Page 1 of 51

PART I LEGAL AUTHORITY

F.I.A. PERMITTEE

Pursuant to the Kentucky Revised Statutes Chapter 224 and the Kentucky Administrative Regulations Title 401 adopted pursuant thereto by the Kentucky Energy and Environment Cabinet (hereinafter referred to as "the Cabinet"), a permit is issued to Blue Grass Army Depot (BGAD), and the persons as specified below (individually and collectively hereinafter referred to as "the Permittee"), for hazardous waste management activities at 431 Battlefield Memorial Highway, Richmond, Kentucky, latitude 37°42'00"N and longitude -84°12'30"W.

The table below specifies the owner and operator for each permitted hazardous waste activity specified in this Hazardous Waste Permit. The owner and operator are co-permittees.

Permit Section / Module	Owner	Operator
Entire Facility Section (F)	U.S. Department of the Army	All persons, as listed below
Conventional Storage Section (N)	U.S. Department of the Army	U.S. Department of the Army–Blue Grass Army Depot (BGAD)
Chemical Storage Section (C)	U.S. Department of the Army	U.S. Department of the Army–Blue Grass Chemical Activity (BGCA)
EDT Section (E)	U.S. Department of the Army	Bechtel Parsons Blue Grass Joint Venture (BPBG)
Mustard Agent (H) Sampling Operations Section (M)	U.S. Department of the Army	U.S. Department of the Army–Program Executive Office, Assembled Chemical Weapons Alternatives (ACWA)
GB Sample Extraction Operation Section (G)	U.S. Department of the Army	U.S. Department of the Army–Program Executive Office, Assembled Chemical Weapons Alternatives (ACWA)
Open Burn, Open/Buried Detonation Section (P)	U.S. Department of the Army	U.S. Department of the Army–Blue Grass Army Depot (BGAD)
BGCAPP Main Plant Section (A)	U.S. Department of the Army	Bechtel Parsons Blue Grass Joint Venture (BPBG)
D-100 Controlled Destruction Chamber Section (D)	U.S. Department of the Army	U.S. Department of the Army–Blue Grass Army Depot (BGAD)
Transport and Storage of Nerve Agent Wastes Section (R)	U.S. Department of the Army	U.S. Department of the Army Program Executive Office, Assembled Chemical Weapons Alternatives (ACWA)

[KRS 224.46.520, KRS 224.50-130, 401 KAR 39:090 Section 1, 401 KAR 39:060 Section 5, 40 CFR 270.10 as established in 401 KAR 39:060 Section 5]

F.I.B. APPLICATION(S)

This permit is based on the assumption that the information in each permit application submittal (herein referred to as the "application") is accurate and that the facility shall be operated as specified in each application and this permit. The original application and its revisions, listed in the table below, are hereby incorporated into this permit. Any inaccuracies found in the applications, dates listed below, could lead to the termination or modification of this permit and potential enforcement action. The Permittee shall inform the Kentucky Division of Waste Management (hereinafter referred to as "the Division") of any deviation from or changes in the information in the application, which would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

Page 2 of 51

Permit Section / Module	Application Submittal Date(s)	
Entire Facility Section (F)	March 27, 2014; November 6, 2014; May 26, 2015; and October 21, 2015	
Conventional Storage Section (N)	March 27, 2014; November 6, 2014; May 26, 2015; and October 21, 2015	
Chemical Storage Section (C)	March 27, 2014; November 6, 2014; May 26, 2015; and October 21, 2015	
EDT Section (E)	March 3, 2014; November 20, 2014; October 19, 2015; and May 19, 2016	
Mustard Agent (H) Sampling Operations Section (M)	November 2, 2015; April 7, 2016; and July 11, 2016	
GB Sample Extraction Operation Section (G)	June 20, 2017; November 7, 2017	
Open Burn, Open/Buried Detonation Section (P)	November 1988; June 19, 2017 ¹ ; February 26, 2018; June 7, 2018	
BGCAPP Main Plant (A)	See the Main Plain Permit, Part I, A.I.B Applications, for a complete list of applications used for the Main Plant Permit	
D-100 Controlled Destruction Chamber (D)	July 20, 2018; August 12, 2019; October 24, 2019	
Transport and Storage of Nerve Agent Wastes Section (R)	March 2020; October 2020; December 2020; March 2021	

¹ Although multiple revisions to the application have been submitted throughout the permitting process, the only application deemed complete was dated June 19, 2017, with supplemental material submitted subsequently. The permit section is based upon the complete application.

[40 CFR 270 as established in 401 KAR 39:060 Section 5]

F.I.C. EFFECTIVE DATE

This permit is effective and shall remain in effect as stated on the signature page of this permit, unless revoked and reissued, or terminated.

[40 CFR 270 as established in 401 KAR 39:060 Section 5]

F.I.D. PARTS OF THE PERMIT

The Permittee shall comply with all terms and conditions of the permit. This permit consists of the conditions set forth in:

- Part I Legal Authority
- Part II Standard Conditions
- Part III Specific Conditions
- Part IV Corrective Action
- Part V Referenced Attachments
- Part VI Waste Minimization

[401 KAR 39:060 Section 5, KRS 224.46-530]

F.I.E. SECTIONS OF THE PERMIT

The conditions in this permit are divided into sections:

(1) Conditions applicable to the entire facility (Blue Grass Army Depot and all tenants/operators)

Page 3 of 51

- (2) Conditions applicable to conventional munitions hazardous waste (other than chemical munitions storage)
- (3) Conditions applicable to chemical weapons storage related hazardous waste
- (4) Conditions applicable to mustard agent (H) chemical weapons related hazardous waste storage, treatment, or disposal using the static detonation chamber/explosive destruction technology (SDC/EDT)
- (5) Conditions applicable to mustard agent (H) sampling operations
- (6) Conditions applicable to GB sample operation
- (7) Conditions applicable to OB/OD operations

Throughout this Entire Facility Section, the phrase "See Specific Sections" means to go to the sections noted above for the particular permit condition/information referenced. Conversely, throughout the other sections, the phrase "See Entire Facility Section" means to see this document for the particular permit condition/information referenced. Each condition has a unique label. This label contains the following items, in the order listed:

- The first letter denotes which section the condition can be found in:
 - F for the entire facility section
 - N for the conventional section
 - C for the chemical section
 - E for the explosive destruction technology section
 - M for the mustard agent (H) sampling operations
 - G is for the GB sample extraction operation
 - P is for the OBOD permit
 - A is for the BGCAPP Main Plant section
 - D is for the D-100 Controlled Destruction Chamber section
 - R is for the Transport and Storage of Nerve Agent Wastes section
- The second letter denotes which part the condition can be found in. See above in Condition F.I.D.
- The third letter denotes the alphabetical listing of the conditions
- If there is a number it denotes the numerical listing of the sub-conditions

Example: N.III.C.(2) – This permit condition is in the Conventional Storage Section (N); in Part III – Specific Conditions; alphabetically listed, is the 3rd in the list (C); and is the 2nd sub-condition

[KRS 224.46-530]

F.I.F. REGULATIONS AND STATUTES

Applicable regulations and statutes are those which are in effect on the date of issuance, modification, or reissuance of this permit.

[401 KAR 39:060 Section 5, KRS 224.46-530]

Page 4 of 51

PART II STANDARD CONDITIONS

F.II.A. EFFECT OF THE PERMIT

Compliance with the terms of this permit constitutes compliance for purposes of enforcement with KRS Chapter 224, except for those requirements not included in the permit which become effective by statute, are promulgated under 401 KAR 39:060 Section 4 (Land Disposal Restrictions) restricting the placement of hazardous wastes in or on the land, or are promulgated under 401 KAR 39:090 Section 1, 40 CFR 264 Subpart AA, 40 CFR 264 Subpart BB, 40 CFR 264 Subpart CC, (Air Emission Standards).

This Permit is issued pursuant to KRS 224.46. Issuance of this Permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of state or local law or regulations. Compliance with the terms of this Permit does not constitute a defense to any order issued or any action brought under Sections 3008(a), 3008(h), 3013, or 7003 of the Resource Conservation and Recovery Act (RCRA) of 1976; Sections 104, 106(a), or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (42 U.S.C. 9601 et seq.), the equivalent state statutes, or any other law governing protection of public health or the environment for any imminent and substantial endangerment to human health, welfare, or the environment.

The Permittee shall treat, store, and/or dispose of hazardous waste on-site; ship/receive hazardous waste; perform post-closure care; and/or perform corrective action in accordance with the Conditions of this Permit. Any storage, treatment, and/or disposal of hazardous waste not authorized in this Permit is prohibited, except as allowed by the Kentucky Hazardous Waste Management Regulations, 401 KAR Chapter 39 and 401 KAR Chapter 40 (40 CFR 239-282).

F.II.B. PERMIT ACTIONS

F.II.B.(1) Permit Modification, Revocation and Reissuance, Termination

This permit may be modified, revoked and reissued, or terminated for cause as specified in 401 KAR 39:060 Section 5 [40 CFR 270.30, 40 CFR 270.41, 40 CFR 270.43, 40 CFR 124.5(a), 40 CFR 270.10(b)-(d)], and 401 KAR 40:040 Section 1. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee, does not stay the applicability or enforceability of any permit condition.

[See list in condition]

F.II.B.(2) Severability: Modification, Suspension, and Revocation of a Permit

The Cabinet may modify, suspend, or revoke this permit for:

- Violation of any requirement of KRS Chapter 224 or the respective administrative regulations promulgated pursuant thereto
- Aiding, abetting, or permitting the violation of any provisions of 401 KAR Chapter 39 and 401 KAR Chapter 40 (Hazardous Waste)
- Any action or omission associated with maintenance and operation of the facility that could or does create a threat to public health or the environment
- Violation(s) of a condition(s) of this permit

Page 5 of 51

- Misrepresentation or omission of a significant fact by the Permittee either in the application(s) for the permit or in information subsequently reported to the Cabinet
- Failure to comply with an order issued by the Cabinet

[401 KAR 39:060 Section 5, 401 KAR 40:040 Section 1, 40 CFR 270.41, 40 CFR 270.43 as established in 401 KAR 39:060 Section 5]

F.II.B.(3) Severability - Invalid Provision

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 or diminished.

[401 KAR 39:060 Section 5, 40 CFR 124.16(a)]

F.II.B.(4) Permit Renewal

This Permit may be renewed as specified in Permit Condition F.II.B.(5). Review of any application for a Permit renewal shall consider improvements in the state of control and measurement technology, as well as changes in applicable regulations.

[401 KAR 39:060 Section 5, 40 CFR 270.30]

F.II.B.(5) Permit Expiration and Continuation

This Permit shall be effective for a fixed term not to exceed ten years. This Permit and all Conditions herein shall remain in effect beyond the permit's expiration date, if the Permittee has submitted a timely, complete application in accordance with 401 KAR 39:060 Section 5, and through no fault of the Permittee, the Division has not issued a new permit. Permits continued under this section remain fully effective and enforceable. When the Permittee is not in compliance with the conditions of the expiring or expired permit, the Cabinet may choose to do any or all of the following:

- Initiate enforcement action based upon the permit which has been continued
- Issue a notice of intent to deny the new permit. If the permit is denied, the Permittee is required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit.
- Issue a new permit with appropriate conditions
- Take other actions authorized by Kentucky regulations, 401 KAR Chapters 39 and 40

[401 KAR 39:060 Section 2, 401 KAR 39:060 Section 5, 40 CFR 270.50, 40 CFR 270.51 as established in 401 KAR 39:060 Section 5]

F.II.B.(6) Permit Modification

The Permittee shall modify the permit to incorporate the corrective action plans, if necessary, developed as specified in Part IV of the Entire Facility Section of this permit.

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 40:040 Section 1, 40 CFR 270 Subpart D as established in 401 KAR 39:060 Section 5]

Page 6 of 51

F.II.B.(7) New Statutes, Standards, or Administrative Regulations

The Cabinet may modify this permit when the standards or administrative regulations on which this permit is based have been changed by statute, amended standards, administrative regulations, or by judicial decision after the permit was issued.

[40 CFR 270.41 as established in 401 KAR 39:060 Section 5]

F.II.C. DEFINITIONS

For the purpose of this permit, terms used herein shall have the same meaning as those in Title 401 of Kentucky Administrative Regulations and listed here. Where terms are not otherwise defined, the meaning associated with such terms shall be as defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

[KAR Title 401]

F.II.C.(1) "Area of Concern" (AOC) includes any area having evidence of a release or a probable release of a hazardous waste or hazardous waste constituent which is not from a Solid Waste Management Unit and is determined by the Permittee and/or the Manager to pose a current or potential threat to human health or the environment. Such AOCs may require investigations and remedial action as required in order to ensure adequate protection of human health and/or the environment.

[KRS 224.46-530(1)(g)]

- F.II.C.(2) "Blister or Nerve Agent" means a compound listed below, or degradation byproducts of these compounds:
 - N001 GB (isopropyl methyl phosphonofluoridate)
 - N002 VX (O-ethyl-S-(2-diisopropylaminoethyl) methyl phosphonothiolate)
 - N003 H (bis(2-chloroethyl) sulfide), and related compounds

[401 KAR 39:060 Section 1, KRS 224.50-130(2)]

F.II.C.(3) "Chemical Munitions" are assembled projectiles or rockets containing chemical warfare agent including GB, VX, or H.

[KRS 224.50-130(2)]

F.II.C.(4) "Chemical Hazardous Waste Storage Units" are the 47 (or less as these may be closed independently during the course of chemical munitions destruction activities) individual container storage areas (munitions igloos) approved in this permit for the storage of chemical munitions and/or Chemical Related Hazardous Waste. These units are located in the Chemical Limited Area. Within the Chemical Storage section of the permit, the terms Hazardous Waste Storage Units (HWSUs) and Chemical Hazardous Waste Storage Igloos are considered the same.

[KRS 224.46-530(1)(g)]

Page 7 of 51

F.II.C.(5) "Chemical Limited Area" means that portion of the facility enclosed in a double fence which contains the Chemical Hazardous Waste Storage Units, and support structures, as well as the demilitarization facilities once they are included in the double fence.

[KRS 224.46-530(1)(g)]

F.II.C.(6) "Chemical Related Hazardous Waste" means all hazardous waste generated by Blue Grass Chemical Activity stockpile management operations.

[KRS 224.46-530(1)(g)]

F.II.C.(7) "Contamination" means the degradation of naturally occurring water, air, or soil quality either directly or indirectly as a result of human activities.

[401 KAR 39:090 Section 1]

F.II.C.(8) "Corrective action" means all corrective actions/measures necessary to protect human health and the environment from any releases of hazardous waste or hazardous waste constituents from a Solid Waste Management Unit at the facility, regardless of the time at which waste was placed in the unit. Corrective action may address releases to air, soils, surface water sediment, groundwater, or subsurface gas.

[401 KAR 39:090]

F.II.C.(9) "Director" is a reference to the Director of the Division of Waste Management. The terms "Cabinet", "Division", and "Manager" can be used interchangeably.

[401 KAR 39:005 Section 1]

F.II.C.(10) "DRE" means the destruction and removal efficiency of agent, calculated by: [(W_{in} – W_{out}) / W_{in}] x 100%. Where W_{in} is the mass of agent into the process and W_{out} is the emission rate of agent out of the process.

[KRS 224.50-130(3)]

F.II.C.(11) "Extent of contamination" is the horizontal and vertical area in which the concentrations of hazardous constituents in the environmental media being investigated are above detection limits or background concentrations indicative of the region, whichever is appropriate as determined by the Cabinet.

[KRS 224.46-530(1)(g)]

- F.II.C.(12) "Facility" means:
 - (1) All contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste, or for managing hazardous secondary materials prior to reclamation. A facility may consist of several treatment, storage, or disposal operational units (e.g., one or more landfills, surface impoundments, or combinations of them).

Page 8 of 51 (2) For the purpose of implementing corrective action under 40 CFR 264.101 or 267.101, all contiguous property under the control of the owner or operator seeking a permit under Subtitle C of RCRA. This definition also applies to facilities implementing corrective action under RCRA Section 3008(h).

(3) Notwithstanding paragraph (2) of this definition, a remediation waste management site is not a facility that is subject to 40 CFR 264.101, but is subject to corrective action requirements if the site is located within such a facility.

[40 CFR 260.10]

- F.II.C.(13) "Hazardous Waste" or "Hazardous Waste Constituent" are those substances referenced in 401 KAR 39:090 Section 1, and 401 KAR 39:060 Section 3 (Appendix on Hazardous Waste Constituents), and include hazardous constituents released from solid waste, and hazardous constituents that are reaction by-products.
 - Constituents conforming to the requirements of Resource Conservation and Recovery Act (RCRA), as amended
 - Blister or nerve agents, or their derivatives, used for chemical warfare; this includes GB (sarin), VX, and H (mustard)

[401 KAR 39:060 Section 3, 401 KAR 39:090 Section 1, KRS 224.46-530(1)(g), KRS 224.50-130(2)]

F.II.C.(14) "Interim Measures" are actions necessary to minimize or prevent the further migration of contaminants and limit actual or potential human and environmental exposure to contaminants while long-term corrective action remedies are evaluated and, if necessary, implemented.

[KRS 224.46-530(1)(g)]

F.II.C.(15) "Land Disposal" means placement in or on the land and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, underground mine or cave, or concrete vault or bunker intended for disposal. The temporary storage of hazardous waste in munitions igloos at BGAD, as specified in this permit, is excluded from the definition of concrete vault or bunker.

[KRS 224.01-010(43)]

F.II.C.(16) "Landfill" includes any disposal facility or part of a facility where hazardous waste is placed in or on the land and which is not a pile, a land treatment facility, a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground mine, a cave, or a corrective action management unit.

[401 KAR 39:005 Section 1]

F.II.C.(17) "Manager" is a reference to the Manager of the Hazardous Waste Branch, Division of Waste Management. The terms "Cabinet", "Director", and "Division" can be used interchangeably.

[KRS 224.46-530(1)(g)]

F.II.C.(18) "MOA" means any Memorandum of Agreement, Memorandum of Understanding, Coordination

Page 9 of 51

Agreement, or any other written document covering the terms, scope, conditions, or other arrangements for services to the facility with an off-site company, group, or government agency.

[KRS 224.46-530(1)(g)]

F.II.C.(19) "Off-site" means properties noncontiguous to the site or facility.

[401 KAR 39:090 Section 1]

F.II.C.(20) "On-site" means on the same or geographically contiguous property which may be divided by public or private right-of-way, provided the entrance and exit between the properties is at a crossroads intersection, and access is by crossing, as opposed to going along the right-of-way. A noncontiguous property owned by the same person but connected by a right-of-way which he controls and to which the public does not have access is also considered on-site property.

[401 KAR 39:005 Section 1]

F.II.C.(21) "Operator" is defined by 40 CFR 260.10 and includes any operation of a facility.

[401 KAR 39:005 Section 1]

F.II.C.(22) "Owner" is defined by 40 CFR 260.10 and includes any person who owns an on-site or offsite facility, or any part of a facility.

[401 KAR 39:005 Section 1]

F.II.C.(23) "Regulated units" are any hazardous waste land disposal sites or facilities, or portions of existing hazardous waste land disposal sites or units which received hazardous waste after January 26, 1983 and are thereby subject to groundwater protection as defined in 401 KAR Chapter 39.

[401 KAR 39:090 Section 1]

F.II.C.(24) "Release" includes any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment of any hazardous waste or hazardous waste constituents.

[KRS 224.1-400(1)(b)&(4)]

F.II.C.(25) "Solid waste" means any garbage, refuse, sludge, and other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining (excluding coal mining wastes, coal mining by-products, refuse, and overburden), agricultural operations, and from community activities, but does not include those materials including, but not limited to, sand, soil, rock, gravel, or bridge debris extracted as part of a public road construction project funded wholly or in part with state funds, recovered material, tire-derived fuel, special wastes as designated by KRS 224.50-760, solid or dissolved material in domestic sewage, manure, crops, crop residue, or a combination thereof which are placed on the soil for return to the soil as fertilizers or soil conditioners, or solid or dissolved material in irrigation return flows or industrial discharges which are point sources subject to permits under Section 402 of the Federal Water Pollution Control Act, as amended (86 Stat. 880), or source, special nuclear, or by-product

Page 10 of 51

material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923).

[KRS 224.1-010(31)(a)]

F.II.C.(26) "Solid Waste Management Unit" includes any unit which has been used for the treatment, storage, or disposal of solid waste or hazardous waste at any time, irrespective of whether the unit is or ever was intended for the management of solid waste or hazardous waste. RCRA regulated hazardous waste management units are also solid waste management units. Such units include any area at a facility at which solid wastes have been routinely and systematically released.

[401 KAR 39:090 Section 1]

F.II.C.(27) "Treatment" means any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological characteristic or composition of any waste so as to neutralize such waste or so as to render such waste nonhazardous, safer for transport, amenable for recovery, amenable for storage, or reduced in volume. Such term includes any activity or processing designed to change the physical form or chemical composition of hazardous waste so as to render it nonhazardous.

[KRS 224.1-010(30)]

In addition to the definition of the term as defined in this chapter, the term **"treatment"**, as used in this section, shall have the definition within KRS 224.50-130(5).

F.II.C.(28) "Unit" includes, but is not limited to, any area in which waste has been placed on or in the ground, any landfill, surface impoundment, waste pile, land treatment unit, incinerator, injection well, tank, container storage area, septic tank, drain field, wastewater treatment unit, elementary neutralization unit, transfer facility, or recycling equipment.

[KRS 224.46-530(1)(g)]

F.II.D. DUTIES AND REQUIREMENTS

F.II.D.(1) Duty to Comply

The Permittee shall comply with all conditions of this permit except to the extent and for the duration that such non-compliance is authorized by an emergency permit. Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of KRS Chapter 224 and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application.

[40 CFR 270.30 as established in 401 KAR 39:060 Section 5]

FII.D.(2) Duty to Reapply

If the Permittee intends to continue an activity allowed or required by this Permit after the expiration date of this Permit, the Permittee shall submit a complete application for a new permit at least one hundred eighty (180) days prior to permit expiration. The Permittee shall comply with the public notice requirements of 401 KAR 39:060 Section 5. The Cabinet may require additional information be included in the application to ensure protection of human health or the environment.

Page 11 of 51

[40 CFR 270.30 as established in 401 KAR 39:060 Section 5]

F.II.D.(3) Obligation for Corrective Action

The Permittee is required to continue this Permit for any period necessary to comply with the corrective action requirements of this Permit.

[401 KAR 39:060 Section 5, 401 KAR 39:090 Section 1]

F.II.D.(4) Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the Conditions of this Permit.

[40 CFR 270.30 as established in 401 KAR 39:060 Section 5]

F.II.D.(5) Duty to Mitigate

In the event of noncompliance with this Permit, the Permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment.

[40 CFR 270.30 as established in 401 KAR 39:060 Section 5]

F.II.D.(6) Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all hazardous waste facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes, but is not limited to, effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures, and adequate agent monitoring. This condition requires the operation of backup or auxiliary facilities, equipment, or similar systems when necessary to achieve compliance with the conditions of the permit.

[40 CFR 270.30 as established in 401 KAR 39:060 Section 5]

F.II.D.(7) Duty to Provide Information

The Permittee shall furnish to the Manager, within a reasonable time, any information which the Division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Permit, or to determine compliance with this Permit. The Permittee shall also furnish to the Manager, upon request, copies of records required to be kept by this Permit.

[40 CFR 270.30 as established in 401 KAR 39:060 Section 5]

F.II.D.(8) Entry and Inspection

Page 12 of 51

The Permittee shall allow an authorized representative of the Division, upon the presentation of credentials and other documents, as required by law to:

- Enter at reasonable times upon the Permittee's premises where a regulated activity is located or conducted, or where records shall be kept under the conditions of this permit
- Have access to and copy, at reasonable times, any records that shall be kept under the conditions of this permit
- Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated as required under this permit
- Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by RCRA, any substances or parameters at any location
- Sample any non-surety material or monitor any substance or parameter at any location, for the purposes of assuring permit compliance as authorized by the Kentucky Revised Statutes
- Split samples of any non-surety materials, and copies of analysis shall be provided to the Permittee or Division upon request

[40 CFR 270.30 as established in 401 KAR 39:060 Section 5]

F.II.D.(9) Inspect New Units

The Permittee shall not begin treatment or storage of hazardous wastes in any new or proposed Hazardous Waste Management Unit, until the Permittee has complied with the following:

- The Permittee has submitted to the Manager by certified mail or hand delivery, a letter signed by the Permittee and a professional engineer (PE) licensed in the Commonwealth of Kentucky stating that the Hazardous Waste Management Unit has been constructed in accordance with this permit. A licensed PE, employed by the government, does not have to be licensed in the Commonwealth of Kentucky (KRS 322.030(2)).
- The Permittee has received confirmation that the appropriate Cabinet personnel has inspected the new Hazardous Waste Management Unit and has determined that the new unit is in compliance with the conditions of this permit; or
- The Permittee has received confirmation that the Cabinet has either waived the inspection, or has within fifteen (15) days, notified the Permittee of the Cabinet's intent to not inspect.

[40 CFR 270.30 as established in 401 KAR 39:060 Section 5]

F.II.D.(10) Monitoring and Records

F.II.D.(10)(a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample shall be the appropriate method from 401 KAR 39:060 Section 2, or an equivalent method if specified in the application, or otherwise approved by the Manager. Laboratory methods shall be those specified in the most recent edition of Test Methods for Evaluating Solid Waste: Physical/ Chemical Methods SW-846, Standard Methods of Wastewater Analysis, or an equivalent method approved by the Manager, 401 KAR 39:060 Section 2 and 401 KAR 39:060 Section 5.

[40 CFR 270.30 as established in 401 KAR 39:060 Section 5]

F.II.D.(10)(b) The Permittee shall retain the following at the facility, or at another location as approved by the Division:

Page 13 of 51

- records of all monitoring information required under the terms of this Permit, including all calibration and maintenance records
- records of all original strip chart recordings for continuous monitoring instrumentation or the modern equivalent
- copies of all reports and records required by this Permit and all data used to prepare them
- records of all data used to complete the application for this Permit
- certification required by 401 KAR 39:090 Section 1
- annual Waste Minimization Certifications
- land disposal certification
- records from all groundwater testing, for the active life of this facility, and for disposal facilities for the postclosure care period as well

[40 CFR 270.30 as established in 401 KAR 39:060 Section 5]

F.II.D.(10)(c) The Permittee shall retain these items for a period of at least three (3) years from the date of the sample, measurement, report, record, certification, or application, or until corrective action is completed, whichever date is later. This period may be extended by request of the Manager at any time and is automatically extended during the course of any unresolved enforcement action regarding this facility.

[40 CFR 270.30 as established in 401 KAR 39:060 Section 5]

F.II.D.(10)(d) Records of monitoring information shall include:

- date(s), exact place(s), time(s), and individual(s) performing sampling or measurements
- date(s) analyses were performed and the individual(s) who performed the analyses
- analytical technique(s) or method(s) used
- results of such analyses, including the detection limits
- · monitoring results shall be reported at intervals specified elsewhere in the permit

[40 CFR 270.30 as established in 401 KAR 39:060 Section 5]

F.II.D.(11) Advance Sampling Notification

The Permittee shall, at a minimum, provide one (1) week advance notification to the Manager and the Division's Field Office, of any corrective action environmental media sampling event required by this permit or its effects, in order to determine hazardous baseline, background, or contamination levels. During an environmental emergency, the Permittee is not required to provide advance notification.

[KRS 224.46-530(1)(g)]

F.II.D.(12) Reporting Planned Changes

The Permittee shall give notice to the Manager as soon as possible of any planned physical alterations or additions which may impact any Hazardous Waste Management Units (HWMUs), Solid Waste Management Units (SWMUs), Areas of Concern (AOCs), or the areas contaminated by them.

[40 CFR 270.30 as established in 401 KAR 39:060 Section 5]

Page 14 of 51

F.II.D.(13) Reporting Anticipated Noncompliance

The Permittee shall give advance notice to the Manager of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

[40 CFR 270.30 as established in 401 KAR 39:060 Section 5]

F.II.D.(14) Transfer of Permit

This Permit may be transferred to a new owner or operator only if it is modified or revoked or a modification made in order to identify the new Permittee and incorporate such other requirements as may be necessary under KRS Chapter 224. Until the new owner or operator has demonstrated compliance with 401 KAR 39:060 Section 5, the old owner/operator shall continue to maintain financial assurance until released by the Manager in writing. Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner/operator in writing of the requirements of 401 KAR Chapters 39 and 40 and this permit.

[401 KAR 39:090 Section 1, 401 KAR 39:060 Section 5, 40 CFR 270.40]

F.II.D.(15) Immediate Notification and Follow-up Reporting

The Permittee shall report to the Manager any non-compliance with the permit which may endanger human health or the environment. Any information shall be provided orally within two (2) hours from the time the Permittee becomes aware of the circumstances (Kentucky twenty-four (24) hours reporting number (800) 928-2380). This oral report shall include the following:

- Information concerning release of any hazardous waste or hazardous constituents that may cause an endangerment to public drinking water supplies, including both surface water and groundwater used for public drinking water supply
- Any information of a release or discharge of hazardous waste or hazardous waste constituents, or of a fire or explosion from a hazardous waste site or facility, which could threaten the environment or human health outside the facility
- Follow Up Reporting: The Permittee shall also provide a written submission to the Manager within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the non-compliance and its cause; the periods of noncompliance (including exact dates and times); whether the non-compliance has been corrected; and if the non-compliance has not been corrected, the anticipated time it is expected to continue; and steps planned or taken to reduce, eliminate, and prevent reoccurrence of the noncompliance. The description of the occurrence and its cause shall include:
 - Name, address, and telephone number of the owner or operator and the reporter
 - Name, address, telephone number of the facility
 - Date, time, and type of incident
 - Name and quantity of material(s) involved
 - The extent of injuries, if any
 - An assessment of actual or potential hazard to the environment and human health outside the facility, where this is applicable
 - Estimated quantity and disposition of recovered material that resulted from the incident

[401 KAR 39:060 Section 5]

Page 15 of 51

F.II.D.(16) Manifest Discrepancy Report

If a significant discrepancy in a manifest is discovered, the Permittee shall attempt to reconcile the discrepancy. If not resolved within fifteen (15) days, the Permittee shall submit a letter report, including a copy of the manifest, to the Manager.

[40 CFR 270.30 as established in 401 KAR 39:060 Section 5]

F.II.D.(17) Unmanifested Waste Report

This report shall be submitted to the Manager within fifteen (15) days of receipt of unmanifested waste.

[40 CFR 270.30 as established in 401 KAR 39:060 Section 5]

F.II.D.(18) Other Noncompliance

The Permittee shall report all instances of noncompliance not reported under the other conditions of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in Permit Condition F.II.D.(15).

[40 CFR 270.30 as established in 401 KAR 39:060 Section 5]

F.II.D.(19) Other Information

Whenever the Permittee becomes aware that any relevant facts were not submitted, or were incorrect in a permit application or in any report to the Manager, the Permittee shall promptly submit such facts or information. In addition, upon request, the Permittee shall furnish to the Manager any information related to compliance with the permit.

[40 CFR 270.30 as established in 401 KAR 39:060 Section 5]

F.II.D.(20) New Additions or Alterations

The Cabinet may modify the permit when there is material and substantial alterations or additions to the permitted facility, or activity; which occurred after permit issuance, which justify the application of permit conditions that are different or absent in this permit.

[40 CFR 270.41(a)] as established in 401 KAR 39:060 Section 5]

F.II.D.(21) New Information

The Cabinet may modify the permit when the Cabinet receives new information. Permits may be modified during their terms for this cause, if the information was not available at the time of permit issuance and justify the application of different permit conditions.

[40 CFR 270.41(a) as established in 401 KAR 39:060 Section 5]

F.II.E. SIGNATORY REQUIREMENT

All applications, reports, or information submitted to the Cabinet shall be signed and certified by the Blue Grass Army Depot Commander, or by a duly authorized representative of that person. Certifications shall include the language: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

[40 CFR 270.11 as established in 401 KAR 39:060 Section 5]

F.II.F. CONFIDENTIAL INFORMATION

The Permittee may claim as confidential any information required to be submitted by this permit in accordance with 401 KAR 39:060 Section 5 and the procedures in 400 KAR 1:060.

F.II.F.(1) Confidential Information Claims

Any information submitted to the Cabinet can be claimed as confidential by the submitter. Any such claim shall be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, the Cabinet may make the information available to the public without further notice. If a claim is asserted, the information shall be treated in accordance with the procedures of the Cabinet, relating to confidentiality of information.

[400 KAR 1:060, 401 KAR 39:060 Section 5, KRS 224.10-210, KRS 224.10-212, 40 CFR 270.12]

F.II.F.(2) "Confidential Business Information" (CBI)

Any record or other information relating to hazardous waste, which is not of public knowledge or general knowledge, the disclosure of which would be likely to have the following effects:

- will impair the Cabinet's ability to obtain the necessary information in the future; or
- will create an unfair advantage in the competitors of the person from which the information was obtained

[400 KAR 1:060 Section 1(4)]

F.II.F.(3) Statement of Basis for Claim

When a claim is made that a record or other information is entitled to confidential treatment, the Permittee shall submit a statement to the Hazardous Waste Branch Manager in support of the claim. The statement shall contain:

- The name and address of the Permittee
- The reason for submitting the record or other information, including whether the submittal is voluntary or required by law
- Whether there has been a previous determination by a court, an Environmental Protection Agency legal office acting under 40 CFR Part 2, Subpart B, or other governmental agency that

Page 16 of 51

Page 17 of 51

the record or other information is, or is not, entitled to confidential treatment

- The measures taken by the Permittee to protect the confidentiality of the record or other information, and whether it intends to continue to take such measures
- Whether the information is not, and has not been, reasonably obtainable without the Permittee's consent by other persons, other than governmental bodies, by use of legitimate means (other than discovery based upon a showing of special need in a judicial or quasi-judicial hearing)
- Whether the record or other information is customarily held in confidence by the Permittee and persons like them
- The manner in which disclosure of the information is likely to create an unfair advantage for competitors of the Permittee
- The basis for asserting that disclosure is likely to impair the Cabinet's ability to obtain necessary information in the future

[400 KAR 1:060 Section 3]

F.II.G. DOCUMENTS TO BE MAINTAINED AT THE FACILITY

The Permittee shall maintain at the facility the following documents and amendments, revisions, and modifications to these documents, as required by the specified regulation:

F.II.G.(1) Permit Application

The approved permit application required by 401 KAR 39:060 Section 5

F.II.G.(2) Waste Analysis Plan

As required by 401 KAR 39:090 Section 1

F.II.G.(3) Inspection Schedules

As required by 401 KAR 39:090 Section 1

F.II.G.(4) Personnel Training Documents and Records

As required by 401 KAR 39:090 Section 1

F.II.G.(5) Contingency Plan

As required by 401 KAR 39:090 Section 1

F.II.G.(6) Operating Record

As required by 401 KAR 39:090 Section 1

F.II.G.(7) Closure Plan

As required by 401 KAR 39:090 Section 1

F.II.G.(8) All Other Documents:

Page 18 of 51

- As required by other permit conditions
- This permit and any correspondence regarding this permit
- Annual Reports as required by 401 KAR 39:090 Section 1

Page 19 of 51

PART III SPECIFIC CONDITIONS

F.III.A. GENERAL

See Specific Sections

F.III.B. GENERAL FACILITY STANDARDS

F.III.B.(1) Identification Number

KY8-213-820-105

F.III.B.(2) Required Notices

F.III.B.(2)(a) Hazardous Waste Imports

The Permittee shall notify the Manager in writing at least four weeks in advance of the date the Permittee expects to receive hazardous waste from a foreign source. Notice of subsequent shipments of the same waste from the same foreign source in the same calendar year is not required.

[40 CFR 264.12 as established in 401 KAR 39:090 Section 1]

F.III.B.(2)(b) Hazardous Waste From Off-Site Sources

When the Permittee is to receive hazardous waste from an off-site source (except where the Permittee is also the generator), he/she shall inform the generator in writing that he/she has the appropriate Permits, and will accept the waste the generator is shipping. The Permittee shall keep a copy of this written notice as part of the operating record. Only waste from other military sites/locations may be received.

[40 CFR 264.12 as established in 401 KAR 39:090 Section 1]

F.III.B.(3) Waste Analysis

- F.III.B.(3)(a) Before the Permittee stores or disposes of any hazardous waste, he shall obtain a detailed chemical and physical analysis of a representative sample of the waste in accordance with Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, EPA Publication SW-846, or equivalent methods approved by the Manager. At a minimum, this analysis shall contain all the information which will need to be known to treat, store, or dispose of the waste. The analysis may be based in whole or in part on:
 - Testing the waste according to the methods set forth in 401 KAR 39:060 Section 3 (Identification and Listing of Hazardous Waste), or an equivalent method approved by the Cabinet; or
 - Applying generator knowledge of the waste based on existing published or documented data on the hazardous waste or on hazardous waste generated from a similar process.
- F.III.B.(3)(b) The analysis shall be repeated as necessary to ensure that it is accurate and up to date. A review of the waste streams shall be conducted annually to determine if any changes have

Page 20 of 51

occurred that may require an analysis to be repeated. At a minimum, the analysis shall be repeated:

- When the Permittee is notified, or has reason to believe, that the process or operation generating the hazardous waste has changed; and/or
- If the owner or operator of an off-site facility that received hazardous waste from the Permittee determines that the waste does not match the waste specified on the accompanying shipping manifest.
- F.III.B.(3)(c) The Permittee shall comply with the Waste Analysis Plan, Attachment C of the application. At a minimum, the Permittee shall maintain proper functional instruments, use approved sampling and analytical methods, verify the validity of sampling and analytical procedures, and perform correct laboratory calculations. If the Permittee uses a contract laboratory to perform analyses, then the Permittee shall inform the laboratory, in writing, that it shall operate under the waste analysis conditions set forth in this Permit.

[40 CFR 264.13 as established in 401 KAR 39:090 Section 1]

F.III.B.(4) Security

The Permittee shall comply with the security procedures outlined in the Procedures to Prevent Hazards, Attachment F of the applicable Section of this permit, as specified in F.I.E. The Permittee shall maintain security at the facility during the post closure care period, in accordance with Part I of the application.

[40 CFR 264.14 as established in 401 KAR 39:090 Section 1]

F.III.B.(5) General Inspection Requirements

The Permittee shall inspect his facility for malfunctions and deterioration, operator error, and discharge which may cause or lead to a release of hazardous waste constituents to the environment or a threat to human health. These inspections shall occur often enough to identify problems in time to correct them before they harm human health or the environment. The Permittee shall remedy any deterioration(s) or malfunction(s) discovered by an inspection, and keep all records.

[40 CFR 264.15 as established in 401 KAR 39:090 Section 1]

F.III.B.(5)(a) Inspection Schedule

The Permittee shall follow the schedule in Procedures to Prevent Hazards, Attachment F of this permit, as specified in F.I.E., for inspecting monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment that are important to preventing, detecting, or responding to environmental or human health hazards.

The Permittee shall keep this schedule at the facility, and it shall identify the types of problems (for example, malfunctions or deterioration) which are to be looked for during the inspection (for example, inoperative sump pump, leaking container, or eroding dike).

The frequency of inspection shall be based on the rate of deterioration of the equipment and the probability of an environmental or human health incident if the deterioration, malfunction, or any

Page 21 of 51

operator error goes undetected between inspections. At a minimum, the inspection schedule for all hazardous waste storage units shall be weekly.

[40 CFR 264.15 as established in 401 KAR 39:090 Section 1]

F.III.B.(5)(b) Remedy

The Permittee shall remedy any deterioration or malfunction of equipment or structures which the inspection reveals, on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action shall be taken immediately.

[40 CFR 264.15 as established in 401 KAR 39:090 Section 1]

F.III.B.(5)(c) General Inspection Log

The Permittee shall record inspections in an inspection log or summary. These records shall be kept for at least three (3) years from the date of inspection. At a minimum, these records shall include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.

[40 CFR 264.15 as established in 401 KAR 39:090 Section 1]

F.III.B.(6) Personnel Training

Facility personnel shall successfully complete a program of classroom instruction and on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with this permit. The Permittee shall ensure that this program includes all the elements described below in this condition. This program shall be directed by a person trained in hazardous waste management procedures, and shall include instruction which teaches facility personnel hazardous waste management procedures (including Contingency Plan implementation) relevant to the position(s) in which they are employed. At a minimum, the training program shall be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including where applicable:

- Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment
- Communications or alarm systems
- Response to fires or explosions
- Response to groundwater contamination incidents
- Shutdown of operations

[40 CFR 264.16(a) as established in 401 KAR 39:090 Section 1]

F.III.B.(6)(a) Initial Training

Facility personnel shall successfully complete the written training programs (Attachment H, of the applicable Section of this permit, as specified in F.I.E.), within six (6) months after the date of their employment or assignment to this facility, or to a new position at this facility, whichever

Page 22 of 51

is later. Employees shall not work in unsupervised positions until they have completed training.

[40 CFR 264.16(b) as established in 401 KAR 39:090 Section 1]

F.III.B.(6)(b) Annual Training

All employees involved in hazardous waste management at the facility shall be given an appropriate annual review of the initial training.

[40 CFR 264.16(c) as established in 401 KAR 39:090 Section 1]

F.III.B.(6)(c) Job Description and Training

The Permittee shall maintain the following training documents and records at the facility:

- The job title for each position at the facility related to hazardous waste management, and the names of the employees filling each job
- A written job description for each job title, including the required skills, education, qualifications, and duties of employees assigned to each position
- A written description of the type and amount of both introductory and continuing training that will be given to each job title
- Records that document that the training or job experience has been given to, and completed by, facility personnel

[40 CFR 264.16(d) as established in 401 KAR 39:090 Section 1]

F.III.B.(6)(d) Training Records

Training records on current personnel shall be kept until closure of the facility. Training records on former employees shall be kept for at least three (3) years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred, within the U.S. Army, or an approved government contractor working at the facility.

[40 CFR 264.16(e) as established in 401 KAR 39:090 Section 1]

F.III.B.(7) General Requirements for Ignitable, Reactive, or Incompatible Waste

F.III.B.(7)(a) The Permittee shall take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste shall be separated and protected from sources of ignition or reaction including but not limited to: open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (for example, from heat-producing chemical reactions), and radiant heat.

[40 CFR 264.17 as established in 401 KAR 39:090 Section 1]

F.III.B.(7)(b) Controlled entrances to Ammo Storage and Chemical Limited Area shall provide the necessary alert/restrictions to workers and visiting personnel of the restriction of smoking and the control of ignitable items.

Page 23 of 51

[40 CFR 264.17 as established in 401 KAR 39:090 Section 1]

F.III.B.(7)(c) The Permittee shall take precautions to prevent uncontrolled reactions which generate extreme heat or pressure, fire or explosions, or violent reactions; produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health or the environment; produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosion; damage the structural integrity of the device or facility; or through other like means threaten human health or the environment.

[40 CFR 264.17 as established in 401 KAR 39:090 Section 1]

F.III.B.(7)(d) The Permittee shall document compliance with this condition. This documentation may be based on references to published scientific or engineering literature, data from trial tests (for example, bench scale or pilot scale tests), waste analyses, or the results of the treatment of similar wastes by similar treatment processes and under similar conditions.

[40 CFR 264.17 as established in 401 KAR 39:090 Section 1]

F.III.B.(8) Location Standards

The Permittee shall comply with the requirements of 40 CFR 264.18 as established in 401 KAR 39:090 Section 1 and with the requirements of 401 KAR 39:090 Section 5, as applicable.

F.III.B.(9) Land Disposal Restrictions (LDR)

A waste restricted by LDR, as identified in 401 KAR 39:060 Section 4, may not be placed in a land disposal unit without further treatment unless the requirements of 401 KAR 39:060 Section 4 are met.

[40 CFR Part 268 as established in 401 KAR 39:060 Section 4]

F.III.B.(9)(a) LDR - Prohibitions on Storage of Restricted Waste

The storage of hazardous wastes restricted from land disposal under 401 KAR 39:060 Section 4 is prohibited, unless the following conditions are met:

- The Permittee stores such waste on site solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment, or disposal.
- Each container of Hazardous Waste is clearly labeled with the words "Hazardous Waste," and marked to identify its contents and the date accumulation began in that container.

[40 CFR 268.50 as established in 401 KAR 39:060 Section 4, KRS 224.46-520(2)]

F.III.B.(9)(b) LDR - Storage Time

The Permittee may store waste restricted from land disposal for up to one (1) year. The Permittee may store waste restricted from land disposal beyond one (1) year, if such storage was solely for the purpose of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal.

[40 CFR 268.50 as established in 401 KAR 39:060 Section 4]

Page 24 of 51

F.III.B.(9)(c) LDR - General Restrictions

401 KAR 39:060 Section 4 identifies hazardous wastes that are restricted from land disposal and defines those limited circumstances in which an otherwise prohibited waste may continue to be placed on or in a land treatment, storage, or disposal unit. The Permittee shall maintain compliance with the requirements of 401 KAR 39:060 Section 4. Where the Permittee has applied for an extension, waiver, or variance under 401 KAR 39:060 Section 4, the Permittee shall comply with all restrictions on land disposal under this part once the effective date for the waste has been reached pending final approval of such application.

[40 CFR 268 as established in 401 KAR 39:060 Section 4, KRS 224.46-520]

F.III.B.(9)(d) LDR - Restrict Shipment to 3X

If a Chemical Related Hazardous Waste carries the waste code N001, N002, or N003 for a nerve or blister agent, the Permittee shall not ship chemical related hazardous waste off-site for disposal unless it is decontaminated to meet the military definition of 3X and if land disposed in Kentucky, agent waste shall be treated either by neutralization, incineration, or an alternate method approved by the Cabinet on a case-by-case basis.

[KRS 224.46-530, KRS 224.50-130]

F.III.C. PREPAREDNESS AND PREVENTION

F.III.C.(1) Design and Operation of Facility

The Permittee shall construct, maintain, and operate the entire facility in a manner to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

[40 CFR 264.31 as established in 401 KAR 39:090 Section 1]

F.III.C.(2) Required Equipment

See Specific Sections

F.III.C.(3) Testing and Maintenance of Equipment

See Specific Sections

F.III.C.(4) Access to Communications or Alarm Systems

See Specific Sections

F.III.C.(5) Required Aisle Space

See Specific Sections

Page 25 of 51

F.III.C.(6) Arrangements with Local Authorities

The Permittee shall attempt to make the following arrangements, as appropriate for the type of waste handled at this facility and the potential need for the services of these organizations:

- Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties, and associated hazards of hazardous waste handled at the facility and places where facility personnel would normally be working, entrances to any roads inside the facility, and possible evacuation routes
- Where more than one (1) police or fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority
- Agreements with state emergency response teams, emergency response contractors, and equipment suppliers
- Arrangements to familiarize local hospitals with the properties of the hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility
- Where state or local authorities decline to enter into such arrangements, the Permittee shall document the refusal in the Operating Record

The Permittee shall keep current copies of all Agreements with Local Authorities for hazardous waste emergency response assistance at an on-site location. If, at any time, the Permittee enters into an agreement with an off-post responder not listed in the Contingency Plan, Attachment G of the applicable Section of this permit, as specified in F.I.E., or chooses not to renew an agreement with an off-post responder listed in the Contingency Plan, then the Permittee shall notify the Hazardous Waste Branch Manager.

[40 CFR 264.37 as established in 401 KAR 39:090 Section 1]

F.III.D. CONTINGENCY PLAN AND EMERGENCY PROCEDURES

See Specific Sections

F.III.E. MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING

In addition to the record keeping and reporting requirements specified elsewhere in this Permit, the Permittee shall do the following:

F.III.E.(1) Manifest System

F.III.E.(1)(a) Receive No Chemical Related Hazardous Waste

The Permittee shall not accept at this facility any chemical warfare agent or Chemical Related Hazardous Waste generated off site.

[KRS 224.46-530]

F.III.E.(1)(b) General Requirements

Page 26 of 51

If the Permittee transports, or offers for transportation, hazardous waste for off-site treatment, storage, or disposal, the Permittee shall prepare a manifest, and if necessary the continuation sheet, incorporated by reference in 401 KAR 39:080 Section 1 (Appendix on Hazardous Waste Manifest and Instructions). The Permittee shall designate on the manifest, the facility which is permitted to handle the waste described on the manifest. The Permittee may also designate on the manifest, one (1) alternate facility which is permitted to handle the waste in the event an emergency prevents delivery of the waste to the primary facility. If the transporter is unable to deliver the hazardous waste to the primary facility or the alternate facility, the Permittee shall either designate another facility or instruct the transporter to return the waste.

[40 CFR 262.20 as established in 401 KAR 39:080 Section 1]

F.III.E.(1)(c) Acquisition of Manifests

If the state to which the shipment is manifested (consignment state) supplies the manifest and requires its use, then the Permittee shall use that manifest and include all information required. If the consignment state does not require and supply the manifest, then the Permittee shall use the Commonwealth of Kentucky's manifest and include all information required.

[40 CFR 262.21 as established in 401 KAR 39:080 Section 1]

F.III.E.(1)(d) Manifest Number of Copies

The manifest consists of at least the number of copies which will provide the Permittee, each transporter, and the owner or operator of the designated facility with one copy each for their records and another copy to be returned, by the operator of the designated facility, to the Permittee.

[40 CFR 262.22 as established in 401 KAR 39:080 Section 1]

F.III.E.(1)(e) Use of the Manifest When Shipping

The Permittee shall:

- Sign the manifest certification by hand
- Obtain the handwritten signature of the initial transporter and date of acceptance on the manifest
- Retain one (1) copy for a minimum of three years
- The Permittee shall give the transporter the remaining copies of the manifest
- For rail shipments of hazardous waste within the United States which originate at the facility, the Permittee shall send at least three (3) copies of the manifest dated and signed in accordance with this section to the next non-rail transporter, if any; or the designated facility if transported solely by rail; or the last rail transporter to handle the waste in the United States, if exported by rail.
- For shipments of hazardous waste to a designated facility in a state which has not yet
 obtained authorization to regulate that particular waste as hazardous, the Permittee shall
 assure that the designated facility agrees to sign and return the manifest to the Permittee,
 and that any out-of-state transporter signs and forwards the manifest to the designated
 facility with the shipment.

Page 27 of 51

[40 CFR 262.23 as established in 401 KAR 39:080 Section 1]

F.III.E.(1)(f) Use of Manifest System When Receiving

If the Permittee receives hazardous waste accompanied by a manifest, he shall:

- Sign and date each copy of the manifest to certify that the hazardous waste covered by the manifest was received
- Note any significant discrepancies in the manifest on each copy of the manifest
- Immediately give the transporter at least one (1) copy of the signed manifest
- Within thirty (30) days after the delivery, send a copy of the manifest to the generator
- Retain at the facility a copy of each manifest for at least three (3) years after the date of delivery

[40 CFR 264.71(a) as established in 401 KAR 39:090 Section 1]

F.III.E.(1)(g) Receiving Hazardous Waste by Rail

If the Permittee receives, from a rail transporter, hazardous waste which is accompanied by a shipping paper containing all the information required on the manifest (excluding the EPA identification numbers, generator's certification, and signatures), the Permittee, or his agent, shall:

- Sign and date each copy of the manifest or shipping paper (if the manifest has not been received) to certify that the hazardous waste covered by the manifest or shipping paper was received
- Note any significant discrepancies (as defined in 40 CFR 264.72) in the manifest or shipping
 paper (if the manifest has not been received) on each copy of the manifest or shipping
 paper
- Immediately give the rail transporter at least one (1) copy of the manifest (or shipping paper if the manifest has not been received)
- Within thirty (30) days after the delivery, send a copy of the signed and dated manifest to the generator; however, if the manifest has not been received within thirty (30) days after delivery, the Permittee, or his agent, shall send a copy of the shipping paper signed and dated to the generator
- Retain at the facility a copy of the manifest and shipping paper (if signed in lieu of the manifest at the time of delivery) for at least three (3) years from the date of delivery

[40 CFR 264.71(b) as established in 401 KAR 39:090 Section 1]

F.III.E.(2) Manifest Discrepancies

Manifest discrepancies are differences between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity or type of hazardous waste a facility actually receives. Significant discrepancies in quantity are:

- For bulk waste, variations greater than ten (10) percent in weight
- For batch waste, any variation in piece count, such as a discrepancy of one (1) drum in a truckload

Significant discrepancies in type are obvious differences which can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid, or toxic constituents not reported

Page 28 of 51

on the manifest or shipping paper.

Upon discovering a significant discrepancy, the Permittee shall attempt to reconcile the discrepancy with the waste generator or transporter (for example, by telephone or email). If the discrepancy is not resolved within fifteen (15) days after receiving the waste, the Permittee shall immediately submit to the Hazardous Waste Branch Manager a letter describing the discrepancy, a description of all attempts to reconcile it, and a copy of the manifest or shipping paper at issue.

[40 CFR 264.72 as established in 401 KAR 39:090 Section 1]

F.III.E.(3) Operating Record

The Permittee shall keep a written Operating Record at this facility. The following information shall be recorded, as it becomes available, and maintained in the Operating Record until closure of the facility:

- A description and the quantity of each hazardous waste received, and the method and date of its treatment, storage, or disposal at the facility as described in 40 CFR Part 264 Appendix I (Appendix on Recordkeeping Instructions)
- The location of each hazardous waste within the facility and the quantity at each location
- Records and results of waste analyses and waste determinations
- Summary reports and details of all incidents that require implementing Contingency Plans
- Records and results of facility and equipment inspections for three (3) years
- Monitoring, testing, analytical data, and corrective action
- Notice to off-site generator of hazardous waste informing them in writing that the Permittee has the appropriate permit(s) for, and shall accept, the waste the generator is shipping
- For an off-site treatment facility, a copy of the notice, and the certification and demonstration, if applicable, required of a generator under 401 KAR 39:060 Section 4 (Land Disposal Restrictions)
- For an on-site treatment facility, the information contained in the notice (except the manifest number), and the certification and demonstration if applicable, required of the generator under 401 KAR 39:060 Section 4 (Land Disposal Restrictions)
- For an off-site storage facility, a copy of the notice, and the certification and demonstration if applicable, required of the generator or the owner or operator under 401 KAR 39:060 Section 4
- For an on-site storage facility, the information contained in the notice (except the manifest number), and the certification and demonstration if applicable, required of the generator or the owner or operator under 401 KAR 39:060 Section 4

[40 CFR 264.73 as established in 401 KAR 39:090 Section 1]

F.III.E.(4) Records

F.III.E.(4)(a) Records Retention

The Permittee shall:

- Keep a copy of each signed shipping manifest, in addition to the signed copy returned from the designated facility which received the waste. Both copies shall be retained on record for at least three (3) years from the date the waste was accepted by the initial transporter.
- Keep a copy of each annual report and exception report for a period of at least three (3)

Page 29 of 51

years from the due date of the report (March 1)

- Keep records of any test results, waste analyses, or other waste determinations for at least three (3) years from the date that the waste was last sent to on-site or off-site treatment, storage, or disposal
- Keep a log showing all facility and equipment inspections

The periods of retention referred to in this section are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Cabinet.

[40 CFR 262.23 as established in 401 KAR 39:080 Section 1, 40 CFR 264.74 as established in 401 KAR 39:090 Section 1]

F.III.E.(4)(b) Availability, Retention, and Disposition of Records

All records, including plans, shall be furnished upon request, and made available at all reasonable times for inspection by any officer, employee, or representative of the Cabinet who is duly designated by the Secretary of the Cabinet. The retention period for all records required under this chapter is extended automatically during the course of any unresolved enforcement action regarding the facility or as requested by the Cabinet. A copy of records of waste disposal locations and quantities shall be sent to the Cabinet and local land authority upon closure of the facility.

[40 CFR 264.74 as established in 401 KAR 39:090 Section 1]

F.III.E.(5) Annual Report

The Permittee shall prepare and submit a Hazardous Waste Annual Report, DEP Form 7072. The Hazardous Waste Annual Report shall be submitted to the Cabinet no later than March 1 of each year. The Hazardous Waste Annual Report shall cover facility activities for the preceding calendar year. The Permittee shall provide a duplicate copy of the Hazardous Waste Annual Report to the Madison County Judge Executive and Emergency Management Agency so that he/she may make the report available to the county law enforcement and emergency services for emergency planning purposes.

The following document is hereby incorporated by reference: "Hazardous Waste Annual Report", DEP Form 7072.

[401 KAR 39:090 Section 9, 401 KAR 39:080 Section 1]

F.III.E.(6) Unmanifested Waste Report

If the Permittee accepts for treatment, storage, or disposal any hazardous waste from an off-site source without an accompanying manifest, or without an accompanying shipping paper, and if the waste is not excluded from the manifest requirement by 401 KAR 39:060 Section 2 (Special Requirements for Hazardous Waste Generated by Conditionally Exempt Small Quantity Generators), then the Permittee shall prepare and submit a single copy of a report to the Hazardous Waste Branch Manager within fifteen (15) days after receiving the waste. The unmanifested waste report shall be submitted on an approved form. The report shall be

Page 30 of 51

designated "Unmanifested Waste Report" and include the following information:

- EPA identification number, name, and address of the facility
- Date the facility received the waste
- EPA identification number, name, and address of the generator and the transporter, if available
- Description and quantity of each unmanifested hazardous waste received
- Method of treatment, storage, or disposal for each hazardous waste
- Certification signed by the Permittee
- Brief explanation of why the waste was unmanifested, if known

[40 CFR 264.76 as established in 401 KAR 39:090 Section 1]

F.III.E.(7) Additional Reports

In addition to submitting the annual report and unmanifested waste reports, the Permittee shall also report to the Cabinet:

- Any releases of hazardous waste at or above the Reportable Quantity (RQ)
- Fires or explosions
- Facility closure
- Any other report required by a condition of this permit

[40 CFR 264.77 as established in 401 KAR 39:090 Section 1, KRS 224.1-400]

F.III.F. GROUNDWATER MONITORING REQUIREMENTS

See specific section

F.III.G. CLOSURE & POSTCLOSURE

F.III.G.(1) Closure Performance Standards

The Permittee shall close the facility in a manner that minimizes the need for further maintenance and that controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, postclosure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere.

[40 CFR 264.111 as established in 401 KAR 39:090 Section 1]

F.III.G.(2) Update Closure Plan

F.III.G.(2)(a) In anticipation of closure or partial closure, the Permittee shall submit an updated and site specific closure plan to the Hazardous Waste Branch Manager for each unit or units planned for upcoming closure. The Closure Plan shall include the results of an historic records review and a detailed sampling and analysis plan for all hazardous wastes and hazardous waste constituents managed in each unit proposed for closure, based upon the results of the records review.

[40 CFR 264.118 as established in 401 KAR 39:090 Section 1]

Page 31 of 51

F.III.G.(2)(b) The Cabinet may request modifications to the plan and the Permittee shall submit the modified plan within sixty (60) days of the Cabinet's request.

[40 CFR 264.118 as established in 401 KAR 39:090 Section 1]

F.III.G.(3) Closure Plan and Amendment

- F.III.G.(3)(a) The Permittee shall submit a written request for a permit modification to the Hazardous Waste Branch Manager to authorize a change in the Closure Plan whenever changes in operating plans or facility design affect the Closure Plan; there is a change in the expected year of closure; in conducting partial or final closure activities, unexpected events require a modification of the Closure Plan.
- F.III.G.(3)(b) The written request shall include a copy of the amended Closure Plan for approval by the Cabinet.

[40 CFR 264.118 as established in 401 KAR 39:090 Section 1]

F.III.G.(3)(c) The written request including a copy of the amended closure plan for approval, shall be submitted at least sixty (60) days prior to the proposed change in facility design.

[40 CFR 264.118 as established in 401 KAR 39:090 Section 1]

F.III.G.(3)(d) If an unexpected event occurs during the partial or final closure period, the Permittee shall request a permit modification no later than thirty (30) days after the unexpected event.

[40 CFR 264.118 as established in 401 KAR 39:090 Section 1]

F.III.G.(3)(e) The Cabinet may request modifications to the plan and the Permittee shall submit the modified plan within sixty (60) days of the Cabinet's request or within thirty (30) days if the change in facility conditions occurs during partial or final closure.

[40 CFR 264.118 as established in 401 KAR 39:090 Section 1]/

F.III.G.(4) Closure Schedule and Notification

F.III.G.(4)(a) Within ninety (90) days after receiving the final volume of hazardous waste in a hazardous waste storage unit, the Permittee shall remove all hazardous wastes in that hazardous waste storage unit in accordance with the Closure Plan applicable to that section of the permit.

[40 CFR 264.113 as established in 401 KAR 39:090 Section 1]

F.III.G.(4)(b) All closure activities shall be completed as described in the Closure Plan; and within 180 days after receiving the final volume of waste, unless a longer period is approved by the Hazardous Waste Branch Manager.

[40 CFR 264.113 as established in 401 KAR 39:090 Section 1]

F.III.G.(4)(c) All equipment and the facility shall be decontaminated and washing residues removed.

Page 32 of 51

[40 CFR 264.114 as established in 401 KAR 39:090 Section 1]

F.III.G.(4)(d) The Permittee shall notify the Division in writing at least forty-five (45) days prior to the date on which he/she expects to begin closure of a hazardous waste management unit or final closure of the facility.

[40 CFR 264.112 as established in 401 KAR 39:090 Section 1]

F.III.G.(5) Disposal or Decontamination of Equipment, Structures, and Soils

During the partial and final closure periods, all contaminated equipment, structures, and soils shall be properly disposed of or decontaminated.

[40 CFR 264.114 as established in 401 KAR 39:090 Section 1]

F.III.G.(6) Certification of Closure

The Permittee shall certify that the unit(s) has been closed in accordance with the specifications in the approved Closure Plan.

[40 CFR 264.115 as established in 401 KAR 39:090 Section 1]

F.III.G.(7) Survey Plat

The Permittee shall submit a survey plat no later than the submission of certification of closure of each hazardous waste disposal unit.

[40 CFR 264.116 as established in 401 KAR 39:090 Section 1]

F.III.G.(8) Postclosure Care and Use of Property

F.III.G.(8)(a) Postclosure Care Period

The Permittee shall conduct postclosure care for any hazardous waste management units which cannot achieve clean closure performance standards. Postclosure care shall be conducted for thirty (30) years after the completion of closure, except that the thirty (30) year postclosure care period may be shortened upon application and demonstration, approved by the Division, that the facility is secure, or may be extended if the Division finds this is necessary to protect human health and the environment.

[40 CFR 264.117 as established in 401 KAR 39:090 Section 1]

F.III.G.(8)(b) Use of Units

The Permittee shall not allow any use of the units which will disturb the integrity of the final cover, liners, any components of the containment system, or the function of the facility's monitoring systems during the postclosure care period.

Page 33 of 51

[40 CFR 264.117 as established in 401 KAR 39:090 Section 1]

F.III.G.(9) Postclosure Plan

F.III.G.(9)(a) Components, Structures, and Equipment Inspections

The Permittee shall inspect the components, structures, and equipment at the site in accordance with the inspection schedule in the approved Postclosure Plan.

[40 CFR 264.118 as established in 401 KAR 39:090 Section 1]

F.III.G.(9)(b) Cover System Inspections

The Permittee shall inspect the cover system(s) for uniformity, drainage, and imperfections. Soil based covers shall be inspected for imperfections including lenses, cracks, channels, root holes, or other structural non-uniformities that may cause an increase in the permeability of the cover.

[40 CFR 264.117 as established in 401 KAR 39:090 Section 1]

F.III.G.(9)(c) Amendments to Postclosure Plan

The Permittee shall request a permit modification to authorize a change in the approved postclosure plan. This request shall be in accordance with applicable requirements and shall include a copy of the proposed amendments to the application for approval by the Division. The Permittee shall request a permit modification whenever changes in operating plans or facility design affect the postclosure plan, or other events occur during the active life of the facility that also affect the postclosure plan. The Permittee shall submit a written request for a permit modification at least sixty (60) days prior to the proposed change in facility design or operation, or no later than sixty (60) days after an unexpected event has occurred which has affected the postclosure plan.

[40 CFR 264.117 as established in 401 KAR 39:090 Section 1]

F.III.G.(9)(d) Removal Request

If the Permittee or any subsequent owner or operator of the land upon which the hazardous waste disposal unit is located wishes to remove hazardous wastes and hazardous waste residues, the liner, if any, or contaminated soils, then he shall request a modification to this postclosure permit in accordance with applicable requirements. The Permittee or any subsequent owner or operator of the land shall demonstrate that the removal of hazardous wastes will satisfy the criteria of 401 KAR 39:090 Section 1.

[40 CFR 264.119 as established in 401 KAR 39:090 Section 1]

F.III.G.(10) Postclosure

No later than sixty (60) days after certification of closure of each hazardous waste disposal unit, the Permittee shall submit records of the type, location, and quantity of hazardous waste disposed

Page 34 of 51

within each cell or disposal unit. Within sixty (60) days of certification of closure of the first hazardous waste disposal unit and the last hazardous waste disposal unit, the Permittee shall do the following:

- Record a notation on the deed to the facility property, in accordance with 401 KAR 39:090 Section 1
- Submit a certification that a notation, in accordance with 401 KAR 39:090 Section 1, has been recorded. The certification shall be signed by the Permittee and by an independent PE licensed in the Commonwealth of Kentucky. Documentation supporting the independent licensed PE's certification shall be furnished to the Hazardous Waste Branch Manager upon request. A licensed PE, employed by the federal government, is not required to be licensed in the Commonwealth of Kentucky. Documentation supporting the PE's certification shall be furnished to the Hazardous Waste Branch Manager upon request.

[40 CFR 264.119 as established in 401 KAR 39:090 Section 1, KRS 322.020, KRS 322.030]

F.III.G.(11) Certification of Completion of Postclosure Care

No later than sixty (60) days after completion of the established postclosure care period for each hazardous waste disposal unit, the Permittee shall submit to the Manager, by registered mail, a certification that the postclosure care for the hazardous waste disposal unit was performed in accordance with the specifications in the approved Postclosure Plan. The certification shall be signed by the Permittee and an independent licensed PE in the Commonwealth of Kentucky. Documentation supporting the independent licensed PE's certification shall be furnished to the Manager upon request until the Manager releases the Permittee from the financial assurance requirements for postclosure care.

[40 CFR 264.120 as established in 401 KAR 39:090 Section 1]

F.III.H. FINANCIAL REQUIREMENTS

Not Applicable

F.III.I. USE AND MANAGEMENT OF CONTAINERS

See Specific Sections

F.III.J. TANK SYSTEMS

See Specific Sections

F.III.K.	SURFACE IMPOUNDMENTS	(RESERVED)
F.III.L.	WASTE PILES	(RESERVED)
F.III.M.	LAND TREATMENT	(RESERVED)
F.III.N.	LANDFILLS POST CLOSURE REQUIREMENTS	(RESERVED)
F.III.O.	INCINERATORS/BIF	(RESERVED)
F.III.P.		(RESERVED)
F.III.Q.		(RESERVED)
F.III.R.		(RESERVED)
F.III.S.	SPECIAL PROVISIONS FOR CLEANUP	(RESERVED)
F.III.T.		(RESERVED)

F.III.U.

F.III.V.

F.III.W. DRIP PADS

F.III.X. MISCELLANEOUS UNITS

See Specific Sections

F.III.Y.

F.III.Z.

F.III.AA. AIR EMISSION STANDARDS FOR PROCESS VENTS

See Specific Sections

F.III.BB. AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS

See Specific Sections

F.III.CC. AIR EMISSION STANDARDS FOR TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS

See Specific Sections

F.III.DD. CONTAINMENT BUILDINGS(RESERVED)F.III.EE. HAZARDOUS WASTE MUNITIONS AND EXPLOSIVES STORAGE(RESERVED)

Page 35 of 51

(RESERVED) (RESERVED) (RESERVED)

(RESERVED) (RESERVED)

Page 36 of 51

PART IV CORRECTIVE ACTION FOR SWMUs AND AOCs

F.IV.A. APPLICABILITY

The Conditions of this Part apply to:

- F.IV.A.(1) Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) identified in Appendix A
- F.IV.A.(2) SWMUs and AOCs identified in Appendix A-1 which require a RCRA Facility Investigation
- **F.IV.A.(3)** SWMUs and AOCs identified in Appendix A-2, which require no further action under this permit at this time
- F.IV.A.(4) SWMUs and AOCs identified in Appendix A-3, which require Confirmatory Sampling
- F.IV.A.(5) SWMUs and AOCs identified in Appendix A-4, which require Corrective Measures
- F.IV.A.(6) Appendix D, Schedule of Compliance
- F.IV.A.(7) Appendix A, Part A
- F.IV.A.(8) Additional SWMUs and AOCs

Any additional SWMUs or AOCs discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means. As used in this part of the permit, the terms "discover", "discovery", or "discovered" refer to the date on which the Permittee either (1) visually observes evidence of a new SWMU or AOC, (2) visually observes evidence of a previously unidentified release of hazardous constituents to the environment, or (3) receives information which suggests the presence of a new release of hazardous waste or hazardous constituents to the environment.

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.A.(9) Contamination Beyond the Facility Boundary

The Permittee shall implement corrective actions beyond the facility boundary, where necessary to protect human health and the environment, unless the Permittee demonstrates to the satisfaction of the Manager, that despite the Permittee's best effort, as determined by the Manager, the Permittee was unable to obtain the necessary permission to undertake such actions. The Permittee is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied. Measures to address such releases shall be determined on a case-by-case basis. Assurances of financial responsibility for completion of such off-site corrective action shall be required.

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

Page 37 of 51

F.IV.B. NOTIFICATION AND ASSESSMENT REQUIREMENTS FOR NEWLY IDENTIFIED SWMUS AND AOCS

F.IV.B.(1) Notification

The Permittee shall notify the Manager, in writing, within fifteen (15) calendar days of discovery, of any additional AOCs and/or SWMUs as discovered under any conditions. The notification shall include, at a minimum, the location of the SWMU or AOC and all available information pertaining to the nature of the release (e.g., media affected, hazardous constituents released, magnitude of release, etc.). If the Manager determines that further investigation of a SWMU or AOC is required, the permittee shall be required to prepare a plan for such investigations as outlined in this permit.

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.B.(2) Assessment Report

The Permittee shall prepare and submit to the Manager, within ninety (90) calendar days of notification, an Assessment Report (AR) for each newly identified SWMU or AOC at the facility. At a minimum, the AR shall provide the following information:

- Location of unit(s) on a topographic map of appropriate scale
- Designation of type and function of unit(s)
- General dimensions, capacities, and structural description of unit(s) (supply any available plans/drawings)
- Date(s) that the unit(s) operated
- Specification of all wastes or products that have been managed at/in the unit(s) to the extent available, include any available data
- All available information pertaining to any release of hazardous waste or hazardous constituents from such unit(s) (to include groundwater data, soil analyses, air, and/or surface water data)
- The unique sequential identification for the SWMU or AOC

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.B.(3) Further Investigation

Based on the results of the AR, the Manager shall determine the need for further investigations at the SWMU(s) or AOC(s) covered in the AR. If the Manager determines that such investigations are needed, the Permittee shall be required to prepare a plan for such investigations.

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.C. NOTIFICATION REQUIREMENTS FOR NEWLY DISCOVERED RELEASES AT PREVIOUSLY IDENTIFIED SWMUs or AOCs

The Permittee shall notify the Manager in writing of any newly discovered release(s) of hazardous waste or hazardous waste constituents discovered during the course of groundwater monitoring, field investigations, environmental audits, or other means, within fifteen (15) calendar days of discovery. Such newly discovered releases may be from SWMUs or AOCs identified or for which further investigation was not required. If the

Page 38 of 51

Manager determines that further investigation of the SWMUs or AOCs is needed, the Permittee shall be required to prepare a plan for such investigations.

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.D. CONFIRMATORY SAMPLING (CS)

F.IV.D.(1) CS Work Plan

The Permittee shall prepare and submit a CS Work Plan to the Manager, within forty-five (45) calendar days of notification by the Manager that a CS Work Plan is required for any newly discovered release at an existing SWMU or AOC or for a newly-identified SWMU or AOC. The CS Work Plan shall include schedules of implementation and completion of specific actions necessary to determine whether or not a release has occurred. It shall also address applicable requirements and affected media.

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.D.(2) Approval/Disapproval

The CS Work Plan shall be approved by the Manager, in writing, prior to implementation. The Manager shall specify the start date of the CS Work Plan schedule in the letter approving the CS Work Plan. If a start date is not specified, work shall begin within 60 days of approval. If the Manager disapproves the CS Work Plan, the Manager shall either (1) notify the Permittee in writing of the CS Work Plan's deficiencies and specify a due date for submission of a revised CS Work Plan, (2) revise the CS Work Plan and notify the Permittee of the revisions, or (3) conditionally approve the CS Work Plan and notify the Permittee of the conditions.

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.D.(3) Implementation

The Permittee shall implement the CS in accordance with the approved CS Work Plan.

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.D.(4) Submitting CS Reports

The Permittee shall prepare and submit to the Manager, in accordance with the schedule in the approved CS Work Plan, a CS Report. The CS Report shall include all data, including raw data, and a summary and analysis of the data that supports all determinations.

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.D.(5) Further Investigation

Based on the results of the CS Report, the Manager shall determine the need for further investigations at the SWMUs or AOCs covered in the CS Report. If the Manager determines that such investigations are needed, the Permittee shall be required to prepare a plan for such investigations as outlined in Condition IV.E. The Manager shall notify the permittee of any no further action decision.

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.E. RCRA FACILITY INVESTIGATION (RFI)

F.IV.E.(1) RFI Work Plan(s)

The Permittee shall prepare and submit to the Manager, within ninety (90) calendar days of notification from the Division, or the time frame established in the CS Report or the Manager's response to the report, that a RFI Work Plan(s) is required for any unit(s) that require further investigation. This Work Plan shall be developed to meet the requirements of the Conditions in F.IV.E.

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.E.(2) RFI Work Plan Content

An RFI Work Plan shall meet the requirements of the RFI Guidance, as described in Appendix B, the RFI Work Plan Outline, that is hereby incorporated into this permit by reference, EPA-530/SW-89-031.(1). The RFI Work Plan(s) shall include schedules of implementation and completion of specific actions necessary to determine the nature and extent of releases and the potential pathways of contaminant releases to the air, land, surface water, or groundwater. The Permittee shall provide sufficient justification and/or documentation that a release is not probable, or a pathway is not complete, if a unit or a media/pathway associated with a unit (groundwater, surface water, soil, subsurface gas, or air) is not included in the RFI Work Plan(s). Such deletions of a unit, media, or pathway from the RFI(s) are subject to the approval of the Manager. The Permittee shall provide sufficient written justification for any omissions or deviations from the minimum requirements of Appendix B. Such omissions or deviations are subject to the approval of the Manager. In addition, a schedule for submitting RFI Progress Reports shall be included.

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.E.(3) RFI Approval/Disapproval

The RFI Work Plan(s) shall be approved by the Manager, in writing, prior to implementation. The Manager shall specify the start date of the RFI Work Plan schedule in the letter approving the RFI Work Plan(s). If the Manager disapproves the RFI Work Plan(s), the Manager shall either (1) notify the Permittee in writing of the RFI Work Plan's deficiencies and specify a due date for submission of a revised RFI Work Plan, or (2) revise the RFI Work Plan and notify the Permittee of the

Page 39 of 51

Page 40 of 51

revisions and the start date of the schedule within the approved RFI Work Plan, or (3) conditionally approve the RFI Work Plan and notify the Permittee of the conditions.

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.E.(4) RFI Implementation

The Permittee shall implement the RFI(s) in accordance with the approved RFI Work Plan(s). The Permittee shall notify the Manager at least two weeks prior to any sampling activity.

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.E.(5) RFI Progress Reports

If the time required to conduct/complete the RFI(s) is greater than one hundred eighty (180) calendar days, the Permittee shall provide the Manager with quarterly RFI Progress Reports (90 day intervals) beginning ninety (90) calendar days from the start date specified by the Manager in the RFI Work Plan approval letter. The Progress Reports shall contain the following information at a minimum:

- Description of the portion of the RFI completed
- Summaries of findings
- Summaries of any deviations from the approved RFI Work Plan during the reporting period
- Summaries of all contacts with local community public interest groups or State government
- Summaries of any problems or potential problems encountered during the reporting period
- Actions taken to rectify problems
- Changes in relevant personnel
- Projected work for the next reporting period
- Summaries of laboratory/monitoring data, etc
- Any presence of high levels of hazardous wastes and hazardous waste constituents in soils and groundwater

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.E.(6) RFI Draft and Final Reports

The Permittee shall prepare and submit to the Manager draft and final RFI Report(s) for the investigations conducted pursuant to the RFI Work Plan(s). The RFI Report(s) shall be submitted to the Manager for review in accordance with the schedule in the approved RFI Work Plan(s).

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.E.(7) RFI Report Content

The RFI Report(s) shall include at a minimum:

• An analysis of all required investigations of SWMUs and AOCs and their results

Page 41 of 51

- Type and extent of contamination at the facility, including sources and migration pathways
- All hazardous constituents present in all media
- Description of actual or potential receptors
- Description of the extent of contamination (qualitative/quantitative) in relation to background levels indicative of the area. The objective of this task shall be to ensure that the investigation data are sufficient in quality (e.g., quality assurance procedures have been followed) and quantity to describe the nature and extent of contamination, potential threat to human health and/or the environment, and to support a Corrective Measures Study, if necessary.
- Proposal for a groundwater monitoring and reporting schedule for those SWMUs and/or AOCs at which groundwater contamination has been detected. Monitoring shall be continued until a remedy selection is made by the Division.

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.E.(8) RFI Report Approval/Disapproval

The Manager shall review the Final RFI Report(s) and notify the Permittee of the need for further investigative action and/or the need for a Corrective Measures Study. The Manager shall notify the Permittee of any no further action decision. Any further investigative action required by the Manager shall be prepared and submitted in accordance with a schedule specified by the Manager and approved in accordance with this permit.

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.F. INTERIM MEASURES (IM)

F.IV.F.(1) IM Work Plan

Upon notification by the Manager, the Permittee shall prepare and submit an IM Work Plan for any SWMU or AOC which the Manager determines is necessary. IMs shall be designed to minimize or prevent the further migration of contaminants and limit human and environmental exposure to contaminants while long-term corrective action remedies are evaluated and, if necessary, implemented. The IM Work Plan shall be submitted within the specified time identified by the Manager in such notification. Such IM shall be conducted concurrently with investigations required under the terms of this permit. The Permittee may initiate IMs by submitting an IM Work Plan for approval to the Manager.

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.F.(2) IM Work Plan Content

The IM Work Plan shall ensure that the interim measures are designed to mitigate any current or potential threat(s) to human health or the environment and is consistent with and integrated into any long-term solution at the facility. The IM Work Plan shall include: the interim measures objectives, procedures for implementation (including any designs, plans, or specifications), and schedules for implementation.

Page 42 of 51

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.F.(3) IM Work Plan Approval/Disapproval

The IM Work Plan shall be approved by the Manager, in writing, prior to implementation. The Manager shall specify the start date of the IM Work Plan schedule in the letter approving the IM Work Plan. If the Manager disapproves the IM Work Plan, the Manager shall either (1) notify the Permittee in writing of the IM Work Plan's deficiencies and specify a due date for submission of a revised IM Work Plan, or (2) revise the IM Work Plan and notify the Permittee of the revisions and the start date of the schedule within the approved IM Work Plan, or (3) conditionally approve the IM Work Plan and notify the Permittee of the Permittee of the Conditional Permittee of the Permittee of the Conditions.

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.F.(4) IM Implementation

The Permittee shall implement the interim measures in accordance with the approved IM Work Plan. The Permittee shall give notice to the Manager as soon as possible of any planned changes, reductions, or additions to the IM Work Plan. Final approval of corrective action which is achieved through interim measures shall be in accordance with 401 KAR 39:060 Section 5 and Condition F.IV.H. as a permit modification.

If the time required for completion of interim measures is greater than one year, the Permittee shall provide the Manager with progress reports at intervals specified in the approved Work Plan. The Progress Reports shall contain the following information at a minimum:

- Description of the portion of the interim measures completed
- Summaries of findings
- Summaries of all deviations from the IM Work Plan during the reporting period
- Summaries of all problems encountered during the reporting period
- Projected work for the next reporting period
- Copies of laboratory/monitoring data

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.F.(5) IM Progress Reports

If the time required for completion of interim measures is greater than one year, the Permittee shall provide the Manager with progress reports at intervals specified in the approved Work Plan. The Progress Reports shall contain the following information at a minimum:

- Description of the portion of the interim measures completed
- Summaries of findings
- Summaries of all deviations from the IM Work Plan during the reporting period
- Summaries of all problems encountered during the reporting period
- · Projected work for the next reporting period
- Copies of laboratory/monitoring data

Page 43 of 51

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.F.(6) Notice of IM Work Plan Changes

The Permittee shall give notice to the Manager within forty-five (45) calendar days prior to any planned changes, reductions, or additions to the IM Work Plan.

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.F.(7) Final IM Report

The Permittee shall prepare and submit to the Manager, within ninety (90) calendar days of completion of IM, an IM Report. The IM Report shall contain the following information at a minimum:

- Description of interim measures implemented
- Summaries of results
- Summaries of all problems encountered
- Summaries of accomplishments and/or effectiveness of interim measures
- · Copies of all relevant laboratory/monitoring data, etc

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.G. CORRECTIVE MEASURES STUDY (CMS)

F.IV.G.(1) CMS Work Plan

The Permittee shall prepare and submit a CMS Work Plan for those units requiring a CMS within ninety (90) calendar days of notification by the Manager that a CMS is required or in accordance with the schedule in the final RFI Report. A time extension may be requested for units that are actively operating and a CMS Work Plan is not readily available until after the units are no longer active. This CMS Work Plan shall be developed to meet the requirements of the Conditions in F.IV.G. The CMS may be performed concurrent with the RFI if the Division determines that sufficient investigative details are available to allow concurrent action.

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.G.(2) CMS Work Plan Content

The CMS Work Plan shall meet the requirements of the Corrective Measures Outline, Appendix C. The CMS Work Plan shall include schedules of implementation and completion of specific actions necessary to complete a CMS. The Permittee shall provide sufficient justification and/or documentation for any unit deleted from the CMS Work Plan. Such deletion of a unit is subject to the approval of the Manager. The scope of the CMS Work Plan shall include all measures necessary to ensure compliance with regulatory and statutory requirements. The Permittee shall

Page 44 of 51

implement corrective actions beyond the facility boundary, if necessary, as set forth in Condition F.IV.A.(9).

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.G.(3) CMS Approval/Disapproval

The Manager shall either approve or disapprove, in writing, the CMS Work Plan. If the Manager disapproves the CMS Work Plan, the Manager shall either (1) notify the Permittee in writing of the CMS Work Plan's deficiencies and specify a due date for submittal of a revised CMS Work Plan, or (2) revise the CMS Work Plan and notify the Permittee of the revisions, or (3) conditionally approve the CMS Work Plan and notify the Permittee of the conditions.

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.H. CORRECTIVE MEASURES IMPLEMENTATION (CMI)

F.IV.H.(1) CMI Work Plan

Within thirty (30) days of the approval date of the remedy selection, unless otherwise agreed by the Manager, the Permittee shall prepare and submit a Corrective Measures Implementation (CMI) work plan for the SWMUs or AOCs requiring corrective measures implementation. This work plan shall include, at a minimum:

- Description of the conceptual design, technical features (e.g. plans and specifications), and construction plan for the selected remedy(ies) to achieve media cleanup standards protective of human health and the environment, controlling the source(s) of release, and complying with standards for the management of wastes and any remedial residues
- Proposed schedule that takes into account all phases of the CMI and the submittal of documents to support the CMI (e.g. operation and maintenance plan, construction completion report, etc.) as described in this Permit
- Requirements for removal and decontamination of units, equipment, devices, or structures that will be used to implement the remedy(ies)

F.IV.H.(2) Operation and Maintenance Plan

If required under the CMI Work Plan, an Operation and Maintenance Plan (O&MP) shall be submitted to the Manager in accordance with the schedule. The O&MP shall include, at a minimum:

- System description
- Startup procedures
- Operation and maintenance procedures
- Schedule of inspection and maintenance
- Waste management practices
- Sampling and analysis required for operation and contingency procedures
- Description of the Corrective Measure(s) completion criteria and the method to be used to show when the criteria are met
- For remedies with Land Use Controls, the Operation and Maintenance Plan shall include the

Page 45 of 51

requirements of Permit Condition F.IV.H.(5)

F.IV.H.(3) Manager Approval

All Plans required for the CMI phase shall be approved, in writing, by the Manager prior to implementation.

F.IV.H.(4) Construction Completion Report

If required under the CMI work plan, a Construction Completion Report (CCR) shall be submitted to the Manager, in accordance with the schedule required by this permit that demonstrates the completion of the remedy construction in accordance with approved plans and specifications. The CCR shall be submitted when all operational tests have been completed. Any necessary documentation required by the Division shall be included in this report.

F.IV.H.(5) Remedy with Land Use Controls

Any final remedy that incorporates land use controls shall be in accordance with KRS 224.80. The SWMUs and AOCs for which land use controls are selected as an integral part of the final remedy are listed in Appendix A-7 - SWMUs and AOCs Requiring Land Use Controls. When corrective measures incorporate land use controls as part of the selected remedy, the following information shall be provided:

- Name, address, and phone number of the person to contact about the SWMU or AOC
- Any necessary security provisions consistent with 401 KAR 39:090 Section 1 to prevent unauthorized entry and/or use of the waste unit
- Description of measures to protect the integrity of any installed engineering control(s) and associated features considered as part of the selected remedy for the period that has to be maintained
- Planned maintenance and monitoring activities and frequencies to ensure the security provisions are maintained
- An inspection checklist describing the land use control elements to be inspected, the frequency
 of inspection, and the potential problems that could be encountered. The checklist shall contain
 an area where the inspector may enter his/her name, the date of inspection, and the date upon
 which any problems encountered are remediated.
- Procedure(s) to follow when a determination is made that the land use control(s) are not effective and require modification
- Mechanism by which a notification shall be recorded on the deed for the facility property, or some other instrument which is normally examined during title search, that shall in perpetuity notify any potential future purchaser of the property, that the property had been used for waste management and disposal activities and that restrictions exist precluding a residential use of the land. The need for a deed restriction may be reevaluated upon the transfer of ownership or control.
- Mechanism by which other pertinent agencies (State or Federal) shall be given notice of
 restrictions placed on the use of the property that is affecting or may affect in the future, areas
 under the control of other State or Federal agencies

F.IV.H.(6) CMI Progress Reports

If the time frame required to complete corrective measures implementation is greater than one

Page 46 of 51

hundred and eighty (180) days, the Permittee shall provide the Division with semi-annual Corrective Measures Implementation Progress Reports (180 day intervals) beginning from the date the CMI work plan is approved by the Division, until the Remedy Completion Report is approved by the Division. The time frame stated is effective unless otherwise agreed to by the Division. The CMI Progress Reports shall contain, at a minimum:

- Description of the portion of the CMI work plan completed (e.g. sampling events, operations, volumes removed/treated, wastes generated, etc)
- Summary of system performance/compliance and progress toward achieving cleanup goals
- Summary of any deviations from the approved CMI work plans during the reporting period
- Summary of all contacts with local community and public interest groups or State and Federal Government
- Summary of any problems or potential problems encountered during the reporting period
- · Summary of actions taken to rectify the problems
- Any changes in relevant personnel
- Projected work for the next reporting period

F.IV.H.(7) Remedy Completion Report

Within ninety (90) days of completion of the CMI, unless otherwise agreed by the Division, the Permittee shall submit a CMI Report, including certification of completion of the corrective measures activities. The CMI Report shall summarize the activities and results from the entire period of Corrective Measures Implementation. The CMI Report shall also demonstrate compliance with all media cleanup goals and meet the corrective measures completion criteria in accordance with this permit. Approval by the Division of the final CMI Report constitutes remedy completion. For corrective measures involving the cleanup of groundwater, the Permittee shall demonstrate that the concentrations of the corrective measures have been terminated. The time frame stated is effective unless otherwise agreed to by the Manager.

F.IV.I. REMEDY APPROVAL

F.IV.I.(1) Remedy Selection

The Manager shall select a remedy from the remedial alternatives evaluated in the CMS. The selection shall be based at a minimum on protection of human health and the environment, as per specific site conditions, existing regulations, and guidance. The selected remedy may include any interim measures implemented to date.

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.I.(2) Statement of Basis

Upon approval of the CMS Report or other Manager decision (for example, NFA), the Permittee shall prepare a draft Statement of Basis that provides a summary and justification of the selected remedy. The Statement of Basis shall be written following EPA guidance "Guidance on RCRA Corrective Action Decision Documents: The Statement of Basis, Final Decision, and Response to Comments," February 1991, EPA/540/G-91/011, (or most recent version) or other Manager approved guidance, and shall include information on the proposed remedy, facility background,

Page 47 of 51

exposure pathways, cleanup goals, the scope of the corrective action, the remedial alternatives considered, an evaluation of those alternatives, and public participation. The Statement of Basis shall be submitted to the Manager in draft form within the time frame specified in the letter from the Manager that notifies the Permittee that the CMS Report is approved or within thirty (30) days if a time frame is not provided. The Manager shall notify the Permittee of deficiencies and specify a due date for submittal of a revised Statement of Basis.

F.IV.I.(3) Amended Plan and Reports

If the Permittee or the Cabinet at any time determine that the SWMU Assessment Report (SAR) information, the Confirmatory Sampling (CS) Work Plan, or RCRA Facility Investigation (RFI) Work Plan no longer satisfy the requirements of this permit for prior or continuing releases of hazardous waste or hazardous constituents from Solid Waste Management Units and/or Areas of Concern, the Permittee shall submit an amended SAR, CS Work Plan, or RFI Work Plan. The amended plan or report shall be submitted to the Hazardous Waste Branch Manager within ninety (90) calendar days of such determination or from receiving notification from the Cabinet.

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.J. MODIFICATION OF THE CORRECTIVE ACTION SCHEDULE OF COMPLIANCE

Modifications to the corrective action schedule of compliance shall not constitute a reissuance of the Permit. The Manager may grant extensions at his/her sole discretion, subject to adequate justification by the Permittee. If at any time, the Manager determines that modification of the corrective action schedule is necessary, the Manager may initiate a modification to the schedule.

F.IV.K. IMMINENT HAZARDS

The Permittee shall report to the Manager, any imminent or existing hazard to public health or the environment from any release of hazardous waste or hazardous constituents from SWMUs and or Areas of Concern consistent with requirements specified in this permit.

F.IV.L. WORK PLAN AND REPORT REQUIREMENTS

All work plans and schedules shall be subject to approval by the Manager, prior to implementation to assure that such work plans and schedules are consistent with the requirements of this Permit and with applicable regulations and guidance. The Permittee shall revise all submittals and schedules as specified by the Manager. The Permittee shall implement all work plans and schedules as approved by the Manager.

All work plans and reports shall be submitted in accordance with the approved schedule. Extensions of the due date for submittals may be granted by the Division based on the Permittee's demonstration that sufficient justification for the extension exists.

If the Permittee at any time determines that the AR, CS Work Plan, or RFI Work Plan(s) required no longer satisfy the requirements of 401 KAR 39:090 Section 8 or this permit for prior or continuing releases of hazardous waste or hazardous constituents from SWMUs and/or AOCs, the Permittee shall submit an amended document to the Manager within ninety (90) calendar days of such determination.

Page 48 of 51

All reports shall be signed and certified in accordance with 401 KAR 39:060 Section 5.

One (1) hard copy and one (1) electronic copy of all reports and work plans shall be provided by the Permittee to the Division of Waste Management at the following address:

Manager, Hazardous Waste Branch Division of Waste Management 300 Sower Boulevard Frankfort, Kentucky 40601

[40 CFR 264.101 as established in 401 KAR 39:090 Section 1, 401 KAR 39:090 Section 8, 401 KAR 100:030, KRS 224.46-530]

F.IV.M. APPROVAL/DISAPPROVAL OF SUBMITTALS

The Manager shall review the work plans, reports, schedules, and other documents ("submittals") which require the Manager's approval in accordance with the conditions of this permit. The Manager shall notify the Permittee in writing of any submittal that is disapproved, and the basis therefore. In the event the Permittee disagrees, in whole or in part, with the Manager's decision of a submittal or disapproval of any revised submittal required by the permit, the Permittee has the right to seek a hearing under KRS 224.10-420(2).

Page 49 of 51

PART V REFERENCED ATTACHMENTS

F.V.A. REFERENCED ATTACHMENTS

F.V.A.(1) Appendix A, List of SWMUs and AOCs

Lists of Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) at this facility are in Appendix A of this permit. All lists in Appendix A are current as of the issuance date of this permit.

F.V.A.(2) Appendix A-1, RCRA Facility Investigation (RFI)

A list of SWMUs and AOCs requiring an RFI at this facility under this permit at this time is included in Appendix A-1.

F.V.A.(3) Appendix A-2, No Further Action (NFA)

A list of SWMUs requiring NFA at this facility under this permit at this time is included in Appendix A-2.

F.V.A.(4) Appendix A-3, Confirmatory Sampling (CS)

A list of SWMUs and AOCs requiring CS at this facility under this permit at this time is included in Appendix A-3.

F.V.A.(5) Appendix B, RFI Work Plan

An RFI Work Plan Outline is incorporated as Appendix B of this permit.

F.V.A.(6) Appendix C, CMS Outline

A CMS Plan Outline is incorporated as Appendix C of this permit.

F.V.A.(7) Appendix D, Schedule of Compliance

A Corrective Action Schedule of Compliance is incorporated as Appendix D of this permit, as needed.

F.V.A.(8) Attachment A, Part A

The facility Part A Permit Application is incorporated as Attachment A of this permit.

Page 50 of 51

PART VI WASTE MINIMIZATION

F.VI.A. Program

The Permittee shall include in the Operating Record a certification by the Permittee no less often than annually, that the Permittee has a program in place to reduce the volume and toxicity of hazardous waste that he generates to the degree determined by the Permittee to be economically practicable. The proposed method of treatment, storage, or disposal is that practicable method currently available to the permittee which minimizes the present and future threat to human health or environment.

[40 CFR 262.25 as established in 401 KAR 39:080 Section 1, KRS 224.46-530]

F.VI.A.(1) Waste Streams

The Permittee shall identify and document types, amounts, and hazardous constituents of waste streams with the source and date of generation.

[40 CFR 262.25 as established in 401 KAR 39:080 Section 1, KRS 224.46-530]

F.VI.A.(2) Assessment

The Permittee shall conduct a periodic waste minimization assessment that includes:

- Identify and document all points in a process where materials can be prevented from becoming a waste or can be recycled
- Identify the potential for waste reduction and recycling techniques applicable to each waste generated at the facility with a cost estimate for capital investment and implementation
- Update and maintain a description of technically and economically practical waste reduction/recycling options to be implemented at the facility and a planned schedule for implementation
- Prepare and maintain an adequate assessment for specific performance goals, preferably quantitative, for the source reduction of waste by stream. Whenever possible, goals should be stated as weight of waste generated per standard unit of production, as defined by the Permittee.

[40 CFR 262.25 as established in 401 KAR 39:080 Section 1, KRS 224.46-530]

F.VI.A.(3) Required Documents

The Permittee shall maintain and update the following documents:

- Policy dated and signed, by management, describing management support for waste minimization and for implementation of a waste minimization plan
- Description of employee awareness and training programs designed to involve employees in waste minimization planning and implementation to the maximum extent feasible
- Description specifying how a waste minimization plan has been incorporated into management practices so as to ensure ongoing efforts with respect to product design, capital planning, production operations, and maintenance

[40 CFR 262.25 as established in 401 KAR 39:080 Section 1, KRS 224.46-530]

F.VI.A.(4) Annual Cost Allocation Review

The Permittee, on an annual basis, shall update a Waste Minimization Cost Allocation Review specific to the operation of the facility which includes:

Page 51 of 51

- Identification of waste management costs for each waste, factoring in liability, transportation, recordkeeping, personnel, pollution control, treatment, disposal, compliance, and oversight costs to the extent feasible
- Description of how each department at the facility is held accountable for the wastes they generate
- Comparison of waste management costs with costs of potential reduction and recycling techniques applicable to each waste at the facility

[40 CFR 262.25 as established in 401 KAR 39:080 Section 1, KRS 224.46-530]

F.VI.A.(5) Seek and Exchange Information

The Permittee shall update and maintain at the facility a description of efforts to seek and exchange technical information on waste minimization from other parts of the company, other firms, trade associations, technical assistance programs, and professional consultants.

[40 CFR 262.25 as established in 401 KAR 39:080 Section 1, KRS 224.46-530]

F.VI.A.(6) Annual Review

The Permittee, on an annual basis, shall evaluate the Waste Minimization Program. The evaluation shall contain, at a minimum:

- Description of types and amounts of hazardous waste reduced or recycled
- Analysis and quantification of progress made relative to each performance goal established and each reduction technique to be implemented
- Amendments to waste minimization plan and explanation
- Explanation and documentation of reduction efforts completed or in progress before development of the waste minimization plan
- Explanation and documentation regarding impediments to hazardous waste reduction specific to the individual facility

[40 CFR 262.25 as established in 401 KAR 39:080 Section 1, KRS 224.46-530]