii) and (f), substituting the term "GASVIT™ System" for "tank", before the GASVIT™ System is placed back into service.
- (e) The Permittee shall document in the operating record procedures taken to comply with (a) through (d) above.
- (f) Pursuant to WAC 173-303-680(2), WAC 173-303-680(3), 40 CFR §761.65(d), and CFR §761.125(a)(1), the Permittee shall notify and report releases to the environment to the Director and Regional Administrator as specified in WAC 173-303-640(7)(d).
- (xiv) All air pollution control devices and capture systems for which this Permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants and to minimize process upsets. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants and process upsets shall be established.
- b. Performance Standard [WAC 173-303-680, WAC 173-303-670(4), WAC 173-303-815(2)(b)(ii), 40 CFR §761.60(e), and 40 CFR §761.60.70.].
- (i) The GASVIT™ System must achieve a destruction and removal efficiency (DRE) of 99.99% for the principal organic dangerous constituents (PODCs) listed below measured at the quench tower exit [WAC 173-303-680(2), WAC 173-303-670(4)(a), and WAC 173-303-815(2)(b)(ii)]:

- Naphthalene
 - Monochlorobenzene
 - The DRE specified in Permit conditions VI.A.1.b.(i) shall be calculated by the method specified in WAC 173-303-670(4)(a).
- (ii) The GASVIT™ System must achieve a destruction and removal efficiency (DRE) of 99.9999% for PCBs measured at the quench tower exit [40 CFR §761.60(e) and 40 CFR §761.70].
- The DRE specified in Permit condition VI.A.1.b.(ii) shall be calculated by the method specified in 40 CFR §264.343(a)(1) substituting PCBs for POHCs.
- (iii) The particulate matter emission from the GASVIT™ System measured at the quench tower exit shall not exceed one hundred and eighty (180) mg/dscm (0.08 grains/dscf) on an uncorrected basis [WAC 173-303-680(2), WAC 173-303-670(4)(c)(ii), WAC 173-303-815(2)(b)(ii), 40 CFR §761.60(e), and 40 CFR §761.70].
- (iv) The hydrogen chloride (HCl) emission from the GASVIT™ System measured at the quench tower exit shall not exceed the following [WAC 173-303-680(2), WAC 173-303-670(4)(c)(I), WAC 173-303-815(2)(b)(ii), 40 CFR §761.60(e), and 40 CFR §761.70]:
- (a) Emission rate specified in Table VI-3.
- (v) The Permittee shall control emission of products of incomplete reaction (PIR) from the GASVIT™ System such that the carbon monoxide (CO) level in the quench tower exit shall not exceed one hundred (100) parts per million (ppm), dry volume, over an hourly rolling average on an uncorrected basis [WAC 173-303-680(2), WAC 173-303-815(2)(b)(ii), and 40 CFR §761.60(e)].
- (vi) If the GASVIT™ System exceeds the emission rates for any constituent on Table VI-2, then the Permittee shall perform the following actions [WAC 173-303-680(2), WAC 173-303-815(2)(b)(ii), and 40 CFR §761.60(e)].

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- (a) Notify the Agencies within twenty-four (24) hours of the discovery.
 - (b) Submit to the Agencies additional risk information to indicate that the increased emission is off-set by decreased emission from another constituent that is expected to be emitted at the same time and/or investigation of the cause of the exceedance.
 - (c) Based on the notification and any additional information, the Director and/or the Regional Administrator may submit, in writing, direction to the Permittee to stop waste feed to the GASVIT™ System. The Permittee shall stop waste to GASVIT™ system in the time specified in writing. Waste feed operation will resume upon written approval from the Agencies, as applicable [WAC 173-303-680(2), WAC 173-303-815(2)(b)(ii), and 40 CFR §761.60(e)].

The above emission limits shall be met by limiting feed rates as specified in Table VI-1 and compliance with the operating conditions specified in Permit condition VI.A.1.c., except as specified in Permit condition VI.A.1.b.(vii).

- (vii) Compliance with the operating condition specified in Permit condition VI.A.1.c., shall be regarded as compliance with the required performance standards identified in Permit conditions VI.A.1.b.(i) through VI.A.1.b.(vi). However, if it is determined that during the effective period of this Permit that compliance with the operating conditions in Permit condition VI.A.1.c. is not sufficient to ensure compliance with the performance standards specified in Permit conditions VI.A.1.b.(i) through VI.A.1.b.(vi), the Permit may be modified, revoked, or reissued pursuant to Permit condition I.B.

- c. Operating Conditions [WAC 173-303-680(2), WAC 173-303-670(6), WAC 173-303-815(2)(b)(ii), WAC 173-303-807, 40 CFR §761.60(e), and 40 CFR §761.70].

The Permittee shall operate the GASVIT™ system in accordance with Attachments OO, QQ, RR, SS, UU, WW(1), WW(3), and YY of this Permit, as modified in accordance with Module VII of this Permit, Permit conditions VI.A.1.b.(vii), VI.A.1.g., VI.A.1.h., and the following:

- (i) The Permittee shall operate the GASVIT™ System in order to maintain the systems and process parameters listed in Table VI-3 of this Permit within the ranges or setpoints specified in Table VI-3 of this Permit.
- (ii) The Permittee shall operate the automatic waste feed cutoff (AWFCO) systems, specified in Table VI-3 of this Permit, to automatically cut-off and/or lock-out the mixed waste and mixed-TSCA PCB regulated waste feed to GASVIT™ System when the monitored operating conditions deviate from the setpoints specified in Table VI-3 of this Permit.
- (iii) The Permittee shall operate the AWFCO systems, specified in Table VI-3 of this Permit, to automatically cut-off and/or lock-out the mixed waste and mixed-TSCA PCB regulated waste feed to the GASVIT™ System when the instrument measuring these monitored parameters fails or exceeds its specified span value.
- (iv) The Permittee shall operate the AWFCO systems, specified in Table VI-3 of this Permit, to automatically cut-off and/or lock-out the mixed waste and mixed-TSCA PCB regulated waste feed to the GASVIT™ System when any portion of the GASVIT™ System is bypassed.
- (v) In the event of a malfunction of the AWFCO systems listed in Table VI-3 of this Permit, the Permittee shall immediately, manually cut-off the waste feed to the GASVIT™ System. The Permittee shall not restart the waste feed until the problem causing the malfunction has been identified and corrected.
- (vi) The Permittee shall manually cut-off the waste feed to the GASVIT™ System when the operating conditions deviate from the limits specified in Permit condition VI.A.1.c.(i), unless the deviation automatically activates the waste feed cut-off sequence specified in Permit

conditions VI.A.1.c.(ii), VI.A.1.c.(iii),
and/or VI.A.1.c.(iv).

- (vii) If greater than thirty (30) waste feed cutoffs occur due to deviations from Table VI-3 within thirty (30) calendar days for the GASVIT™ System, the Permittee is required to verbally notify the Agencies of the deviations from Table VI-3 on the first business day of the occurrence or following the occurrence and shall require either Department or Agency written approval before waste feed can resume. If neither of the Agencies respond to the notification within two (2) business days, the Permittee is automatically authorized to resume waste feed. These waste feed cut-offs, whether automatically or manually activated, are counted if the specified setpoints are deviated from while mixed waste, and mixed-TSCA regulated PCB wastes, and waste residues continue to be processed in the GASVIT™ System. A cascade event is counted at a frequency of one towards the first waste feed cutoff parameter specified on Table VI-3 which the setpoint is deviated from.
- (viii) If any portion of the GASVIT™ System is bypassed so that gases are not treated as during the demonstration test it shall be regarded as non-compliance with the operating conditions specified in Permit condition VI.A.1.c. and the performance standards specified in Permit condition VI.A.1.b. After such a bypass the Permittee shall perform the following actions:
- (a) Investigate the cause of the bypass;
 - (b) Take appropriate corrective measures to minimize future bypasses;
 - (c) Record the investigation findings and corrective measures in the operating record; and
 - (d) Submit a written report to the Agencies within five (5) days of the bypass documenting the result of the investigation and corrective measures taken.
- (ix) Non-aqueous GASVIT™ System residues (i.e.,

vitriified product, high temperature filter residues, discarded HEPA filters, etc.) generated during treatment of mixed-TSCA regulated PCB wastes shall be sampled and analyzed in accordance with Attachment CC of this Permit, as modified in accordance with Permit condition II.F., to demonstrate that these residues contain less than two (2) parts per million (ppm) of total PCBs. All such non-aqueous GASVIT™ System residues which contain 2 ppm or greater total PCBs must be retreated in the GASVIT™ System or must be disposed of as though it contains the highest concentration of PCBs fed during the generation of the residue [40 CFR 761.60(e)].

- (x) Aqueous GASVIT™ System's residues (i.e., scrubber blowdown, etc.) generated during mixed-TSCA regulated PCB wastes shall be sampled and analyzed in accordance with Attachment CC of this Permit, as modified in accordance with Permit condition II.F., to demonstrate that these residues contain less than three (3) parts per billion (ppb) of total PCBs. All such aqueous GASVIT™ System residues which contain 3 ppb or greater total PCBs must be retreated in the GASVIT™ System disposed of as though it contains the highest concentration of PCBs fed during the generation of the residue or processed through a carbon treatment system until such time that the water contains less than 3 ppb total PCBs. Carbon thus used must be disposed of as though it contains the highest concentration of PCBs fed during the generation of the residue [40 CFR §761.60(e)].
- (xi) The Permittee shall control fugitive emissions from the GASVIT™ System by maintaining the primary chamber sealed against fugitive emissions and maintaining the downstream air pollution control system under negative pressure, except for the Syngas converter which will be sealed against fugitive emissions.
- (xii) Compliance with the operating conditions specified in Permit condition VI.A.1.c., shall be regarded as compliance with the required performance standards identified in Permit condition VI.A.1.b. However, evidence that compliance with these operating conditions is insufficient to ensure compliance with the

performance standards, shall justify modification, revocation, or reissuance of this Permit, in accordance with Permit condition I.B.

- d. Inspection Requirements [WAC 173-303-680(3), WAC 173-303-670(7), WAC 173-303-807, and 40 CFR §761.60(e)].
- (i) The Permittee shall inspect the GASVIT™ System in accordance with the inspection schedules and requirements in Attachment EE of this Permit.
 - (ii) The inspection data for the GASVIT™ System shall be recorded, and the records shall be placed in the operating record for the GASVIT™ System, in accordance with Permit condition II.I.
 - (iii) The Permittee shall comply with the inspection requirements specified in Attachment YY and WW(1) and WW(3) of this Permit, as modified by Module VII of this Permit and Permit conditions VI.A.1.b.(vii), VI.A.1.g., and VI.A.1.h.
- e. Monitoring Requirements [WAC 173-303-680(3), WAC 173-303-670(7), WAC 173-303-807, 40 CFR §761.60(e), and 40 CFR §761.70].
- (i) Upon receipt of a written request from the Department or the Agency, the Permittee shall perform sampling and analysis of the waste and exhaust emissions to verify that the operating requirements established in the permit achieve the performance standards delineated in this Permit.
 - (ii) All monitoring, recording, maintenance, calibrations, and test data shall be recorded and the records for GASVIT™ System shall be placed in the operating record for the GASVIT™ System in accordance with Permit condition II.G.
 - (iii) The Permittee shall comply with the monitoring requirements specified in the Attachments OO, QQ, WW(1), WW(2), and YY of this Permit, as modified by Module VII of this Permit and Permit conditions VI.A.1.b.(vii), VI.A.1.g., and VI.A.1.h.
- f. Recordkeeping Requirements [WAC 173-303-380, WAC 173-303-680(3), WAC 173-303-807, and

40 CFR §§761.60(e), 761.65(d), 761.70, 761.180(c), and 761.180(f)].

- (i) The Permittee shall record and maintain in the operating record for GASVIT™ System, all monitoring, calibration, and inspection data compiled under the conditions of this Permit, in accordance with Permit condition II.G.
- (ii) The Permittee shall record in the operating record the date, time, and duration of all automatic waste feed cutoffs and/or lockouts, including the triggering parameters, reason for the deviation, and corrective measures taken to prevent recurrence of the incident. The Permittee shall also record all incidents of the automatic waste feed cutoff function failures, including the corrective measures taken to correct the condition that caused the failure.
- (iii) A quarterly report will be submitted to the Agencies each calendar quarter within thirty (30) days following the end of the quarter. The report will include the following information:
 - (a) Total waste processing time for the GASVIT™ System;
 - (b) Date/Time of all startups and shutdowns;
 - (c) Date/Time/Duration/Cause/Corrective Action taken for all shutdowns caused by malfunction of either process or control equipment; and
 - (d) Date/Time/Duration/Cause/Corrective Action taken for all instances of waste feed cutoff pursuant to Table VI-3.
- (iv) The Permittee shall calibrate the carbon monoxide (CO) and oxygen (O₂) continuous emission monitors (CEMS) specified in the Permit in accordance with Performance Specifications for Continuous Emission Monitoring Unit A referenced by 40 CFR Part 266, Appendix IX. The Permittee shall calibrate the carbon dioxide (CO₂) CEM specified in this Permit in accordance with Performance Specifications for CO₂ CEMs referenced in 40 CFR Part 60, Appendix A, Method 3A.

- (v) The Permittee shall submit a report of all quarterly CEM Calibration Error and annual CEM Performance Specification Tests conducted in accordance with Conditions VI.A.1.f.(iv).
 - (vi) The Permittee shall comply with the record keeping requirements specified in Attachment YY of this Permit, as modified by Module VII of this Permit and Permit conditions VI.A.1.b.(vii), VI.A.1.g., and VI.A.1.h.
- g. Periodic Emission Retesting [WAC 173-303-680(2), WAC 173-303-815(2)(b)(ii), WAC 173-303-670(7), WAC 173-303-807, and 40 CFR §761.60(e)].
- (i) Dioxin and Furan Emissions Testing
 - (a) Within eighteen (18) months of commencing operation pursuant to Part VI of this Permit, the Permittee shall submit to the Agencies for approval a Dioxin and Furan Emission Test Plan (DFETP) for performance of emission testing at the quench tower exit for dioxins and furans during "Normal Operating Conditions" in accordance with I.B.3. and I.B.4. The DFETP shall include applicable EPA promulgated test methods and procedures in effect at the time of the submittal, and projected commencement and completion dates for the Dioxin and Furan Emission Test. All applicable public comment periods and notifications as required by WAC 173-303-830(4) shall be followed. "Normal Operating Conditions" shall be defined for the purposes of this Permit condition as follows:
 - (1) CO CEM that measures emissions immediately at the quench tower exit is recording emission levels within the range of the average value to the maximum value allowed on Table VI-3. The average value is defined as the sum of all hourly rolling average values recorded over the previous twelve (12) months divided by the number of rolling averages recorded during that time. The average value shall not include calibration data, malfunction data, and data obtained when not

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- processing mixed waste or mixed-TSCA regulated PCB waste; and
- (2) The operating limits on Table VI-3 designated by "Hourly Rolling Average" Tag Numbers TE-0355, TE-0315, TE-0703-03, and Tag Numbers FIT-0214, WIT-0114, ZS-0225, ZS-0234, ZS-0244, FT-0601, FT-0621, FT-0602, FT-0622, PT-0601, PT-0621, AET-0523, and FT-0544 are held within the range of the average values over the previous twelve (12) months and the maximum or minimum, as appropriate, that is allowed on Table VI-3. The average value is defined as the sum of the rolling average values recorded over the previous twelve (12) months divided by the number of rolling averages recorded during that time. The average value shall not include calibration data, malfunction data, and data obtained when not processing mixed waste or mixed-TSCA regulated PCB waste.
- (b) Within sixty (60) days of the Agencies approval of the DFETP or within thirty-six (36) months of commencing operation pursuant to Part VI of this Permit, whichever is later, the Permittee shall implement the approved DFETP. The Permittee shall re-implement the approved DFETP every thirty-six (36) months from the DFETP implementation date, thereafter, for the duration of this Permit.
- (c) The Permittee shall submit a summary of all operating data collected pursuant to the DFETP to the Agencies upon completion of the test. The Permittee shall submit to the Agencies a complete test report within ninety (90) calendar days of completion of the testing. The test report shall be certified in accordance with WAC 173-303-807.
- (d) If preliminary or final calculations show that the emission rate of dioxins and furans exceeds the limits on Table VI-2 the

Permittee shall perform the following actions:

- (1) Notify the Agencies within twenty-four (24) hours of the discovery.
 - (2) Investigate the cause of the exceedance and submit a report of the investigation findings to the Agencies.
 - (3) Based on the notification and any additional information, the Director and/or the Regional Administrator may submit, in writing, direction to the Permittee to stop waste feed to the GASVIT™ System and/or to submit a revised DFETP requesting approval to retest in accordance with WAC 173-303-830(4). If the Permittee is required by the Agencies to submit a revised DFETP, the plan must include substantive changes to prevent the exceedance from reoccurring. The Permittee shall stop waste feed to GASVIT™ System in the time specified in writing. Waste feed operation will resume upon written approval from the Agencies [WAC 173-303-680(2), WAC 173-303-815(2)(b)(ii), and 40 CFR §761.60(e)].
- h. Additional Demonstration Tests During Normal Operation [WAC 173-303-680(2), WAC 173-303-670(7), WAC 173-303-807, WAC 173-303-815(2)(b)(ii), and 40 CFR §761.60(e)].
- (i) Within fifty-four (54) months of commencement of GASVIT™ Unit operations pursuant to Part VI of this Permit, the Permittee shall re-submit the Demonstration Test Plan to the Agencies for approval (Attachment YY of this Permit, as modified in accordance with Permit condition VI.A, and Module VII of this Permit, revised as a permit modification). The revised Demonstration Test Plan shall include applicable EPA promulgated test methods and procedures in effect at the time of the re-submittal, and projected commencement and completion dates for an additional Demonstration Test. All applicable public

comment periods and notifications as required by WAC 173-303-830(4) shall be followed.

- (ii) Within sixty (60) days of the Agencies approval of the revised DTP in accordance with Permit condition VI.A.1.h., or within sixty (60) months of commencing operation pursuant to Part VI of this Permit, whichever is later, the Permittee shall implement the approved revised DTP for the GASVIT™ System.
- (iii) The Permittee shall submit a summary of all data collected during the demonstration test to the Agencies upon completion of the demonstration test. The Permittee shall submit to the Agencies a complete demonstration test report within ninety (90) calendar days of completion of the demonstration test. All submissions shall be certified in accordance with WAC 173-303-807.
- (iv) If the preliminary or final calculations show that one or more of the performance standards listed in VI.A.1.b.(i) through VI.A.1.b.(vi) for the GASVIT™ System, were not met during the demonstration test, the Permittee shall perform the following actions:
 - (a) Immediately stop waste feed to the GASVIT™ System.
 - (b) Verbally notify the Agencies within twenty-four (24) hours of this discovery.
 - (c) Investigate the cause of the failure and submit a report of the investigation findings to the Agencies.
 - (d) Submit to the Agencies a revised demonstration test plan requesting approval to retest in accordance with WAC 173-303-830(4). The revised demonstration test plan must include substantive changes to prevent failure from reoccurring.
- (v) If the preliminary or final calculations for any demonstration test, or testing results from any sampling pursuant to Permit condition VI.A.1.e. shows that any emission rate for any constituent listed in Table VI-3 is exceeded, then the Permittee shall perform the following actions:

- (a) Notify the Agencies within twenty-four (24) hours of the discovery.
- (b) Submit to the Agencies additional risk information to indicate that the increased emission is off-set by decreased emission from another constituent that is expected to be emitted at the same time and/or investigate the cause of the exceedance and submit a report of the investigation findings to the Agencies.
- (c) Based on the notification and any additional information, the Director and/or the Administrative may submit, in writing, direction to the Permittee to stop waste feed to the GASVIT™ System to submit a revised demonstration plan requesting approval to retest in accordance with WAC 173-303-830(4). If the Permittee is required by the Agencies to submit a revised demonstration plan, the plan must include substantive changes to prevent the exceedance from reoccurring. The Permittee shall stop waste to the GASVIT™ System in the time specified in writing. Waste feed operation will resume upon written approval from the Agencies [WAC 173-303-815(2)(b)(ii), WAC 173-303-680(2), and 40 CFR §761.60(e)].

TABLE VI - 1 MAXIMUM FEED RATES TO GASVIT™ SYSTEM

Description of Waste	Normal Operation
Liquid Waste Feed Rate (lb/min)	4.16* Instantaneous
Bulk Solid Waste Feed (lb/hr)	350* Hourly Rolling Average
Containerized Solid Waste Feed (lb/hr)	350* Hourly Rolling Average
Metal Feedrates	LIQUID/TOTAL (LB/HR)
Antimony	0.020*/0.029*
Arsenic	0.071*/0.10*
Barium	0.14*/0.20*
Beryllium	0.071*/0.10*
Cadmium	0.071*/0.10*
Chromium	0.083*/0.12*
Lead	7.1*/10*
Mercury	0.031*/0.046*
Nickel	7.1*/10*
Selenium	0.00014*/0.00020*
Silver	0.00021*/0.00029*
Thallium	0.0000056*/0.0000081*
Total Chlorine/Chloride	55*

TABLE VI-2 - GASVIT™ SYSTEM ESTIMATED EMISSION RATES

Chemical Constituents	CAS NUMBER	Emission Rates (g/sec)
1,1,1-Trichloroethane (Methylchloroform)	71-55-6	2.80E-06*
1,1,2,2-Tetrachloroethane	79-34-5	2.20E-06*
1,1,2-Trichloroethane	79-00-5	2.20E-06*
1,1-Dichloroethane (Ethylidene dichloride)	75-34-3	2.20E-06*
1,1-Dichloroethylene (Vinylidene Chloride)	75-35-4	2.20E-06*
1,2,3-Trichloropropane	96-18-4	2.2E-06*
1,2,4-Trichlorobenzene	120-82-1	2.60E-06*
1,2,4-Trimethylbenzene (Pseudocumene)	95-63-6	1.10E-05*
1,2-Dichlorobenzene	95-50-1	5.30E-06*
1,2-Dichloroethane (Ethylene dichloride)	107-06-2	2.20E-06*
1,2-Dichloropropane (Propylene dichloride)	78-87-5	2.20E-06*
1,3-Dichlorobenzene	541-73-1	2.60E-06*
1,4-Dichlorobenzene	106-46-7	2.60E-06*
2,4,5-Trichlorophenol	95-95-4	2.60E-06*
2,4,6-Trichlorophenol	88-06-2	2.60E-06*
2,4-Dichlorophenol	120-83-2	2.60E-06*
2,4-Dimethylphenol	105-67-9	2.60E-06*
2,4-Dinitrophenol	51-28-5	2.60E-06*
2,4-Dinitrotoluene	121-14-2	2.60E-06*
2,6-Dinitrotoluene	606-20-2	2.60E-06*
2-Chloronaphthalene (beta-chloronaphthalene)	91-58-7	2.60E-06*
2-Chlorophenol	95-57-8	2.60E-06*
2-Nitroaniline (o-Nitroaniline)	88-74-4	2.60E-06*
2-Propanone (Acetone)	67-64-1	2.20E-06*
3,3'-Dichlorobenzidine	91-94-1	2.60E-06*
3-Nitroaniline (m-Nitroaniline)	99-09-2	2.60E-06*
4,6-Dinitro-2-methylphenol	534-52-1	2.60E-06*
4-Chloroaniline (p-Chloroaniline)	106-47-8	2.60E-06*
4-Nitroaniline (p-Nitroaniline)	100-01-6	2.60E-06*
4-Nitrophenol	100-02-7	2.60E-06*
Acenaphthene	83-32-9	4.00E-09*
Acrylonitrile	107-13-1	2.20E-06*
Anthracene	120-12-7	4.00E-09*

Chemical Constituents	CAS NUMBER	Emission Rates (g/sec)
Antimony	7440-36-0	3.70E-06*
Arsenic	7440-38-2	7.60E-06*
Barium	7440-39-3	2.50E-06*
Benzene	71-43-2	4.40E-06*
Benzo (a) anthracene	56-55-3	4.00E-09*
Benzo (a) pyrene	50-32-8	4.00E-09*
Benzo (b) fluoranthene	205-99-2	4.00E-09*
Benzo (g, h, i) perylene	191-24-2	4.00E-09*
Benzo (k) fluoranthene	207-08-9	4.00E-09*
Benzoic acid	65-85-0	2.60E-06*
Benzyl alcohol	100-51-6	2.60E-06*
Benzyl chloride	100-44-7	2.20E-06*
Beryllium	7440-41-7	1.30E-06*
Bis (2-chloroethoxy) methane	111-91-1	2.60E-06*
Bis (2-chloroethyl) ether	111-44-4	2.60E-06*
Bis (2-chloroisopropyl) ether (2,2-Oxybis (1-Chloropropane))	108-60-1	2.60E-06*
Bromodichloromethane	75-27-4	2.20E-06*
Bromoform	75-25-2	2.20E-06*
Bromomethane	74-83-9	2.20E-06*
Butylbenzyl phthalate	85-68-7	2.60E-06*
Cadmium	7440-43-9	1.30E-06*
Carbon disulfide	75-15-0	2.20E-06*
Carbon tetrachloride	56-23-5	2.20E-06*
Chlorine/Chloride (Total)	7782-50-5	6.40E-03*
Chlorobenzene	108-90-7	4.40E-06*
Chlorobenzilate	510-15-6	2.60E-06*
Chloroethane	75-00-3	2.20E-06*
Chloroethylene (Vinyl Chloride)	75-01-4	2.20E-06*
Chloroform	67-66-3	2.20E-06*
Chloromethane	74-87-3	2.20E-06*
Chrome (Chromium: Total) (Hexavalent by METHOD 7109)	7440-47-3	1.50E-06*
Chrysene	218-01-9	4.00E-09*
Cis-1,3-Dichloropropene	10061-01-5	2.20E-06*
Copper	7440-50-8	6.30E-05*
Di (2-Ethylhexyl) phthalate (Bis (2-ethyl hexyl) phthalate, Di-sec-octyl phthalate)	117-81-7	2.60E-06*
Dibenzo (a, h) anthracene	55-70-3	4.00E-09*
Dibenzofuran	132-64-9	2.60E-06*
Dibromochloromethane	124-48-1	2.20E-06*
Dichlorodifluoromethane	75-71-8	2.20E-06*
Dichloromethane (Methylene chloride)	75-09-02	1.20E-05*

Chemical Constituents	CAS NUMBER	Emission Rates (g/sec)
Diethyl phthalate	84-66-2	2.60E-06*
Dimethyl phthalate	131-11-3	2.60E-06*
Di-n-butyl phthalate	84-74-2	2.60E-06*
Di-n-octyl phthalate	117-84-0	2.60E-06*
Ethyl benzene	100-41-4	2.20E-06*
Fluoranthene	206-44-0	4.00E-09*
Fluorene	86-73-7	4.00E-09*
Hexachlorobenzene	118-74-1	2.60E-06*
Hexachlorobutadiene	87-68-3	2.60E-06*
Hexachlorocyclopentadiene	77-47-4	2.60E-06*
Hexachloroethane	67-72-1	2.60E-06*
Hydrochloric acid	7647-01-0	6.40E-03*
Indeno (1,2,3-cd)pyrene	193-39-5	4.00E-09*
Isophorone	78-59-1	2.60E-06*
Lead	7439-92-1	1.30E-04*
Manganese	7439-96-5	2.20E-06*
m-Cresol (3-methylphenol)	108-39-4	2.60E-06*
Mercury	7439-97-6	1.50E-04*
m-Xylene	108-38-3	2.20E-06*
Napthalene	91-20-3	5.30E-06*
Nickel	7440-02-0	1.30E-04*
Nitrobenzene	98-95-3	2.60E-06*
N-nitroso-di-n-propylamine	621-64-7	2.60E-06*
N-nitroso-di-phenylamine	86-30-6	2.60E-06*
O-cresol (2-Methylphenol)	95-48-7	2.60E-06*
o-Xylene	95-47-6	2.20E-06*
PCB ^a	13029-08-8	1.20E-07*
PCDD/PCDF	-	-
TCDD, 2,3,7,8-	1746-01-6	1.80E-11*
OCDD, 1,2,3,4,5,7,8,9-	3268-87-9	1.80E-13*
HxCDD, 1,2,3,7,8,9-	19408-74-3	8.80E-12*
OCDF, 1,2,3,4,5,6,7,8,9-	39001-02-0	1.80E-13*
HxCDD, 1,2,3,4,7,8-	39227-28-6	8.80E-12*
PeCDD, 1,2,3,7,8-	40321-76-4	4.40E-11*
TCDF, 2,3,7,8-	51207-31-9	1.80E-12*
HpCDF, 1,2,3,4,7,8,9-	55673-89-7	8.80E-13*
PeCDF, 2,3,4,7,8-	57117-31-4	4.40E-11*
PeCDF, 1,2,3,7,8-	57117-41-6	4.40E-12*
HxCDF, 1,2,3,6,7,8-	57117-44-9	8.80E-12*
HxCDD 1,2,3,6,7,8-	57653-85-7	8.80E-12*
HxCDF, 2,3,4,6,7,8-	60851-34-5	8.80E-12*
HpCDF, 1,2,3,4,6,7,8-	67562-39-4	8.80E-13*
HxCDF, 1,2,3,4,7,8-	70648-26-9	8.80E-12*
HxCDF, 1,2,3,8,7,9-	72918-21-9	8.80E-12*
HpCDD, 1,2,3,4,6,7,8-	99999-99-9	8.80E-13*

Chemical Constituents	CAS NUMBER	Emission Rates (g/sec)
p-Cresol (4-Methylphenol)	106-44-5	2.60E-06*
Pentachlorophenol	87-86-5	2.60E-06*
Phenol	108-95-2	2.60E-06*
p-Xylene	106-42-3	2.60E-06*
Pyrene	129-00-0	4.00E-09*
Selenium	7782-49-2	2.60E-05*
Silver	7440-22-4	3.70E-05*
Styrene	100-42-5	2.20E-06*
Tetrachloroethylene (PERC)	127-18-4	4.40E-06*
Thallium	7440-28-0	1.00E-06*
Toluene	108-88-3	6.10E-06*
trans-1,2-Dichloroethene	156-60-5	2.20E-06*
trans-1,3-Dichloropropene	10061-02-6	2.20E-06*
Trichloroethene (TCE) (Trichloroethylene)	79-01-6	2.20E-06*
Trichloroflouromethane	75-69-4	2.20E-06*
Vanadium	7440-62-2	2.50E-05*
Vinyl acetate	108-05-4	2.20E-06*

^a Includes Total Mono CBs, Total Di CBS, Total Tri CBs, Total Tetra CBs, Total Penta CBs, Total Hexa CBs, Total Hepta CBs, Total Octa CBs, Total Nona CBs, Total Deca CBs, 3,4,3',4' - TeCB, 3,4,5,3',4' - PeCB, 3,4,5,3',4',5' - HxCB, 2,3,4,3',4' - PeCB, 2,3,4,5,4' - PeCB, 2,4,5,3',4' - PeCB, 3,4,5,2',4' - PeCB, 2,3,4,5,3',4' - HxCB, 2,3,4,3',4',5' - HxCB, 2,4,5,3',4',5' - HxCB, 2,3,4,5,3',4',5' - HpCB, 2,3,4,5,2'3',4' - HpCB, 2,3,4,5,2',4',5' - HpCB

TABLE VI-3 - GASVIT™ SYSTEM WASTE FEED CUTOFF PARAMETERS

Subsystem Designation	Tag Number	Process Description	Setpoints During Normal Operation
GV-03 1	TE-0355	Thermal Residence Chamber gas minimum temperature (°F)	1,450* Based on Hourly Rolling Average
GV-03 2	TE-0355	Thermal Residence Chamber gas minimum temperature (°F)	1400* Instantaneous
GV-03 3	TE-0315	Process Chamber gas maximum temperature (°F)	2,650* Hourly Rolling Average
GV-03 4	TE-0315	Process Chamber gas maximum temperature (°F)	2,750* Instantaneous
GV-07 5	TE-0703-03	Syngas Converter gas minimum temperature (°F)	1,600* Hourly Rolling Average
GV-07 6	TE-0703-03	Syngas Converter gas minimum temperature (°F)	1,500* Instantaneous
GV-02 7	FIT-0214	Liquid waste maximum feed rate (lb/min)	4.16* Instantaneous
GV-02 8	WIT-0114	Bulk solid waste maximum feed rate (lb/hr)	350* Hourly Rolling Average
GV-02 9	WIT-0114	Continuous Solid waste maximum feed rate (lb/hr)	350* Hourly Rolling Average

GV-02 10	YK-0231	Batch time for containerized solid waste feed minimum (secs)	90* Instantaneous
GV-06 11	FT-0601	First scrubber ejector liquid minimum flow rate (gpm)	15* Instantaneous
GV-06 12	FT-0621	Second scrubber ejector liquid minimum flow rate (gpm)	15* Instantaneous
GV-06 13	FT-0602	First packed bed scrubber minimum recycle flow rate (gpm)	21* Instantaneous
GV-06 14	FT-0622	Second packed bed scrubber minimum recycle flow rate (gpm)	21* Instantaneous
GV-06 15	PT-0601	First scrubber ejector liquid minimum discharge pressure (psig)	15 Instantaneous
GV-06 16	PT-0621	Second scrubber ejector liquid minimum discharge pressure (psig)	15 Instantaneous
GV-06 17	AET-0622	Second packed bed scrubber minimum pH	5.5* Ten-Minute Rolling Average
GV-06 18	AET-0622	Second packed bed scrubber minimum pH	6.0* Hourly Rolling Average
GV-06 19	AET-0623	Second packed bed scrubber maximum liquid conductivity (umho/cm)	30,000* Hourly Rolling Average
GV-06 20	FT-0644	Maximum process gas flowrate (acfm)	300* Hourly Rolling Average

GV-03 21	PT-0380	Maximum process chamber pressure (in w.c.)	55 Instantaneous
GV-03 22	AE-0350	Maximum CO/[CO+CO ₂] (Not active if process gas contains less than 1.0 vol%CO)	.95 Hourly Rolling Average
GV-05 23	PDT-0501	High temperature filter maximum pressure differential (in w.c.)	45 Instantaneous
GV-06 24	PDT-0641	HEPA filter maximum pressure differential (in w.c.)	6 Instantaneous
GV-06 25	TE-0646	HEPA/Carbon filter inlet gas temperature maximum (°F)	240 Instantaneous
GV-03 26	IT-0325	Plasma electrode current minimum (amps)	10 10-Minute Rolling Average
GV-07 27	FIT-0702	Syngas converter blower exhaust flow minimum (scfm)	25 Instantaneous
GV-07 28	FIT-0770	Syngas converter conversion air fan flow minimum (scfm)	10 X blower exhaust Instantaneous
GV-07 29	AET-0715	Post-Quench Tower exit maximum Carbon monoxide (ppm dry basis)	100 10 minute Rolling Average
GV-25 30	FIT-2520	GASVIT™ Building Confinement system fan minimum (scfm)	15,000 Instantaneous

GV-03 31	PT-0380	GASVIT™ System gas bypass of thermal residence chamber and first scrubber ejector	Instantaneous
GV-07 32	YN-0700	GASVIT™ System gas bypass of syngas converter	Instantaneous
GV-06 34	PDT-0660	Carbon filter maximum pressure differential (in w.c.)	30 Instantaneous
GV-06 35	TE-0646	HEPA/Carbon filter inlet gas temperature minimum (°F)	55 Instantaneous
GV-07 36	AET-0702	Syngas Converter Inlet Gas Flammability (%LEL)	85 Instantaneous
GV-05 37	PDT-0501	High Temperature Filter Minimum Differential Pressure (in w.c.) (Not active if process gas flow rate is <50 scfm)	0.5 Instantaneous
GV-05 38	TE-0505	High Temperature Filter maximum inlet temperature (°F)	450* 10-minute rolling average
GV-03 39	AE-0663 AE-0664	Minimum CO/(CO+CO ₂) (Not active if process gas contains less than 1.0 vol. % CO)	0.40 10-minute rolling average

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**MODULE VII - SHORT TERM MISCELLANEOUS THERMAL TREATMENT UNITS-SHAKEDOWN,
 DEMONSTRATION TEST, AND POST DEMONSTRATION TEST**

GASVIT™ SYSTEM DESCRIPTION

Description	Subsystem Designation	Unit Description Drawings	Tables	Narrative Description
Feed ^a Subsystems: Liquid feeder, continuous solid feeder, solid batch feeder, and flux feeder	GV-02	31001-P-050, 31001-P-072- 01 and 31001-P-072- 02 of Attachment RR of this Permit and, 31001-P-072- 03 and 04 of Attachment SS of this Permit	Tables F, G, and H of Attachment UU of this Permit	Section 3.2 of Attachment QQ of this Permit
Process Chamber and Thermal Residence Chamber	GV-03	31001-P-051 and 31001-P- 073-01 through 09 of Attachment SS of this Permit	Tables I, J, K, L, M, N, O, P, and Q	Section 3.3
Product Handling	GV-04	31001-P-051, 31001-P-074- 01 and 02 of Attachment SS of this Permit	Tables R and S	Section 3.4
First Stage Syngas Processing (High Temperature Filter)	GV-05	31001-P-051 and 31001-P- 075 of Attachment SS of this Permit	Table T	Section 3.5

Description	Subsystem Designation	Unit Description Drawings	Tables	Narrative Description
Second Stage Syngas Processing (Primary Scrubber, Secondary Scrubber, High Efficiency Mist Eliminator (HEME), High Efficiency Particulate (HEPA) Air Filter, and Carbon Filter)	GV-06	31001-P-052-01, 31001-P-076-01, 31001-P-076-02, 31001-P-076-03, and 31001-P-076-04 of Attachment SS of this Permit	Tables U, V, W, and X	Section 3.6
Third Stage Syngas Processing (Syngas Converter and Quench)	GV-07	31001-P-052-02 and 31001-P-077 of Attachment SS of this Permit	Table Y	Section 3.7
Syngas Processing for Process Control	GV--08	31001-P-051 of Attachment SS of this Permit and 31001-P-078 of Attachment RR of this Permit	Table Z	Section 3.8
GASVIT™ Main Process Controls	GV-10	31001-P-080-01 and 31001-P-080-02 of Attachment RR of this Permit	Tables BB and CC	Section 3.10

Requirements pertaining to the tank in the Liquid Feed Subsystem (GV-02) are specified in Module IV of this Permit.

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- VII.A.1. General Conditions During Shakedown, Demonstration Test, and Post-Demonstration Test for GASVIT™ Unit A [WAC 173-303-680, WAC-303-340, WAC 173-303-670(2)-(7), WAC 173-303-815(2)(b)(ii), WAC 173-303-807, and 40 CFR §§761.60(e), 761.65(d), 761.70 and 761.180].
- a. Construction and Maintenance [WAC 173-303-340, WAC 173-303-680(2), 40 CFR §761.60(e), and 40 CFR §761.65(d)].
- (i) The Permittee shall design and construct the GASVIT™ System as specified in all applicable drawings in Attachments RR and SS of this Permit and all applicable drawings and specifications in Attachments OO, QQ, UU, WW(1), WW(3), and XX of this Permit.
- (ii) The Permittee shall design and construct all containment systems for the GASVIT™ System as specified in all applicable drawings in Attachment RR of this Permit and all applicable drawings and specifications in Attachments OO, QQ, RR, UU, WW(1), and XX of this Permit.
- (iii) The Permittee shall obtain and submit to the Agencies within sixty (60) days of completing reinstallation of the GASVIT™ System, a written certification from an independent, qualified, registered professional engineer attesting that proper reinstallation procedures were used for the GASVIT™ System and GASVIT™ System's corresponding containment systems. The independent GASVIT™ System installation inspection and subsequent written certification, shall comply with all requirements of WAC 173-303-640(3)(h), substituting the term "GASVIT™ System" for "tank" in accordance with WAC 173-303-680(2), and 40 CFR §§761.60(e) and 761.65(d) and include:
- (a) Field reinstallation report with date of reinstallation;
- (b) Approved welding procedures;
- (c) Welder qualification and certifications;
- (d) Hydro-test reports, as applicable, in accordance with the American Society of Mechanical Engineers Boiler and Pressure Vessel Code, Section VIII, Division 1;

- (e) Tester credentials;
 - (f) Field inspector credentials;
 - (g) Field inspector reports;
 - (h) Field waiver reports; and
 - (i) Non-compliance reports and corrective action (including field waiver reports) and repair reports.
- (iv) The Permittee shall ensure periodic integrity assessments are conducted on the GASVIT™ System over the term of this Permit pursuant to WAC 173-303-680(2) and (3) and 40 CFR§761.65(d) as specified in WAC 173-303-640(3)(b) substituting the term "GASVIT™ System" for "tank" using procedures in Attachment EE of this Permit. The schedule and conditions for revising the schedule, provided in Attachment EE of this Permit shall be used for these integrity assessments substituting the term "GASVIT™ System" for "tank". The starting date for scheduling shall be the date of the most recent integrity assessment. Results of the integrity assessments shall be included in the facility operating record until final closure and corrective action are complete and certified.
- (v) The Permittee shall address problems detected during the GASVIT™ System integrity assessment specified in Permit condition VII.A.1.a.(iv) in accordance with procedures specified in Attachment EE of this Permit.
- (vi) The Permittee shall immediately remove the GASVIT™ System from dangerous waste, mixed waste, mixed-TSCA regulated PCB waste, and TSCA regulated PCB waste service if the GASVIT™ System does not meet or exceed its design standard as specified in the unit data sheets in Attachments UU, WW(1), WW(3), and XX of this Permit.
- (vii) All process monitors required, pursuant to Permit condition VII.A.1.c. shall be equipped with operational alarms to warn of deviation, or imminent deviation from the limits specified in Tables VII-1 and VII-3 of this Permit.

- (viii) Modifications to design plans and specifications for the GASVIT™ System shall be allowed only in accordance with Permit conditions I.B.3., I.B.4., and II.L.
- (ix) The Permittee shall install and test all process monitoring and control instrumentation for the GASVIT™ System in accordance with Attachments EE, QQ, UU, WW(1), WW(3), and YY of this Permit prior to treating dangerous waste, mixed waste, mixed-TSCA regulated PCB waste, or TSCA regulated PCB waste in the GASVIT™ System.
- (x) The Permittee shall not feed dangerous waste, mixed waste, mixed-TSCA regulated waste, or TSCA regulated PCB waste in the GASVIT™ System until such time that the Permittee has demonstrated compliance with the certification of construction or modification requirements, as specified in Permit condition I.D.9. and II.L. and obtained a permit modification in accordance with Permit condition II.R.
- (xi) No dangerous wastes or TSCA PCB regulated wastes shall be treated in the GASVIT™ System unless the operating conditions, specified under Permit condition VII.A.1.c. of this Permit, are complied with.
- (xii) The Permittee shall not place dangerous waste, mixed-TSCA regulated PCB waste, TSCA regulated PCB waste, treatment reagents, or other materials in the GASVIT™ System if these substances could cause the unit to rupture, leak, corrode, or otherwise fail.
- (xiii) The Permittee shall operate the GASVIT™ System to prevent spills and overflows using the procedures and equipment described in Attachments II, OO, QQ, RR, SS, UU, WW(1), WW(3), and XX of this Permit.
- (xiv) The Permittee shall ensure that the containment systems for the GASVIT™ System is free of cracks or gaps to prevent any migration of waste or accumulated liquid out of the system to the soil, ground water, or surface water at any time. Any indication that a crack or gap may exist in the containment systems shall be

investigated and repaired in accordance with Attachment EE of this Permit.

- (xv) An impermeable coating, as specified in Attachment OO of this Permit, applicable drawings in Attachment RR of this Permit, and applicable specifications in Attachment XX of this Permit, shall be maintained for all concrete containment systems for the GASVIT™ System. The coating shall prevent migration of any wastes into the concrete. All coatings shall meet the following performance standards:
- (a) The coating must seal the containment surface such that no cracks, seams, or other avenues through which liquid could migrate are present;
 - (b) The coating must be of adequate thickness and strength to withstand the normal operation of equipment and personnel within the given area such that degradation or physical damage to the coating or lining can be identified and remedied before wastes could migrate from the system; and
 - (c) The coating must be compatible with the waste managed in the containment system.
- (xvi) The Permittee shall inspect all containment systems for the GASVIT™ System in accordance with the procedures specified in Attachment EE of this Permit and take the following actions if liquid is detected in these containment systems:
- (a) Remove the liquid from the containment area pursuant to WAC 173-303-680(2) and (3) and 40 CFR §761.60(e) as specified in WAC 173-303-640(7)(b) substituting the term "GASVIT™ System" for "tank". The liquid removed from containment areas of the GASVIT™ System shall be, at a minimum, managed as mixed waste and mixed TSCA-regulated PCB waste.
 - (b) Determine the source of the liquid.
 - (c) If the cause of the release was a spill of uncontaminated water that has not damaged the integrity of the GASVIT™

System, the Permittee may return the GASVIT™ System to service pursuant to WAC 173-303-680(2) and (3) and 40 CFR§761.60(e) as specified in WAC 173-303-640(7)(e)(ii) substituting the term "GASVIT™ System" for "tank". In such a case, the Permittee shall take action to ensure the incident that caused the liquid to enter the containment system of the unit will not reoccur.

- (d) If the source of the liquid is determined to be a leak in a primary containment of the unit, or if the source of the liquid is not determined, the Permittee shall take the following actions:
 - (1) Close the GASVIT™ System according to Permit condition II.M., or
 - (2) Repair and certify the GASVIT™ System pursuant to WAC 173-303-680(2) and (3) and 40 CFR §761.60(e) in accordance with procedures in WAC 173-303-640(7)(e)(iii) and (f), substituting the term "GASVIT™ System" for "tank", before the GASVIT™ System is placed back into service.
- (e) The Permittee shall document in the operating record procedures taken to comply with (a) through (d) above.
- (f) Pursuant to WAC 173-303-680(2) and (3) and 40 CFR §§761.65(d) and 761.125(a)(1) the Permittee shall notify and report releases to the environment to the Director and Regional Administrator as specified in WAC 173-303-640(7)(d).

- (xvii) All air pollution control devices and capture systems for which this Permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants and to minimize process upsets. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants and process upsets shall be established.

- b. Performance Standard [WAC 173-303-670(4), WAC 173-303-680, WAC 173-303-815(2)(b)(ii), and 40 CFR §§761.60(e) and 761.70]
- (i) The GASVIT™ System must achieve a destruction and removal efficiency (DRE) of 99.99% for the principal organic dangerous constituents (PODCs) listed below measured at the quench tower exit [WAC 173-303-670(4)(a), WAC 173-303-680(2), and WAC 173-303-815(2)(b)(ii)]:
- Naphthalene
 - Monochlorobenzene
 - The DRE specified in Permit condition VII.A.1.b.(I) shall be calculated by the method specified in WAC 173-303-670(4)(a)(I).
- (ii) The GASVIT™ System must achieve a destruction and removal efficiency (DRE) of 99.9999% for PCBs measured at the quench tower exit [40 CFR §§761.60(e) and 761.70]. The DRE specified in Permit condition VII.A.1.b.(ii) shall be calculated by the method specified in 40 CFR §264.343(a)(1), substituting PCBs for POHC.
- (iii) The particulate matter emission from the GASVIT™ System measured at the quench tower exit shall not exceed 180 mg/dscm (0.08 grains/dscf) on an uncorrected basis [WAC 173-303-670(4)(c)(ii), WAC 173-303-680(2), WAC 173-303-815(2)(b)(ii), and 40 CFR §§761.60(e) and 761.70].
- (iv) The hydrogen chloride (HCl) emission from the GASVIT™ System measured at the quench tower exit shall not exceed the following [WAC 173-303-670(4)(c)(i), WAC 173-303-680(2), WAC 173-303-815(2)(b)(ii), or 40 CFR §§761.60(e) and 761.70]:
- (a) 6.40E-3 grams/second.
- (v) The Permittee shall control emission of products of incomplete reaction (PIR) from the GASVIT™ System such that the carbon monoxide (CO) level in the quench tower exit shall not exceed one hundred (100) parts per million (ppm), dry volume, over an hourly rolling average on an uncorrected basis [WAC 173-303-

680(2), WAC 173-303-815(2) (b) (ii), and 40 CFR §761.60 (e)] .

- (vi) If the emissions from GASVIT™ System exceed the emission rates listed in Table VII-2, the Permittee shall notify the Agencies in accordance with Permit condition VII.A.3.d.(vii) [WAC 173-303-680(2), WAC 173-303-815(2) (b) (ii), and 40 CFR §761.60(e)]. The above emission limits shall be met by limiting feed rates as specified in Table VII-1 and compliance with the operating conditions specified in Permit condition VII.A.1.c., except as specified in Permit condition VII.A.1.b.(viii).
- (vii) If the Permittee submits a notification pursuant to Permit condition VII.A.1.b.(vi), the Agencies may submit, in writing, direction to the Permittee to stop waste feed to the GASVIT™ System in accordance with Permit condition VII.A.3.d.(vii). Resumption of waste feed operations to the GASVIT™ System shall be in accordance with VII.A.3.d.(vii).
- (viii) Compliance with the operating condition specified in Permit condition VII.A.1.c., shall be regarded as compliance with the required performance standards identified in Permit conditions VII.A.1.b.(i) through VII.A.1.b.(vi). However, if it is determined that during the effective period of this Permit that compliance with the operating conditions in Permit condition VII.A.1.c. is not sufficient to ensure compliance with the performance standards specified in Permit conditions VII.A.1.b.(i) through VII.A.1.b.(vi), the Permit may be modified, revoked, or reissued pursuant to WAC 173-303-830(3) and 40 CFR §§761.60(e)] .

- c. Operating Conditions [WAC 173-303-670(6), WAC 173-303-680(2), WAC 173-303-815(2)(b)(ii), WAC 173-303-807, and 40 CFR §§761.60(e) and 761.70].

The Permittee shall operate the GASVIT™ System in accordance with Attachments OO, QQ, RR, SS, UU, WW(1), WW(3), and YY of this Permit, as modified in Permit conditions VII.A.3.a., VII.A.3.d., VII.A.1.b.(viii), VII.A.5., and the following:

- (i) The Permittee shall operate the GASVIT™ System in order to maintain the systems and process parameters listed in Table VII-3 of this Permit within the ranges or setpoints specified in Table VII-3 of this Permit.
- (ii) The Permittee shall operate the automatic waste feed cut-off (AWFCO) systems, specified in Table VII-3 of this Permit, to automatically cut-off and/or lock-out the dangerous waste, mixed waste, mixed-TSCA regulated PCB waste, and TSCA regulated PCB waste feed to GASVIT™ System when the monitored operating conditions deviate from the setpoints specified in Table VII-3 of this Permit.
- (iii) The Permittee shall operate the AWFCO systems, specified in Table VII-3 of this Permit, to automatically cut-off and/or lock-out the dangerous waste, mixed waste, mixed-TSCA regulated PCB waste, and TSCA regulated PCB waste feed, to the GASVIT™ System when the instrument measuring these monitored parameters fails or exceeds its specified span value.
- (iv) The Permittee shall operate the AWFCO systems, specified in Table VII-3 of this Permit, to automatically cut-off and/or lock-out the dangerous waste, mixed waste, mixed-TSCA regulated PCB waste, and TSCA regulated PCB waste feed to the GASVIT™ System when any portion of the GASVIT™ System is bypassed.
- (v) In the event of a malfunction of the AWFCO systems listed in Table VII-3 of this Permit, the Permittee shall immediately, manually cut-off the waste feed to the GASVIT™ System. The Permittee shall not restart the waste feed until the problem causing the malfunction has been identified and corrected.

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- (vi) The Permittee shall manually cut-off the waste feed to the GASVIT™ System when the operating conditions deviate from the limits specified in Permit condition VII.A.1.c.1., unless the deviation automatically activates the waste feed cut-off sequence specified in Permit conditions VII.A.1.c.(ii), VII.A.1.c.(iii), and/or VII.A.1.c.(iv).
- (vii) If greater than thirty (30) waste feed cutoffs occur due to deviations from Table VII-3 within thirty (30) calendar days for the GASVIT™ System, the Permittee is required to verbally notify the Agencies of the deviations from Table VII-3 on the first business day of the occurrence or following the occurrence. These waste feed cut-offs, whether automatically or manually activated are counted if the specified setpoints are deviated from while dangerous waste, mixed waste, mixed-TSCA regulated PCB waste, TSCA regulated PCB waste, and waste residues continue to be processed in the GASVIT™ System. A cascade event is counted at a frequency of one towards the first waste feed cutoff parameter specified on Table VII-3 which the setpoint is deviated from.
- (viii) If any portion of the GASVIT™ System is bypassed so that gases are not treated as during the demonstration test it shall be regarded as non-compliance with the operating conditions specified in Permit condition VII.A.1.c. and the performance standards specified in Permit condition VII.A.1.b. After such a bypass, the Permittee shall perform the following actions:
- (a) Investigate the cause of the bypass;
 - (b) Take appropriate corrective measures to minimize future bypasses;
 - (c) Record the investigation findings and corrective measures in the operating record; and
 - (d) Submit a written report to the Agencies within five (5) days of the bypass documenting the result of the investigation and corrective measures taken.

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- (ix) Non-aqueous GASVIT™ System residues (i.e., vitrified product, high temperature filter residues, discarded HEPA filters, etc.) generated during treatment of TSCA regulated PCB wastes or mixed-TSCA regulated PCB waste shall be sampled and analyzed in accordance with the Attachment CC of this Permit, as modified in accordance with Permit condition II.F., to demonstrate that these residues contain less than two (2) parts per million (ppm) of total PCBs. All such non-aqueous GASVIT™ System residues which contain 2 ppm or greater total PCBs must be retreated in GASVIT™ System, or must be disposed of as though it contains the highest concentration of PCBs fed during the generation of the residue [40 CFR 761.60(e)].
- (x) Aqueous GASVIT™ System residues (i.e., scrubber blowdown, etc.) generated during TSCA regulated PCB wastes or mixed-TSCA regulated PCB waste shall be sampled and analyzed in accordance with Attachment CC of this Permit, as modified in accordance with Permit condition II.F., to demonstrate that these residues contain less than three (3) parts per billion (ppb) of total PCBs. All such aqueous GASVIT™ System which contain 3 ppb or greater total PCBs must be retreated in the GASVIT™ System, disposed of as though it contains the highest concentration of PCBs fed during the generation of the residue or processed through a carbon treatment system until such time that the water contain less than 3 ppb total PCBs. Carbon thus used must be disposed of as though it contains the highest concentration of PCBs fed during the generation of the residue [40 CFR 761.60(e)].
- (xi) The Permittee shall control fugitive emissions from the GASVIT™ System by maintaining the primary chamber sealed against fugitive emissions and maintaining the downstream air pollution control system under negative pressure, except for the Syngas Converter which will be sealed against fugitive emissions.
- (xii) Compliance with the operating conditions specified in Permit condition VII.A.1.c., shall be regarded as compliance with the required performance standards identified in Permit condition VII.A.1.b. However, evidence that

compliance with these operating conditions is insufficient to ensure compliance with the performance standards, shall justify modification, revocation, or reissuance of this Permit, in accordance with Permit condition I.B.1.

- d. Inspection Requirements [WAC 173-303-670(7), WAC 173-303-680(3), WAC 173-303-807, and 40 CFR §§761.60(e) and 761.65(d)].
- (i) The Permittee shall inspect the GASVIT™ System in accordance with the inspection schedules and requirements in Attachment EE of this Permit.
 - (ii) The inspection data for GASVIT™ System shall be recorded, and the records shall be placed in the operating record for GASVIT™ System, in accordance with Permit condition II.I.
 - (iii) The Permittee shall comply with the inspection requirements specified in the Attachments YY, WW(1), and WW(3) of this Permit, as modified by Permit conditions VII.A.3.a., VII.A.3.d., VII.A.1.b.(viii), and VII.A.5.
- e. Monitoring Requirements [WAC 173-303-670(7), WAC 173-303-680(3), WAC 173-303-807, and 40 CFR §§761.60(e) and 761.70].
- (i) Upon receipt of a written request from the Department or the Agency, the Permittee shall perform sampling and analysis of the waste and exhaust emissions to verify that the operating requirements established in the Permit achieve the performance standards delineated in this Permit.
 - (ii) All monitoring, recording, maintenance, calibrations, and test data shall be recorded and the records for the GASVIT™ System shall be placed in the operating record for the GASVIT™ System, in accordance with Permit condition II.G.
 - (iii) The Permittee shall comply with the monitoring requirements specified in the Attachments OO, QQ, WW(1), WW(2), and YY of this Permit, as modified by Permit condition VII.A.3.a., VII.A.3.d., and VII.A.1.b.(viii).

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- f. Record keeping Requirements [WAC 173-303-380, WAC 173-303-680 (3), WAC 173-303-807, and 40 CFR §§761.60 (e), 761.70, 761.180 (b), 761.180 (c), and 761.180 (f)].
- (i) The Permittee shall record and maintain in the operating record for the GASVIT™ System, all monitoring, calibration, and inspection data compiled under the conditions of this Permit, in accordance with Permit condition II.G.
- (ii) The Permittee shall record in the operating record the date, time, and duration of all automatic waste feed cutoffs and/or lockouts, including the triggering parameters, reason for the deviation, and corrective measures taken to prevent recurrence of the incident. The Permittee shall also record all incidents of the automatic waste feed cutoff function failures, including the corrective measures taken to correct the condition that caused the failure.
- (iii) A quarterly report will be submitted to the Agencies each calendar quarter within thirty (30) days following the end of the quarter. The report will include the following information:
- (a) Total waste processing time for the GASVIT™ System;
- (b) Date/Time of all startups and shutdowns;
- (c) Date/Time/Duration/Cause/Corrective Action taken for all shutdowns caused by malfunction of either process or control equipment; and
- (d) Date/Time/Duration/Cause/Corrective Action taken for all instances of waste feed cutoff pursuant to Table VII-3.
- (iv) The Permittee shall calibrate the carbon monoxide (CO) and oxygen (O₂) continuous emission monitors (CEMS) specified in the Permit in accordance with Performance Specifications for Continuous Emission Monitoring Systems referenced by 40 CFR Part 266, Appendix IX. The Permittee shall calibrate the carbon dioxide (CO₂) CEM specified in this Permit in accordance with

Performance Specifications for CO2 CEMs referenced in 40 CFR Part 60, Appendix A, Method 3A.

- (v) The Permittee shall submit a report of all quarterly CEM Calibration Error and annual CEM Performance Specification Tests conducted in accordance with Conditions VII.A.1.f.(iv).
- (vi) The Permittee shall comply with the record keeping requirements specified in Attachment YY of this Permit, as modified by Permit condition VII.A.3.a.

VII.A.2. Shakedown Period [WAC 173-303-670(2), WAC 173-303-670(5), WAC 173-303-680(2), WAC 173-303-807, and 40 CFR §§761.60(e) and 761.70].

- a. The shakedown period for GASVIT™ System shall be conducted in accordance with Permit condition VII.A., the Demonstration Test Plan, Attachment YY of this Permit except as modified in accordance with Permit conditions VII.A.2.b., VII.A.3.a., and VII.A.5.
- b. Duration of the Shakedown Period
 - (i) The shakedown period for the GASVIT™ System shall begin with the initial introduction of dangerous waste in the GASVIT™ System following construction and shall end with the start of the demonstration test.
 - (ii) The shakedown period shall not exceed seven hundred and twenty (720) operating hours. The Permittee may petition the Agencies for one extension of the shakedown period for seven hundred and twenty (720) additional operating hours in accordance with Permit modification procedures specified in Permit conditions I.B.3. and I.B.4.
- c. Allowable Waste Feed During the Shakedown Period
 - (i) The Permittee may feed the dangerous and mixed waste specified for the GASVIT™ System the Part A Forms (Attachment BB of this Permit) except that the limitations in Tables 1, 2E, 18, and 19 and Figure 8 of Section C of Attachment CC of this Permit, Permit Conditions II.F. and VII.A.2.c. also apply.

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- (ii) The Permittee shall not feed the following wastes to the GASVIT™ System:
 - (a) Acutely toxic dangerous wastes listed in WAC 173-303-081(2)(a)(i).
 - (b) TSCA regulated PCB waste.
 - (c) Deleted
 - (d) Mixed-TSCA regulated PCB waste.
 - (iii) The feed rates to the GASVIT™ System shall not exceed the limits in Table VII-1 of this Permit.
 - (iv) The Permittee shall conduct sufficient analysis of the waste treated in the GASVIT™ System to verify that the waste feed is within the physical and chemical composition limit specified in this Permit.
 - (v) Only one (1) feed mechanism shall be used to feed wastes to GASVIT™ System, at any given time.
- VII.A.3. a. Demonstration Test Period [WAC 173-303-670(2), WAC 173-303-670(5), WAC 173-303-680(2), WAC 173-303-807, and 40 CFR §§761.60(e) and 761.70].
- (i) The Permittee shall operate, monitor, and maintain GASVIT™ System as specified in Permit condition VII.A.1. and Attachment YY of this Permit except as modified in accordance with Permit conditions VII.A.3.a. and VII.A.5.
 - (ii) The Demonstration Test Plan, Attachment YY of this Permit for the GASVIT™ System shall be resubmitted to the Agencies for approval by the Permittee as a permit modification pursuant to permit conditions I.B.3 and I.B.4 at least one hundred and eighty (180) days prior to the start date of the demonstration test. The revised Demonstration Test Plan shall include applicable EPA promulgated test methods and procedures in effect at the time of the resubmittal, the results of a laboratory matrix-specific instrument detection limit study demonstrating that cesium can be measured by EPA Method 6010A at an acceptable low sample quantitation limit (SQL) for supporting the Permittee's risk assessment, and projected commencement and

completion dates for the Demonstration Test. All applicable public comment periods and notifications as specified in WAC 173-303-830(4) shall be followed.

- (iii) The Permittee shall not commence the demonstration test period until documentation has been submitted to the Agencies verifying that GASVIT™ System has operated at a minimum of 90% of the shakedown setpoints in Table VII-3 of this Permit for a minimum of an eight (8) consecutive hours period on two (2) consecutive days.

b. Performance Standards

The Permittee shall demonstrate compliance with the performance standards specified in Permit condition VII.A.1.b. during the Demonstration Test Period.

c. Allowable Waste Feed During the Demonstration Test Period

- (i) The Permittee may feed the dangerous and mixed waste specified for the GASVIT™ System in Part A Forms (Attachment BB of this Permit) except that the limitations in Tables 1, 2E, 18, and 19 and Figure 8 of Section C of Attachment CC of this Permit, Permit conditions II.F. and VII.A.3.c. also apply.
- (ii) Deleted
- (iii) The feed rates to the GASVIT™ System shall not exceed the limits in Table VII-1 of this Permit.
- (iv) The Permittee shall conduct sufficient analysis of the waste treated in GASVIT™ System to verify that the waste feed is within the physical and chemical composition limit specified in this Permit, in accordance with Attachments CC and YY of this Permit.
- (v) Only one (1) feed mechanism shall be used to feed wastes to the GASVIT™ System, at any given time.

d. Demonstration Data Submissions and Certifications

- (i) The Permittee shall submit a summary of all data collected during the demonstration test to the Agencies upon completion of the demonstration test. The Permittee shall submit

to the Agencies a complete demonstration test report within ninety (90) calendar days of completion of the demonstration test. All submissions shall be certified in accordance with WAC 173-303-807.

- (ii) After successful completion of demonstration test, the Permittee shall be authorized to commence feed of dangerous wastes and mixed wastes to the GASVIT™ System - up to 50% of the maximum feed rates for the post-demonstration test period indicated in Table VII-1 of this Permit, in compliance with the operating requirements specified in Permit condition VII.A.1.c.
- (iii) After successful completion of the demonstration test, submittal of the following to the Department, and the Permittee's receipt of Department approval in writing, the Permittee shall be authorized to commence dangerous wastes and mixed wastes to the GASVIT™ up to 75% of the maximum feed rates for the post-demonstration test period indicated in Table VII-1 of this Permit:
 - (a) Calculations and analytical data showing compliance with the performance standards specified in Permit conditions VII.A.1.b.(I).
- (iv) After successful completion of the demonstration test, submittal of the following to the Agency, and the Permittee's receipt of Agency approval in writing, the Permittee shall be authorized to commence TSCA regulated PCB waste and mixed-TSCA regulated PCB waste feed to GASVIT™ System to 75% of the maximum feed rates for the post-demonstration test period indicated in Table VII-1 of this Permit:
 - (a) Calculations and analytical data showing compliance with the performance standards specified in Permit condition VII.A.1.b.(ii) and showing all non-aqueous GASVIT™ System residuals to be below 2 ppm PCBs and all aqueous GASVIT™ System residuals to be below 3 ppb PCBs.
- (v) After successful completion of the demonstration test, and submittal and Agencies approval of the

following in writing, the Permittee shall be authorized to feed only mixed wastes and mixed-TSCA regulated PCB wastes feed to the GASVIT™ System under Normal Operations pursuant to Module VI of this Permit:

- (a) A complete demonstration test report.
 - (b) Final Risk Assessment Report (FRAR) completed pursuant to Permit condition II.S.
- (vi) If the preliminary or final calculations show that one or more of the performance standards listed in VII.A.1.b.(i), VII.A.1.b.(ii), VII.A.1.b.(iii), VII.A.1.b.(iv)(b), and VII.A.1.b.(v) of this Permit for the GASVIT™ System were not met during the demonstration test, the Permittee shall perform the following actions:
- (a) Immediately stop waste feed to the GASVIT™ System.
 - (b) Verbally notify the Agencies within twenty-four (24) hours of this discovery.
 - (c) Investigate the cause of the failure and submit a report of the investigation findings to the Agencies.
 - (d) Submit to the Agencies a revised demonstration test plan requesting approval to retest in accordance with WAC 173-303-830(4). The revised demonstration test plan must include substantive changes to prevent failure from reoccurring.
- (vii) If the preliminary or final calculations for any demonstration test, or testing results from any sampling pursuant to VII.A.1.e. show that any emission rate for any constituent listed in Table VII-2 is exceeded, then the Permittee shall perform the following actions:
- (a) Notify the Agencies within twenty-four (24) hours of the discovery.
 - (b) Submit to the Agencies additional risk information to indicate that the increased emission is off-set by decreased emission from another constituent that is expected to be

emitted at the same time and/or investigate the cause of the exceedance and submit a report of the investigation findings to the Agencies.

- (c) Based on the notification and any additional information, the Director and/or the Administrative may submit, in writing, direction to the Permittee to stop waste feed to the GASVIT™ System and/or to submit a revised demonstration plan requesting approval to retest in accordance with WAC 173-303-830(4). The revised demonstration plan, if required to be submitted, must include substantive changes to prevent the exceedance from reoccurring. The Permittee shall stop waste to GASVIT™ System in the time specified in writing. Waste feed operation will resume upon written approval from the Agencies [WAC 173-303-680(2), WAC 173-303-815(2)(b)(ii), and 40 CFR §761.60(e)].

- VII.A.4. Post-Demonstration Test Period [WAC 173-303-670(2), WAC 173-303-670(5), WAC 173-303-680(2), WAC 173-303-807, and 40 CFR §§761.60(e) and 761.70].

The Permittee shall operate, monitor, and maintain the GASVIT™ System as specified in Permit condition VII.A.1. and Attachment YY of this Permit, except as modified in accordance with Permit conditions VII.A.3.a., VII.A.3.d., and VII.A.5.

- a. Allowable Waste Feed During the Post-Demonstration Test Period
- (i) The Permittee may feed the dangerous waste and mixed waste specified for the GASVIT™ System the Part A Forms (Attachment BB of this Permit), mixed-TSCA regulated PCB wastes, and TSCA regulated PCB wastes, except that the limitations in Tables 1, 2E, 18, and 19 and Figure 8 of Section C of Attachment CC of this Permit. Permit conditions II.F. and VII.A.3.c. also apply.
- (ii) The feed rates to the GASVIT™ System shall not exceed the limits in Table VII-1 of this Permit or in Permit condition VII.A.3.d.

- (iii) The Permittee shall conduct sufficient analysis of the waste treated in GASVIT™ System to verify that the waste feed is within the physical and chemical composition limits specified in this Permit, in accordance with Attachment YY of this Permit, except as modified in accordance with Permit conditions VII.A.3.a., VII.A.3.d., and VII.A.5., and as specified in Attachment CC of this Permit, except as modified in accordance with Permit condition II.F.
- (vi) Only one (1) feed mechanism shall be used to feed wastes to the GASVIT™ System at any given time.

VII.A.5. Compliance Schedules

- a. The Permittee shall obtain and submit to the Department and Agency as a Class 1 permit modification request requiring Agencies' approval pursuant to Permit conditions I.B.3. and I.B.4., an amendment to applicable portions of Attachments OO, QQ, RR, SS, UU, WW(1), WW(3), and YY of this Permit to eliminate the following to the GASVIT™ System. The GASVIT™ System shall not be operated until the Department and Agency have approved this Permit modification request:
 - (i) Eliminate all references to the Steam Boiler (BLR-0725).
 - (ii) Eliminate all references to GASVIT™ Unit B.
 - (iii) Eliminate all references to monitoring for hydrocarbons after the syngas converter and replace with monitoring for carbon monoxide on a dry gas basis on an hourly rolling average basis at the quench tower exit.
- b. The Permittee shall obtain and submit to the Department and Agency as a permit modification request, pursuant to Permit conditions I.B.3. and I.B.4., an amendment to Section 3.3 of Attachments QQ to include a description of the thermal residence chamber. The GASVIT™ System shall not be operated until the Department and Agency has approved this Permit modification request.
- c. The Permittee shall obtain and submit to the Department and Agency as a permit modification request, pursuant to Permit conditions I.B.3. and I.B.4., an amendment to Table D-12-2 of Attachment OO of this Permit for the GASVIT™ System construction dimensions for the following

subsystem components. The GASVIT™ System shall not be constructed until the Department and Agency have approved this Permit modification request.

- (i) 1st stage syngas handling (GV-05) filter (high temperature filter).
 - (ii) 2nd stage syngas handling scrubbers.
 - (iii) 2nd stage scrubber piping system and pumps.
 - (iv) ID fans.
- d. The Permittee shall obtain and submit to the Department and Agency as a permit modification request, pursuant to Permit conditions I.B.3. and I.B.4., an amendment to Attachment WW(1) of this Permit for the GASVIT™ System to add the following. The GASVIT™ System shall not be operated until the Department and Agency have approved this Permit modification request.
- (i) Specification 15111, Table 4.2, for 3 Way Solenoid Valve, FV4, fill in the following requirements: Subsystem, surveillance, functional test, preventative maintenance, and calibration.
 - (ii) Specification 15130H, add the following to the Table of Contents: "56. Scrubber Water Conductivity Meter, AET-0603"
 - (iii) Specification 15130H, for Carbon Monoxide Analyzer (AE-C0): provide specification which addresses compliance with the requirements for CO monitors in 40 CFR Part 266, Appendix IX, Section 2.0.
- e. The Permittee shall obtain and submit to the Department and Agency as a permit modification request, pursuant to Permit conditions I.B.3. and I.B.4., an amendment to applicable portions of Attachments UU, WW(1), WW(3), and YY of this Permit to include addition of the following to the GASVIT™ System Subsystems specified below. The GASVIT™ System shall not be constructed until the Department and Agency have approved this Permit modification request.
- (i) Solid Feed System (GV-02)-Specification for Air Lock Exhaust Filter (Tag Number GV-02-FLT-0227).
 - (ii) Product Handling (GV-0V)-Specification 15861 for HEPA Filter (Tag Number GV-04 FLT-0417).

- (iii) Product Handling (GV-04) Metals-Specification 15861 for HEPA Filter (Tag Number GV-04 FLT-0427).
 - (iv) First Stage Syngas Processing (GV-5)-Specification 15861 for HEPA Filter (Tag Number GV-05 FLT-0530).
 - (v) Process Chamber (GV-03) Nitrogen-Specification 15120 for Water-Nitrogen Heat Exchanger (Tag No. GV-03-HX-0385).
- f. The Permittee shall obtain and submit to the Department and the Agency as a permit modification request, pursuant to Permit conditions I.B.3. and I.B.4., an amendment to applicable portions of Attachments OO, QQ, RR, SS, WW(1), and WW(3) of this Permit to reflect the installation of catch pans beneath all GASVIT™ System Subsystems GV-03, 04, 05, 06, 07, and 08, with a containment volume equal to the entire internal volume of the subsystem excluding the volume occupied by process equipment. These subsystems shall not be constructed until the Department and Agency have approved this Permit modification request
- g. The following amendments to the Demonstration Plan, Attachment YY of this Permit, are hereby made. The Permittee shall submit the revised pages reflecting these amendments to the Director and Regional Administrator with the revised Demonstration Test Plan in accordance with Permit condition VII.A.3.a.(ii):
- (i) Amend all references to analytical methods for measuring PCBs in stack gases to include use of the following:

"Draft EPA Method 1668 Toxic Polychlorinated Biphenyls by Isotope Dilution High Resolution Gas Chromatograph/High Resolution Mass spectrometry", Office of Science and Technology, Office of Water, March 1997.
 - (ii) Page 1, Section D-5, first paragraph, lines 3 and 4: replace "in lieu of a Trial Burn since the GASVIT™ System is not an incinerator" with "as appropriate for the GASVIT™ System as a Miscellaneous Treatment Unit under WAC 173-303-680 and as an alternate method under 40 CFR §761.60(e)".
 - (iii) Page 4, Section D-5b(2), Objective 2, eighth bullet, third line: replace "total hydrocarbons" with "carbon monoxide".

- (iv) Page 4, Section D-5b(2), Objective 2, ninth bullet: add the following objective; "scrubber discharge pressures".
- (v) Page 4, Section D-5b(2), Objective 2: add the following objective as the tenth bullet; "Demonstrate Syngas converter minimum gas temperature".
- (vi) Page 5, Section D-5b(2), Test Conditions 1, 2, and 3: add the following objective; "Minimum syngas converter gas temperature".
- (vii) Page 6, Section D-5b(2), bullet six: replace "total hydrocarbons" with "carbon monoxide".
- (viii) Page 23, Section D-5b(2) (c) (ii), line 8: "total hydrocarbons" with "carbon monoxide".
- (ix) Page 24, Section D-5b(2) (c) (iii), tenth bullet: delete "H₂".
- (x) Page 25, Section D-5b(2) (c) (iii), eleventh bullet: delete "H₂".
- (xi) Page 26, Section D-5b(2) (c) (iii), Test Condition 3, first bullet: add the following; "total metals (Sb, As, Ba, Be, Cs, Ce, Cd, Cr, Cu, Pb, Mn, Hg, Ni, Se, Ag, V, and Tl)" and ninth bullet: delete "H₂".
- (xii) Page 26, Section D-5b(2) (c) (iii), Test Condition 3, third bullet: add the following; "total metals (Sb, As, Ba, Be, Cs, Ce, Cd, Cr, Cu, Pb, Mn, Hg, Ni, Se, Ag, V, and Tl)".
- (xiii) Page 38, Section D-5b(2) (e) (iv): revise first bullet, first sentence as follows; "Permittee will accept risk-based feed rate limits for the metals selenium and thallium that assume no removal of these metals in the process chamber or the syngas processing equipment".
- (xiv) Page 38, Section D-5b(2) (e) (iv): revise second bullet, first sentence as follows; "Permittee will establish maximum feed rate limits for the metals antimony, barium, beryllium, cadmium, chromium, lead, mercury, nickel, and silver using a 'Tier III' approach."

- (xv) Page 46, Section D-5b(2)(g)(iv), third line: revise as follows; "automatically stops all dangerous waste, mixed-wastes, TSCA regulated PCB wastes, and mixed-TSCA regulated PCB wastes".
- (xvi) Page 46, Section 5b(2)(i), third line: revise as follows; "important process parameters, in anticipation of the RCRA/TSCA Permit, to ensure continuing performance".
- (xvii) Page 50, Section 5b(2)(i)(i), Minimum Syngas Converter Temperature: add the following sentence; "A minimum instantaneous temperature limit will be established from the average of the minimum one-minute temperature values that are recorded during each 30-minute interval of Test Conditions 1, 2, and 3".
- (xviii) Page 50, Section 5b(2)(i)(i), Packed Bed Scrubber #2 Minimum Recycle Flow Rate, third line: delete the term "average".
- (xix) Page 51, Section 5b(2)(i)(i), Scrubber #2 Minimum pH: add; "A minimum hourly rolling average pH limit will also be established based on the average of the hourly rolling average pH values recorded during each of the Demonstration Test runs."
- (xx) Page 51, Section 5b(2)(i)(i), add the following under Group A1 Parameters: "Ejector Scrubber #1 minimum liquid discharge pressure. The liquid discharge pressure will be maintained above a minimum value demonstrated during the Demonstration Test. The liquid discharge pressure should be based on the average flow rate demonstrated during each run of the Demonstration Test runs".
- (xxi) Page 51, Section 5b(2)(i)(i), add the following under Group A1 Parameters: "Ejector Scrubber #2 minimum liquid discharge pressure. The liquid discharge pressure will be maintained above a minimum value demonstrated during the Demonstration Test. The liquid discharge pressure should be based on the average flow rate demonstrated during each run of the Demonstration Test runs."

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- (xxii) Page 54, Section D-5b(2) (i) (ii): replace references to "hydrocarbons" with "carbon monoxide" and replace hydrocarbon setpoint with "100 ppm on a dry basis based on a one-hour rolling average".
- (xxiii) Page 55, Section D-5b(2) (i) (iii): revise first sentence as follows; "Permittee will demonstrate maximum feed rates for the metals antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, nickel, and silver."
- (xxiv) Page 55, Section D-5b(2) (i) (ii): revise second paragraph, first sentence as follows; "Permittee will accept risk based feed rate limits for the metals selenium and thallium that assume no control of these metals in the process chamber or syngas processing system."
- (xxv) Tables D-5b1, D-5b2, D-5b37, Group A1 Parameters: add the following:
- (a) Control Parameter - "Syngas converter minimum temperature (°F)" with a Value of "1500 °F," and with Comments "instantaneous AWFCO".
 - (b) Control Parameter "Minimum Batch Time for containerized solid waste feed," with a Value of "90 seconds" and with Comments "Instantaneous AWFCO".
 - (c) Control Parameter "Second packed bed scrubber minimum pH," with a Value of "7.5" and with Comments "Hourly rolling average AWFCO".
- (xxvi) Tables D-5b1, D-5b2, D-5b37, and D-5b38, Group A2 Parameters, add the following:
- (a) Control Parameter - "Carbon Monoxide in emission at quench tower exit" with a Value of "100 ppm" and with Comments "dry basis based on a one-hour rolling average AWFCO".
 - (b) Control Parameter "GASVIT™ System gas bypasses of Thermal Residence Chamber and first scrubber ejector," with a

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- Value of "NA" and with Comments,
"Instantaneous AWFCO".
- (c) Control Parameter "GASVIT™ System gas bypasses of syngas converter," with a Value of "NA" and with Comments "Instantaneous AWFCO".
- (xxvii) Tables D-5b1, D-5b2, D-5b37, and D-5b38, Group A2 Parameters, amend as follows:
- (a) Control Parameter "Plasma torch failure" replace with "minimum plasma electrode current" and Value replace with "one (1) amp".
- (b) Control Parameter "Syngas converter failure" replace with the following:
- (1) "minimum syngas converter blower exhaust low flow" with a Value of "25 SCFM".
- (2) "minimum syngas converter conversion air fan low flow" with a Value of "10 times syngas blower exhaust flow rate".
- (3) "minimum GASVIT™ building confinement system fans low flow" with a Value of "15,000 SCFM".
- (c) Control Parameter "High temperature filter maximum pressure differential (in w.c.)," replace Value with "45".
- (xxviii) Table D-5b2, revise maximum metal feed rates for chromium as follows "083/.12".
- (xxix) Table D-5b3, add the Instrument ID and Tag Numbers for following "Service":
- (a) First Scrubber ejector liquid minimum discharge pressure.
- (b) Second Scrubber ejector liquid minimum discharge pressure.
- (c) Batch Timer for containerized solid waste feeder.

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- (d) GASVIT™ building confinement system fan flow.
- (e) Carbon monoxide in emission at quench tower exit.
- (xxx) Table D-5b3, delete the Service "Converter offgas hydrocarbons".
- (xxxi) Tables D-5b17c and D-5b18, and Appendix A, Table 7-1, amend to include Analyses for "total metals" for "containerized waste solid feed, flux material" and for "TCLP metals" for "vitrified product" for Test Condition 3.
- (xxxii) Table D-5b19b, add the following to the list of Coplanar PCBs:

"2,3,4,5,2',3',4'-Heptachlorobiphenyl
2,3,4,5,2',4',5'-Heptachlorobiphenyl"
- (xxxiii) Table D-5b35, add the following:
- (a) Parameter - "Minimum Batch Time for containerized solid waste feed" Test Condition 3 - "90 seconds".
- (b) Parameter - "Carbon Monoxide in emission at quench tower exit, one-hour rolling average on dry basis" Test Conditions 1, 2, and 3-100 ppm.
- (xxxiv) Table D-5b35, delete Parameter -"Syngas converter offgas hydrocarbons".
- (xxxv) Table D-5b35, revise the Parameter "Metal feed rates" as follows:
- (a) "Antimony (spiked)," Test Condition 1 - ".02"; Test Conditions 2 and 3- ".029".
- (b) "Barium (spiked)," Test Condition 1 - ".14"; Test Conditions 2 and 3 -".2".
- (c) "Beryllium (spiked)," Test Conditions 2 and 3 - ".1".
- (d) "Chromium (as Cr VI) (spiked)," Test Condition 1 - ".083"; Test Conditions 2 and 3 - ".12".

- (e) "Mercury (spiked)," Test Condition 1 - ".032"; Test Conditions 2 and 3 - ".046".
- (f) "Silver (spiked)," Test Condition 1 - ".071"; Test Conditions 2 and 3- ".1".
- (g) "Selenium," Test Conditions 1, 2, and 3 - "Note 1".

(xxxvi) Table D-B36, add the following:

- (a) Interlock Parameter - "Syngas converter minimum temperature (°F)" with Comments "instantaneous AWFCO".
- (b) Interlock Parameter "Minimum Batch Time for containerized solid waste feed," with Comments "Instantaneous AWFCO".
- (c) Interlock Parameter "Second packed bed scrubber minimum pH, with Comments "Hourly rolling average AWFCO".
- (d) Interlock Parameter - "Carbon Monoxide in emission at quench tower exit" with Comments "dry basis based on a one-hour rolling average AWFCO".
- (e) Interlock Parameter "GASVIT™ System gas bypasses of thermal residence chamber and first scrubber ejector," with Comments "Instantaneous AWFCO".
- (f) Interlock Parameter "GASVIT™ System gas bypasses of syngas converter," with Comments "Instantaneous AWFCO".

(xxxvii) Table D-5b36, amend as follows:

- (a) Interlock Parameter "Plasma torch failure" replace with "minimum plasma electrode current" with Comments "Instantaneous".
- (b) Interlock Parameter "Syngas converter failure" replace with the following:
 - (1) "minimum syngas converter blower exhaust flow" with Comment of "Instantaneous".
 - (2) "minimum syngas converter conversion air fan flow" with Comment of

"Instantaneous".

- (3) "minimum GASVIT™ building confinement system fans flow" with Comment of "Instantaneous".

(xxxviii) Table D-5b38, Group A1 Parameters, add the following:

- (a) Control Parameter - "Syngas converter minimum temperature (°F)" with a Value of "1500 °F", and with Comments "instantaneous AWFCO".
- (b) Control Parameter "Minimum Batch Time for containerized solid waste feed," with a Value of "ninety (90) seconds" and with Comments "Instantaneous AWFCO".
- (c) Control Parameter "Second packed bed scrubber minimum pH, with a Value of "5.5" and with Comments "Hourly rolling average AWFCO".
- h. The Permittee shall submit to the Department and the Agency for approval with the revised Demonstration Test Plan in accordance with Permit Condition VII.A.3.a.(ii) a work plan and schedule for its implementation to generate additional operational data correlating $C0/(C0+C0_2)$ ratio to carbon conversion in the process chamber. The data generation period shall include the Demonstration Test and the first six (6) months of operation of the GASVIT™ System pursuant to Module VI of this Permit. A report of the results of the implementation of the work plan including evaluation of data shall be submitted to the Department and the Agency within nine (9) months of operation of the GASVIT™ System pursuant to Module VI of this Permit. The Work plan shall include at a minimum the following:
- (i) Sample matrixes and sample parameters to be analyzed including frequency;
- (ii) Sampling Procedures;
- (iii) Analytical Procedures;
- (iv) Quality Assurance and Quality Control procedures for sampling and analysis procedures; and
- (v) Data Evaluation Strategies/Techniques.

- (vi) GASVIT™ System operating parameters for correlation.
- i. The Permittee shall obtain and submit to the Department and the Agency as a permit modification request, pursuant to Permit conditions I.B.3. and I.B.4., an amendment to applicable portions Attachments OO, QQ, RR, SS, UU, and WW to expand the interlocks to include all waste feed cutoff triggers as specified in Table VII-3 of this Permit. The Permittee shall not operate the GASVIT™ System until this permit modification is approved by Department and the Agency.
- j. The Permittee shall obtain and submit to the Department and the Agency as a permit modification request, pursuant to Permit conditions I.B.3. and I.B.4., an amendment to the Appendix A, Table 6 of Attachment YY of this Permit to include complete information for each specified column heading for each instrument measuring the parameters listed on Table VII-3 of this Permit. Where the calibration procedure is not a published method (i.e., ASTM, NBS, etc.) a copy of the detailed procedure will be submitted and added to Attachment EE of this Permit. The Permittee shall not operate the GASVIT™ System until this Permit modification is approved by Department and the Agency.
- k. The Permittee shall obtain and submit to the Department and Agency as a permit modification request, pursuant to Permit conditions I.B.3. and I.B.4., an amendment to applicable portions of Attachments EE, II, OO, QQ, RR, SS, UU, WW(1), WW(3), and YY of this Permit and Tables VII-3 and VI-3 of this Permit and an amendment to applicable portions of Attachment 13 and Appendix C of Attachment 6 of the Permit application, to add an immediately post-HEPA carbon filter unit to the GASVIT™ System. The GASVIT™ System shall not be constructed until the Department and Agency have approved this Permit modification request.
- l. The Permittee shall obtain and submit to the Department and Agency as a permit modification request, pursuant to Permit conditions I.B.3. and I.B.4., an amendment to applicable portions of Attachments WW(1) and YY of this Permit to incorporate concurrent stack sampling for all trains during the Demonstration test. The GASVIT™ System shall not be constructed until the Department and Agency have approved this Permit modification request.
- m. The Permittee shall obtain and submit to the Department and Agency as a permit modification request, pursuant to Permit conditions I.B.3. and I.B.4., an amendment to

applicable portions of Attachments EE, II, OO, QQ, RR, SS, UU, WW(1), WW(3), and YY of this Permit documenting that the syngas converter (GV-08) is sealed against fugitive emissions in accordance with WAC 173-303-670(6)(d)(i). The GASVIT™ System shall not be constructed until the Department and Agency have approved this Permit modification request.

- n. The Permittee shall develop and maintain on-site, as part of the Operating Record, surveillance, maintenance, and calibration event lists for the equipment control/instrument devices for the following subsystems prior to operation of the GASVIT™ System:

GV-02
GV-03
GV-04
GV-05
GV-06
GV-07
GV-08
GV-09

TABLE VII-1 - MAXIMUM FEED RATES TO GASVIT™ SYSTEM

Description of Waste	Shakedown and Post Demonstration Test	Demonstration Test
Liquid waste feed rate (lb/min)	4.16 Instantaneous	5.0 Instantaneous
Bulk solid waste feed (lb/hr)	350 Hourly rolling average	400 Hourly rolling average
Containerized solid waste feed (lb/hr)	350 Hourly rolling average	400 Hourly rolling average
Metal Feedrates (lb/hr)	LIQUID/TOTAL	LIQUID/TOTAL
Antimony	0.020/0.029	0.020/0.029
Arsenic	0.071/0.10	0.071/0.10
Barium	0.14/0.20	0.14/0.20
Beryllium	0.071/0.10	0.071/0.10
Cadmium	0.071/0.10	0.071/0.10
Chromium	0.083/0.12	0.083/0.12
Lead	7.1/10	7.1/10
Mercury	0.031/0.046	0.031/0.046
Nickel	7.1/10	7.1/10
Selenium	0.00014/0.00020	0.00014/0.00020
Silver	0.00021/0.00029	0.00021/0.00029
Thallium	0.0000056/0.0000081	.0000056/.0000081
Total Chlorine/Chloride (lb/hr)	55	55

Table VII-2 - GASVIT™ SYSTEM ESTIMATED EMISSION RATES

Chemical Constituents	CAS NUMBER	Emission Rates (g/sec)
1,1,1-Trichloroethane (Methylchloroform)	71-55-6	2.80E-06
1,1,2,2-Tetrachloroethane	79-34-5	2.20E-06
1,1,2-Trichloroethane	79-00-5	2.20E-06
1,1-Dichloroethane (Ethylidene dichloride)	75-34-3	2.20E-06
1,1-Dichloroethylene (Vinylidene Chloride)	75-35-4	2.20E-06
1,2,3-Trichloropropane	96-18-4	2.2E-06
1,2,4-Trichlorobenzene	120-82-1	2.60E-06
1,2,4-Trimethylbenzene (Pseudocumene)	95-63-6	1.10E-05
1,2-Dichlorobenzene	95-50-1	5.30E-06
1,2-Dichloroethane (Ethylene dichloride)	107-06-2	2.20E-06
1,2-Dichloropropane (Propylene dichloride)	78-87-5	2.20E-06
1,3-Dichlorobenzene	541-73-1	2.60E-06
1,4-Dichlorobenzene	106-46-7	2.60E-06
2,4,5-Trichlorophenol	95-95-4	2.60E-06
2,4,6-Trichlorophenol	88-06-2	2.60E-06
2,4-Dichlorophenol	120-83-2	2.60E-06
2,4-Dimethylphenol	105-67-9	2.60E-06
2,4-Dinitrophenol	51-28-5	2.60E-06
2,4-Dinitrotoluene	121-14-2	2.60E-06
2,6-Dinitrotoluene	606-20-2	2.60E-06
2-Chloronaphthalene (beta-chloronaphthalene)	91-58-7	2.60E-06
2-Chlorophenol	95-57-8	2.60E-06
2-Nitroaniline (o-Nitroaniline)	88-74-4	2.60E-06
2-Propanone (Acetone)	67-64-1	2.20E-06
3,3'-Dichlorobenzidine	91-94-1	2.60E-06
3-Nitroaniline (m-Nitroaniline)	99-09-2	2.60E-06
4,6-Dinitro-2-methylphenol	534-52-1	2.60E-06
4-Chloroaniline (p-Chloroaniline)	106-47-8	2.60E-06
4-Nitroaniline (p-Nitroaniline)	100-01-6	2.60E-06
4-Nitrophenol	100-02-7	2.60E-06
Acenaphthene	83-32-9	4.00E-09
Acrylonitrile	107-13-1	2.20E-06
Anthracene	120-12-7	4.00E-09
Antimony	7440-36-0	3.70E-06
Arsenic	7440-38-2	7.60E-06
Barium	7440-39-3	2.50E-06

Chemical Constituents	CAS NUMBER	Emission Rates (g/sec)
Benzene	71-43-2	4.40E-06
Benzo(a)anthracene	56-55-3	4.00E-09
Benzo(a)pyrene	50-32-8	4.00E-09
Benzo(b)fluoranthene	205-99-2	4.00E-09
Benzo(g,h,i)perylene	191-24-2	4.00E-09
Benzo(k)fluoranthene	207-08-9	4.00E-09
Benzoic acid	65-85-0	2.60E-06
Benzyl alcohol	100-51-6	2.60E-06
Benzyl chloride	100-44-7	2.20E-06
Beryllium	7440-41-7	1.30E-06
Bis(2-chloroethoxy)methane	111-91-1	2.60E-06
Bis(2-chloroethyl)ether	111-44-4	2.60E-06
Bis(2-chloroisopropyl)ether (2,2-Oxybis(1-Chloropropane))	108-60-1	2.60E-06
Bromodichloromethane	75-27-4	2.20E-06
Bromoform	75-25-2	2.20E-06
Bromomethane	74-83-9	2.20E-06
Butylbenzyl phthalate	85-68-7	2.60E-06
Cadmium	7440-43-9	1.30E-06
Carbon disulfide	75-15-0	2.20E-06
Carbon tetrachloride	56-23-5	2.20E-06
Chlorine/Chloride (Total)	7782-50-5	6.40E-03
Chlorobenzene	108-90-7	4.40E-06
Chlorobenzilate	510-15-6	2.60E-06
Chloroethane	75-00-3	2.20E-06
Chloroethylene (Vinyl Chloride)	75-01-4	2.20E-06
Chloroform	67-66-3	2.20E-06
Chloromethane	74-87-3	2.20E-06
Chrome (Chromium: Total) (Hexavalent by METHOD 7109)	7440-47-3	1.50E-06
Chrysene	218-01-9	4.00E-09
cis-1,3-Dichloropropene	10061-01-5	2.20E-06
Copper	7440-50-8	6.30E-05
Di(2-Ethylhexyl) phthalate (Bis(2-ethyl hexyl)phthalate, Di-sec-octyl phthalate)	117-81-7	2.60E-06
Dibenzo(a,h)anthracene	55-70-3	4.00E-09
Dibenzofuran	132-64-9	2.60E-06
Dibromochloromethane	124-48-1	2.20E-06
Dichlorodifluoromethane	75-71-8	2.20E-06
Dichloromethane (Methylene chloride)	75-09-02	1.20E-05
Diethyl phthalate	84-66-2	2.60E-06
Dimethyl phthalate	131-11-3	2.60E-06

Chemical Constituents	CAS NUMBER	Emission Rates (g/sec)
Di-n-butyl phthalate	84-74-2	2.60E-06
Di-n-octyl phthalate	117-84-0	2.60E-06
Ethyl benzene	100-41-4	2.20E-06
Fluoranthene	206-44-0	4.00E-09
Fluorene	86-73-7	4.00E-09
Hexachlorobenzene	118-74-1	2.60E-06
Hexachlorobutadiene	87-68-3	2.60E-06
Hexachlorocyclopentadiene	77-47-4	2.60E-06
Hexachloroethane	67-72-1	2.60E-06
Hydrochloric acid	7647-01-0	6.40E-03
Indeno (1,2,3-cd) pyrene	193-39-5	4.00E-09
Isophorone	78-59-1	2.60E-06
Lead	7439-92-1	1.30E-04
Manganese	7439-96-5	2.20E-06
m-Cresol (3-methylphenol)	108-39-4	2.60E-06
Mercury	7439-97-6	1.50E-04
m-Xylene	108-38-3	2.20E-06
Napthalene	91-20-3	5.30E-06
Nickel	7440-02-0	1.30E-04
Nitrobenzene	98-95-3	2.60E-06
N-nitroso-di-n-propylamine	621-64-7	2.60E-06
N-nitroso-di-phenylamine	86-30-6	2.60E-06
O-cresol (2-Methylphenol)	95-48-7	2.60E-06
o-Xylene	95-47-6	2.20E-06
PCB ^a	13029-08-8	1.20E-07
PCDD/PCDF	-	-
TCDD, 2,3,7,8-	1746-01-6	1.80E-11
OCDD, 1,2,3,4,5,7,8,9-	3268-87-9	1.80E-13
HxCDD, 1,2,3,7,8,9-	19408-74-3	8.80E-12
OCDF, 1,2,3,4,5,6,7,8,9-	39001-02-0	1.80E-13
HxCDD, 1,2,3,4,7,8-	39227-28-6	8.80E-12
PeCDD, 1,2,3,7,8-	40321-76-4	4.40E-11
TCDF, 2,3,7,8-	51207-31-9	1.80E-12
HpCDF, 1,2,3,4,7,8,9-	55673-89-7	8.80E-13
PeCDF, 2,3,4,7,8-	57117-31-4	4.40E-11
PeCDF, 1,2,3,7,8-	57117-41-6	4.40E-12
HxCDF, 1,2,3,6,7,8-	57117-44-9	8.80E-12
HxCDD 1,2,3,6,7,8-	57653-85-7	8.80E-12
HxCDF, 2,3,4,6,7,8-	60851-34-5	8.80E-12
HpCDF, 1,2,3,4,6,7,8-	67562-39-4	8.80E-13
HxCDF, 1,2,3,4,7,8-	70648-26-9	8.80E-12
HxCDF, 1,2,3,8,7,9-	72918-21-9	8.80E-12
HpCDD, 1,2,3,4,6,7,8-	99999-99-9	8.80E-13
p-Cresol (4-Methylphenol)	106-44-5	2.60E-06
Pentachlorophenol	87-86-5	2.60E-06

Chemical Constituents	CAS NUMBER	Emission Rates (g/sec)
Phenol	108-95-2	2.60E-06
p-Xylene	106-42-3	2.60E-06
Pyrene	129-00-0	4.00E-09
Selenium	7782-49-2	2.60E-05
Silver	7440-22-4	3.70E-05
Styrene	100-42-5	2.20E-06
Tetrachloroethylene (PERC)	127-18-4	4.40E-06
Thallium	7440-28-0	1.00E-06
Toluene	108-88-3	6.10E-06
trans-1,2-Dichloroethene	156-60-5	2.20E-06
trans-1,3-Dichloropropene	10061-02-6	2.20E-06
Trichloroethene (TCE) (Trichloroethylene)	79-01-6	2.20E-06
Trichloroflouromethane	75-69-4	2.20E-06
Vanadium	7440-62-2	2.50E-05
Vinyl acetate	108-05-4	2.20E-06

^a Includes Total Mono CBs, Total Di CBS, Total Tri CBs, Total Tetra CBs, Total Penta CBs, Total Hexa CBs, Total Hepta CBs, Total Octa CBs, Total Nona CBs, Total Deca CBs, 3,4,3',4' - TeCB, 3,4,5,3',4' - PeCB, 3,4,5,3',4',5' - HxCB, 2,3,4,3',4' - PeCB, 2,3,4,5,4' - PeCB, 2,4,5,3',4' - PeCB, 3,4,5,2',4' - PeCB, 2,3,4,5,3',4' - HxCB, 2,3,4,3',4',5' - HxCB, 2,4,5,3',4',5' - HxCB, 2,3,4,5,3',4',5' HpCB, 2,3,4,5,2'3',4' - HpCB, 2,3,4,5,2',4',5' - HpCB

TABLE VII-3 - GASVIT™ SYSTEM WASTE FEED CUTOFF PARAMETERS

	Tag Number	Process Description	Setpoints During Shakedown and Post Demonstration Test	Setpoints During Demonstration Test Period*
GV-03 1	TE-0355	Thermal Residence Chamber gas minimum temperature (°F)	1,500 Based on Hourly Rolling Average	1,400 Based on Hourly Rolling Average
GV-03 2	TE-0355	Thermal Residence Chamber gas minimum temperature (°F)	1,400 Instantaneous	1,300 Instantaneous
GV-03 3	TE-0315	Process Chamber gas Maximum temperature (°F)	2,550 Hourly Rolling Average	2,850 Hourly Rolling Average
GV-03 4	TE-0315	Process Chamber gas maximum temperature (°F)	2,750 Instantaneous	2,950 Instantaneous
GV-07 5	TE-0703-03	Syngas Converter gas minimum temperature (°F)	1,600 Hourly Rolling Average	1,600 Hourly Rolling Average
GV-07 6	TE-0703-03	Syngas Converter gas minimum temperature (°F)	1,500 Instantaneous	1,500 Instantaneous
GV-02 7	FIT-0214	Liquid waste maximum feed rate (lb/min)	4.16 Instantaneous	5.0 Instantaneous

	Tag Number	Process Description	Setpoints During Shakedown and Post Demonstration Test	Setpoints During Demonstration Test Period*
GV-02 8	WIT-0114	Bulk solid waste maximum feed rate (lb/hr)	350 Hourly Rolling Average	400 Hourly Rolling Average
GV-02 9	WIT-0114	Continuous solid waste maximum feed rate (lb/hr)	350 Hourly Rolling Average	400 Hourly Rolling Average
GV-02 10	YK-0231	Batch time for containerized solid waste feed minimum (secs)	90 Instantaneous	90 Instantaneous
GV-06 11	FT-0601	First scrubber ejector liquid minimum flow rate (secs)	15 Instantaneous	10 Instantaneous
GV-06 12	FT-0621	Second scrubber ejector liquid minimum flow rate (gpm)	15 Instantaneous	10 Instantaneous
GV-06 13	FT-0602	First packed bed scrubber minimum recycle flow rate (gpm)	21 Instantaneous	16 Instantaneous
GV-06 14	FT-0622	Second packed bed scrubber minimum recycle flow rate (gpm)	21 Instantaneous	16 Instantaneous
GV-06 15	PT-0601	First scrubber ejector liquid minimum discharge pressure (psig)	15 Instantaneous	15 Instantaneous

	Tag Number	Process Description	Setpoints During Shakedown and Post Demonstration Test	Setpoints During Demonstration Test Period*
GV-06 16	PT-0621	Second scrubber ejector liquid minimum discharge pressure (psig)	15 Instantaneous	15 Instantaneous
GV-06 17	AET-0622	Second packed bed scrubber minimum pH	6.5 Ten-Minute Rolling Average	5.0 Ten-Minute Rolling Average
GV-06 18	AET-0622	Second packed bed scrubber minimum pH	7.0 Hourly Rolling Average	5.5 Hourly Rolling Average
GV-06 19	AET-0623	Second packed bed scrubber maximum liquid Conductivity (umho/cm)	30,000 Hourly Rolling Average	40,000 Hourly Rolling Average
GV-06 20	FT-0644	Maximum process gas flowrate (scfm)	350 Hourly Rolling Average	500 Hourly Rolling Average
GV-03 21	PT-0380	Maximum process chamber pressure (in. w.c.)	55 Instantaneous	55 Instantaneous
GV-03 22	AE-0350	Maximum CO/[CO+CO ₂] (Not active if process gas contains less than 1.0 vol%CO)	.95 Hourly Rolling Average	.95 Hourly Rolling Average
GV-05 23	PDT-0501	High temperature filter maximum pressure differential (in w.c.)	45 Instantaneous	45 Instantaneous

	Tag Number	Process Description	Setpoints During Shakedown and Post Demonstration Test	Setpoints During Demonstration Test Period*
GV-06 24	PDT-0641	HEPA filter maximum pressure differential (in w.c.)	6 Instantaneous	6 Instantaneous
GV-06 25	TE-0646	HEPA/Carbon filter inlet gas temperature maximum (°F)	240 Instantaneous	240 Instantaneous
GV-03 26	IT-0325	Plasma electrode current minimum (amps)	10 10-minute Rolling Average	10 10-minute Rolling Average
GV-07 27	FIT-0702	Syngas converter blower exhaust flow minimum (scfm)	25 Instantaneous	25 Instantaneous
GV-07 28	FIT-0770	Syngas converter conversion air fan flow minimum (scfm)	10 X blower exhaust Instantaneous	10 X blower exhaust Instantaneous
GV-07 29	AET 0715	Post-Quench Tower exit maximum carbon monoxide (ppm dry basis)	100 10 minute Rolling Average	100 10 minute Rolling Average
GV25 30	FIT-2520	GASVIT™ Building Confinement system fan minimum (scfm)	15,000 Instantaneous	15,000 Instantaneous
GV-03 31	PT-0380	GASVIT™ System gas bypass of thermal residence chamber and first Scrubber ejector	Instantaneous	Instantaneous

	Tag Number	Process Description	Setpoints During Shakedown and Post Demonstration Test	Setpoints During Demonstration Test Period*
GV-07 32	YN-0700	GASVIT™ System gas bypass of syngas converter	Instantaneous	Instantaneous
GV-06 34	PDT-0660	Carbon filter maximum pressure differential (in w.c.)	30 Instantaneous	30 Instantaneous
GV-06 35	TE-0646	HEPA/Carbon filter inlet gas temperature minimum (°F)	55 Instantaneous	55 Instantaneous
36	AET-0702	Syngas Converter Inlet Gas Flammability Limit (%LEL)	85 Instantaneous	85 Instantaneous
GV-05 37	PDT-0501	High Temperature Filter Minimum Differential Pressure (in w.c.) (Not active if process gas flow rate is <50 scfm)	0.5 Instantaneous	0.5 Instantaneous
GV-05 38	TE-0505	High Temperature Filter maximum inlet temperature (°F)	450 10-minute rolling average	450 10-minute rolling average
GV-03 39	AE-0350	Minimum CO/(CO+CO ₂) (Not active if process gas contains less than 1.0 vol.% CO)	0.40 10-minute rolling average	0.40 10-minute rolling average

*- Includes up to 120 hours pre-demonstration test

MODULE VIII - CORRECTIVE ACTION

On November 4, 1994, the Washington State Department of Ecology received final authorization from the U.S. Environmental Protection Agency, Region 10, to implement the State Corrective Action Program in lieu of

the Federal Corrective Action Program. The Washington State Department of Ecology (Department) will take the lead for corrective action at the Perma-Fix Northwest, Richland Incorporated facility, located in Richland, Washington.

VIII.A. APPLICABILITY

VIII.A.1. The provisions of Module VIII apply to any solid waste management units (SWMUs) and areas of concern (AOCs) identified in this permit, including any SWMUs or AOCs discovered during the period of this permit, and apply to contamination which has migrated beyond the facility boundary. As used in Module VIII of this permit, the terms "discover" and "discovery" refer to the date on which the Permittee either; (1) visually observes evidence of a previously unidentified SWMU or AOC; (2) visually observes evidence of a previously unidentified release of dangerous constituents to the environment; or (3) otherwise becomes aware of information which suggests the presence of a previously unidentified SWMU, AOC, or release of dangerous waste or dangerous constituents to the environment.

The Permittee, pursuant to this Permit, shall be required to investigate any releases or potential for release of dangerous waste or dangerous constituents from any SWMU at the facility, regardless of the time at which waste was placed in such unit. The Permittee shall be required to take corrective action for any such releases on-site and/or off-site where necessary to protect human health and the environment.

Once approved in writing by the Department, all submittals to the Department as required by Module VIII of the Permit become enforceable parts of this Permit.

VIII.B. SITE HAZARD ASSESSMENT

VIII.B.1. The Permittee shall submit to the Department a Site Hazard Assessment in accordance with WAC 173-340-320, in order to satisfy the corrective action requirements of WAC 173-303-646, within one hundred and eighty (180) days from effective date of this Permit. This document will be added to this Permit as a Permit attachment.

a. The Site Hazard Assessment shall cover, in addition to the permitted facility, all contiguous land to the facility being given this Permit, and any other land impacted by releases from the permitted facility and its contiguous land, as required in WAC 173-303-646(2).

- b. The Permittee shall submit to the Department for approval, within thirty (30) calendar days from the effective date of this Permit, a Site Hazard Assessment Plan to include all the scheduled site records review and a Sampling and Analysis Plan and Schedule in accordance with WAC 173-340-820 (in order to satisfy the requirements of WAC 173-303-646) for the sampling activities planned to complete this assessment.
- c. In addition to all the information required by WAC 173-340-320(4) (undertaken in order to satisfy the requirements of WAC 173-303-646), the Site Hazard Assessment shall include the following two (2) tables:
 - (i) A comprehensive table of Solid Waste Management Units and areas of concern identified by the assessment that requires further investigation and/or action. The Permittee shall prioritize the SWMUs and AOCs in the table according to risk. Upon approval by the Department, the table with the prioritized list will be added to this Permit pursuant to condition VIII.B.2., through a permit modification that will require public review and comment; and
 - (ii) A table of other areas of concern which do not require further action.
- d. RCRA corrective action requirements for SWMUs identified in the Site Hazard Assessment and Permit Condition VIII.B.2. shall be completed by the Permittee in accordance with these permit conditions and under the Washington State Department of Ecology authorities contained in Chapters 43.21A, 43.70, 70.98, 70.105, and 70.105D of the Revised Code of Washington, and MTCA Regulations, Chapter 173-340 Washington Administrative Code, as necessary to satisfy the requirements of WAC 173-303-646.

VIII.B.2. The solid waste management units listed in this Permit (after completion of the Site Hazard Assessment) shall be managed in accordance with the provisions of this module of the Permit.

VIII.C. Remedial Investigation and Feasibility Study (RI/FS)

- VIII.C.1. If deemed necessary by the Department, within ninety (90) calendar days of the Permittee's submittal of the Site Hazard Assessment, the Permittee shall submit to the Department a Draft Remedial Investigation and Feasibility Study (RI/FS) Workplan in accordance with the requirements of WAC 173-340-350 (State Remedial Investigation and Feasibility Study), in order to satisfy the corrective action requirements of WAC 173-303-646.
- VIII.C.2. The Draft RI/FS Workplan shall include provisions to complete characterization of the soil, groundwater, surface water, and sediment at and around the facility, as needed. It shall also present a methodology for developing, evaluating, screening, and selecting appropriate cleanup action alternatives for the SWMUs identified pursuant to conditions VIII.B.1.c. and VIII.B.2. (after the completion of the Site Hazard Assessment). The Draft RI/FS Workplan shall include a schedule for completion of all RI/FS Workplan tasks.
- VIII.C.3. Within thirty (30) calendar days of receiving the Department's comments on the Draft RI/FS Workplan, the Permittee shall incorporate the Department's comments and submit a Final RI/FS Workplan for approval.
- VIII.C.4. Within fifteen (15) calendar days of receiving written approval from the Department, the Permittee shall implement the Final RI/FS Workplan in accordance with the schedule set forth therein.
- VIII.C.5. A Draft Remedial Investigation (RI) Report shall be submitted in accordance with the schedule set forth in the Department-approved Final RI/FS Workplan.
- VIII.C.6. Within forty-five (45) calendar days of receiving the Department's comments on the Draft RI Report, the Permittee shall incorporate the Department's comments and submit a Final RI Report for approval.
- VIII.C.7. A Draft Feasibility Study (FS) Report shall be submitted in accordance with the schedule set forth in the Department approved Final RI/FS Workplan.
- VIII.C.8. Within forty-five (45) calendar days of receiving the Department's comments on the Draft FS, the Permittee shall incorporate the Department's comments and submit a Final FS for approval.

VIII.D. CLEANUP ACTION PLAN (CAP)

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- VIII.D.1. After completion and Departmental approval of the Remedial Investigation and Feasibility Study Reports, the Permittee may be required to draft a Cleanup Action Plan (CAP) to satisfy the requirements of WAC 173-340-400 (Cleanup Actions), in order to satisfy the corrective action requirements of WAC 173-303-646.
- VIII.D.2. After public review and comment, the CAP will be finalized and the Permittee will be required to design, construct, operate, maintain, and monitor the selected cleanup or corrective actions via a Class 2 or 3 permit modification which will incorporate requirements and schedules from a consent decree or agreed order, as agreed to by the Department and the Permittee, or will incorporate requirements and schedules from an enforcement order, as necessary to satisfy the requirements of WAC 173-303-646.

VIII.E. INTERIM ACTIONS

- VIII.E.1. The Department may mutually agree with the Permittee to conduct interim cleanup actions pursuant to WAC 173-340-430(1) at any time during the cleanup process. The Department may direct the Permittee to conduct interim cleanup actions pursuant to WAC 173-340-430(1) at any time during the cleanup process if the Department determines there is a threat to human health and the environment from a release, a suspected release, or potential release.
- VIII.E.2. The Permittee shall conduct the required interim actions in accordance with the requirements set in WAC 173-340-430 (Interim Actions). All interim cleanup actions conducted at any of the SWMUs identified pursuant to conditions VIII.B.1.c. and VIII.B.2. shall be reflected in the RI/FS Final Reports, as per conditions, VIII.C.6., 7., 8., and 9.

VIII.F. REPORTING AND PUBLIC INVOLVEMENT

- VIII.F.1. It is hereby required that the Permittee take the following actions and that these actions be conducted in accordance with Chapter 173-340 WAC (MTCA Cleanup Regulation) and with applicable provisions of Chapter 173-303 WAC (Dangerous Waste Regulations), unless otherwise specifically provided for herein.
- VIII.F.2. Progress reports shall be submitted to the Department by the Permittee on a quarterly basis, unless another time interval is agreed upon by the Permittee and the Department, commencing thirty (30) calendar days after this Permit becomes effective. The progress reports shall summarize corrective action activities completed

during the current time period, those planned for the next time period, any problems encountered and their resolution, and the results of sampling and ground water monitoring. Progress reports shall be submitted on the 15th day of the month following the end of the reporting period. The quarterly reporting periods shall include January-March, April-June, July-September, and October-December. Revision of the time interval for submittal of progress reports shall require a Class 1 permit modification requiring the Department's approval.

VIII.F.3. Per WAC 173-340-600(8) (Public Participation Plans), the Permittee shall prepare and/or update a public participation plan worksheet that conforms to the model provided by the Department for this Facility. The initial worksheet shall be submitted to the Department within ninety (90) calendar days of the effective date of this Permit.

VIII.G. DISCOVERY OF NEW SOLID WASTE MANAGEMENT UNITS

VIII.G.1. During the corrective action process, the Permittee shall continuously consider and evaluate any information regarding releases, suspected releases, or potential releases of hazardous substances, including dangerous waste and dangerous constituents at the facility. The Permittee shall notify the Director in writing of any newly-identified SWMU, newly-discovered releases from SWMUs, and newly-discovered AOCs, within all areas of the Facility, no later than thirty (30) calendar days after the date of discovery. The notification shall include, but not be limited to, the following information as required by WAC 173-303-806(4) (a) (xxiii):

- a. A description of the SWMU's type, function, dates of operation, location (including a map), design criteria, dimensions, materials of construction, capacity, ancillary systems (e.g., piping), release controls, alterations made to the unit, engineering drawings, and all closure and post-closure information available, particularly whether wastes were left in place;

- b. A description of the composition and quantities of solid wastes processed by the units with emphasis on dangerous wastes and dangerous constituents; and
- c. A description of any release (or potential release) of dangerous waste or dangerous constituents originating from the unit. Include information on the date(s) of release, type of dangerous waste or dangerous constituents, quantity released, nature of the release, extent of release migration, and cause of release (e.g., overflow, broken pipe, tank leak, etc.). Also, provide any available data which would quantify the nature and extent of environmental contamination, including the results of soil and/or groundwater sampling and analysis efforts. Likewise, submit any existing monitoring information that indicates releases of dangerous waste or dangerous constituents have not occurred or are not occurring.

- VIII.G.2. The Department may determine that additional solid waste management units shall be added to those listed in Permit Condition VIII.B.2. based upon additional information received by the Permittee and/or the Director.
- VIII.G.3. Upon receipt of the notification of any newly-identified SWMU, or if otherwise discovered, the Director may require the Permittee to submit an RI/FS or Interim Action Workplan and/or perform interim or corrective actions in accordance with the requirements contained in Permit Conditions VIII.C. through VIII.F.
- VIII.G.4. In lieu of a new RI/FS, the Permittee may propose either to incorporate any newly-identified SWMU into an ongoing RI/FS or to submit a proposal for the performance of a Corrective Action Plan at such newly-identified SWMU in accordance with the provisions of Permit Condition VIII.D., or interim measures in accordance with the provisions of Permit Condition VIII.E. Any such proposal shall be submitted to the Director along with, or subsequent to, the notification of the discovery of the SWMU(s).
- VIII.G.5. Nothing in this Permit shall relieve the Permittee of any obligation it may have under any law, including, but not limited to, Section 103 of CERCLA; Section 304 of the Emergency Planning Community Right-to-Know Act (EPCRA) 42 U.S.C. §11004; WAC 173-340-300; and WAC 173-34-450; to report releases of hazardous wastes, hazardous

constituents, or hazardous substances, to, at, or from the facility.

VIII.H. Financial Assurance

VIII.H.1. The Permittee shall establish and maintain financial assurance for corrective action in at least the amount necessary to implement the Cleanup Action Plan (CAP) as provided in WAC 173-340-360(10) and WAC 173-303-410, respectively, and required by WAC 173-303-646. In the absence of detailed regulations, Federal Register/Volume 51, no. 206/Friday, October 24, 1986/Proposed Rules, Federal Register/Vol.55, No.145/Friday, July 27, 1990/Proposed Rules and Federal Register/Vol. 61, No. 85/Wednesday, May 1, 1996/Proposed Rules, shall be used as guidance. Acceptable mechanisms include trust funds, surety bonds guaranteeing performance, letters of credit, insurance, financial test, corporate guarantee, or another instrument if the Permittee demonstrates to the satisfaction of the Director that it provides an acceptable level of financial assurance. The cost estimate for corrective action shall be in the amount necessary to fund the CAP and the Compliance Monitoring Plan under WAC 173-340-410. The Permittee shall provide the Department's Project Manager with documentation of this financial assurance within sixty (60) calendar days of the Department's issuance of the final CAP. The Permittee shall maintain financial assurance from the date of this submittal through completion of corrective action. The Permittee shall adjust the financial assurance coverage for changes in cost estimates and/or for inflation within thirty (30) days after each anniversary of the date the preceding costs were first prepared and shall provide the Department's Project Manager with documentation of the updated financial assurance.

VIII.H.2. The Permittee shall notify the Department's Project Manager by certified mail of the commencement of a voluntary or involuntary bankruptcy proceeding under Title 11, United States Code, naming the Permittee as debtor within ten (10) days after commencement of the proceeding. In the event of bankruptcy of the trustee or issuing institution, or suspension or revocation of the authority of the trustee or issuing institution to act as a trustee or issuing institution, the Permittee must establish financial assurance (trust fund or insurance policy) with another authorized trustee or issuing institution within sixty (60) days after the date of voluntary or involuntary bankruptcy proceeding.

VIII.I. DISPUTE RESOLUTION

- VIII.I.1. If following submission of a draft submittal required by this section of the Permit, the Permittee disagrees with or has questions concerning the Department's comments and/or required modifications, the Permittee, within five (5) calendar days after receipt of the Department's comments and/or required notifications, may in writing request a meeting or telephone conference with the Department's Director or his/her designated representative to resolve the matter. The Department's receipt of such written request will begin a twenty (20) calendar day informal dispute resolution period that includes a meeting with the Director or his/her designated representative. The written request shall include a statement of the issue(s) the Permittee wishes to address.
- VIII.I.2. The twenty (20) calendar day informal resolution period shall extend to the due date for the re-submittal. If agreement is reached within the informal resolution period, the Permittee shall incorporate in a revised submittal the agreed-upon comments and/or modifications within thirty (30) calendar days after reaching agreement, unless the Department specifies a longer period of time. If agreement is not reached within the informal resolution period, the Department will send a letter of disapproval to the Permittee. Within thirty (30) calendar days of receipt of the written disapproval letter, the Permittee shall submit a revised, final draft submittal that incorporates all of the Department's comments or required modifications.
- VIII.I.3. Once approved in writing by the Department, all submittals to the Department as required by this section of the Permit are incorporated by reference and become enforceable parts of this Permit, as if fully set forth herein.
- VIII.I.4. During the performance of work under an approved submittal, minor field changes may be agreed to verbally by the Department's Project Manager. In such a case, the Permittee shall submit a description of the minor field changes to the Department's Project Manager, in writing, within seven (7) calendar days after the verbal agreement. The Department's Project Manager shall provide written confirmation of the agreed minor field changes.
- VIII.I.5. The Department and the Permittee agree to utilize the dispute resolution process only in good faith and agree to expedite, to the extent possible, the dispute

resolution process whenever it is used. Implementation of these dispute resolution procedures shall not provide a basis for delay of any activities required by the Permit that are not the basis of the dispute, unless the Department agrees in writing to a schedule extension for those activities.

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Attachment 1