

SECTION F

PROCEDURES TO PREVENT HAZARDS

Revision No.

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SECTION F
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SECTION F

PROCEDURES TO PREVENT HAZARDS

As required by 40 CFR 270.14(b)(4), (5), (8), and (9), and ADEM Administrative Code Rule 335-14-8-.02(5)(b) 4, 5, 8 and 9, this section provides procedures for preventing hazards and being prepared for hazards if they should occur. The Facility is not requesting any waiver of preparedness and prevention requirements under 40 CFR 270.14(b)(6) and ADEM Administrative Code Rule 335-14-8-02(5)(b) 6.

F-1 Security

The Facility may be operated 24 hours per day, 7 days per week. Shift hours may vary. Hazardous wastes are received during all operating hours.

F-1a Control of Unauthorized Entry

The portion of the Facility currently being operated is entirely fenced with at least a 6-foot chain link fence as shown on Figure B-3, Facility Layout, in Appendix B-2 to Section B of this Application. The Facility intends to extend this fence to encompass new areas as they are brought into operation. Gates in this perimeter fencing, shown in Figure G-5, provide access to unfenced portions of the Facility and provide ingress and egress for certain construction and maintenance activities. They also may be used as emergency evacuation exits (see Emergency Response Plan (Contingency Plan) in Section G of this Application). Except for the main gate, all gates are kept locked with a chain and padlock.

The entire fence is posted with warning signs secured to the chain link fencing spaced approximately 50 feet apart. These signs read in English: "Danger, Unauthorized Persons Keep Out." These signs are legible from 25 feet and can be seen from any approach to the Facility's main gate. The main gate is open during normal operating hours. At all other times, the main gate is closed. When the gate is open, personnel are stationed in the guardhouse and scales (Unit 207) located outside of the main gate (see Figure B-3, Facility Layout, in Appendix B-2 to Section B). Remote video surveillance will be provided with outdoor high-resolution cameras with day/night viewing capabilities. Remote cameras will be monitored by a remote security operating center, and will be available for viewing by Facility personnel computers with remote security software.

Only authorized vehicles are allowed to enter the Facility. All active employees and authorized contractors (temporary and long-term) are provided an electronic access cards to gain entrance to the employee entrance to the left of the scales. Authorization for all other cases is granted by the Facility personnel at the scales/guardhouse at the gate entrance. All persons required to sign in upon entering the Facility (pedestrians and drivers) must also be signed out. The Facility

has found that this procedure adequately controls unauthorized entry into the Facility. Authorized EPA and ADEM inspectors may enter the Facility in accordance with the above procedures.

- 5 Employees that work in certain areas are required to pass through the employee shower and locker room and change into protective work clothes (see discussion of Personnel Protection in Section G). All employees are required to clock-in or sign-in at the facility entrance/exit so in the event of an emergency, they are known to be on-site or off-site.

F-1b Control of Authorized Entry

- 10 Drivers of trucks delivering wastes to the Facility are given specific instructions at the main receiving station about where to proceed for sampling and off-loading. If the driver is unfamiliar with the Facility¹, a Facility employee may accompany the driver to the destination point, or they will be supplied a map with instructions. Off-loading is conducted under the direction of Facility personnel.

- 15 Drivers of trucks delivering materials and drivers of service vehicles are directed to their destinations on the Facility by the guard or other Facility personnel.

- 20 Contractors, consultants, visitors, and other non-employees authorized entry onto the Facility are typically accompanied by Facility personnel while on the premises. Exceptions are where an individual has a prolonged and very specific job to perform in a specific area of the Facility (e.g., building construction, drilling wells). In these cases, the non-Facility personnel will be required to attend the contractor orientation course to become familiar with the Facility and the safety procedures to be taken while on-site.

- 25 In summary, non-employee personnel authorized to enter the Facility are given instructions and are under appropriate levels of surveillance. In addition, such persons are provided safety equipment (i.e., hard hats, and protective glasses), which they are required to wear.

F-1c Surveillance

- 30 During normal operating hours (i.e., when the main gate is open), at least one person is continuously stationed at the scale/guardhouse to sign truck drivers and other persons in and out of the Facility.

- 35 Many Facility personnel are supplied with two-way radios tuned to the Facility's radio-communication system for use during routine communication and emergency situations. All Facility personnel are familiar with the Facility's Emergency Response Plan. All automatic

¹ Many truck drivers make frequent deliveries and become familiar with the location of off-loading and parking and sampling areas.

alarms are routed to the main gate security office. These alarms are routinely checked to assure they are functioning properly. Remote video surveillance is also provided at the Facility.

The Facility has found that the security procedures described in this section are effective in preventing unauthorized entry of persons and livestock onto the Facility, controlling authorized entry, security violations (e.g., unlocked doors), safety and emergency procedure violations (e.g., blocked fire exits), and actual or potential emergency situations (e.g., fires, spills, leaks). The Facility believes that these security procedures conform to the requirements of 40 CFR 264.14 and ADEM Administrative Code Rule 335-14-5-.02(5).

F-2 Inspections

F-2a Inspection Plan

This Inspection Plan has been developed in accordance with the regulatory requirements set forth in 40 CFR 264.15 and ADEM Administrative Code Rule 335-14-5-.02(6). The procedures set forth in this plan are such that this Facility will be in compliance with all requirements of 40 CFR 264.15 and ADEM Administrative Code Rule 335-14-5-.02(6). A copy of this plan is maintained at the Facility.

This Inspection Plan is intended to provide a mechanism to prevent and detect system malfunctions, equipment deterioration, and operator errors which, if allowed to continue without remedial action, may ultimately lead to a release of hazardous waste constituents to the environment or create a threat to human health. The Inspection Plan is designed to provide an early warning of the potential for such events in order that the corrective and preventive actions may be taken in a timely manner.

The Inspection Plan is divided into the general Facility inspections and the process specific unit inspections. The former focuses on items that apply to Facility-wide operations. Facility security, safety, emergency equipment, environmental monitoring systems, and transportation areas provisions are included under general Facility inspections. Process specific unit inspections include inspection of basic operations/utility systems, storage units, treatment process units, and landfill

Inspections are performed by trained, qualified individuals assigned the responsibility to detect any unsafe conditions at the Facility and to prevent adverse consequences. These designated individuals have the training and authority to:

- implement the required inspections;
- perform necessary evaluations and hazard assessments; and

- recommend appropriate corrective or remedial actions.

Inspections are performed according to a pre-determined schedule based on engineering knowledge and operational experience with the systems and processes involved. Each inspection item has the content and frequency necessary to alert Facility personnel prior to the development of a serious problem. A trained inspector evaluates and assesses each item to detect any potential malfunction, equipment deterioration, or operator error through regular observation of the process and procedures. The level of response and its timing is determined by the nature and seriousness of the problem identified. The protection of personnel and the prevention of adverse environmental impact are of paramount concern during the inspection process.

F-2a(1) Inspection Program Administration

The Facility Environmental Compliance Supervisor is fully responsible for implementation of the Inspection Program. Reports of the results of the inspections, with appropriate documentation, are made by the inspector directly to the Environmental Manager. The inspector is responsible for directing the appropriate Facility functional units to implement required remedial and corrective measures; or the inspector may request direction from the Environmental Manager for remedial action.

F-2a(2) Personnel Qualifications

Each inspector is trained in hazardous waste management, hazard assessment, documentation and record-keeping, and various safety and contingency plan procedures. The qualifications and duties of the inspectors are included in Position Description forms on file at the Facility. Further information on qualifications and duties is included in the Training Plan that is provided in Section H of this Application.

F-2a(3) Hazard Assessment and Evaluation Procedures

The inspector must be familiar with the location and normal configuration of all equipment and systems to be inspected. For any discrepancy observed, the inspector shall determine the potential for personnel injury or for release of hazardous waste constituents and shall assess the nature and timing of remedial action required. The inspector shall consider the following:

- the location and nature of the problem;
- the presence of secondary containment or control;
- the amount and type of waste material involved;
- the potential for human exposure; and
- the likelihood of waste migration.

The inspector shall maintain open lines of communication with the Facility's Emergency Coordinator and Environmental Compliance Supervisor. The inspector must depend on their judgment and advice regarding physical constraints and scope of corrective actions, response timing, interim controls, and countermeasures.

5

When an inspection indicates equipment malfunction or deterioration, or any other improper condition, at a minimum, the following actions will be taken as appropriate:

10

- assess the situation;
- determine the corrective/remedial measures needed, including appropriate interim measures. The Facility's Emergency Response outlines appropriate responses for various situations;
- establish the time frame within which the remedial action must occur. For emergency or near emergency situations, prompt verbal reports shall be made to the Emergency Coordinator and/or General Manager; and
- provide adequate follow up to verify that the specified response has occurred and that the situation has been resolved satisfactorily.

15

F-2a(4) Documentation and Recordkeeping

20

Inspections (and re-inspections) are conducted and documented using forms specifically designed to contain all pertinent information. A specific Remedial Work Order and Re-inspection Report form (see example in Figure F-2-1 provided following Section F) is generated by the inspector for each discrepancy noted by the inspector. The form contains pertinent corrective work orders and is forwarded to the appropriate Facility personnel for implementation, then returned to the Environmental Inspector for review of completeness, and for filing. All completed forms are retained in the Facility operating records. These files are maintained at the Facility for a minimum period of three years from the date of inspection.

25

30

Inspection forms are provided for specified daily, weekly, monthly, or other scheduled periodic inspections. Each periodic inspection form includes significant administrative information, including identification of the Facility unit, the name of the inspector, and the date and time of the inspection. The inspection checklist section of the form indicates the status of designated equipment or structures. The inspector's assessment, including notations of the urgency of the required response, is marked on the form. The inspection report forms are prepared in advance to include pertinent items of equipment to be inspected according to the specific schedules shown later in this plan. These forms may be periodically modified to accommodate changing needs of the Facility.

35

A separate Remedial Work Order and Re-inspection Report form is used for corrective action initiation and to document whether each discrepancy noted during an earlier inspection has been adequately corrected. This form identifies the equipment or process unit involved, the nature of the discrepancy noted, and the date of the inspection. It also describes requisite response actions, the time by which these are to be implemented, and the name of the person responsible for such actions. Descriptions of appropriate remedial responses are provided in the Emergency Response Plan.

The second section of this form is used by the inspector during his next scheduled inspection (following the date by which the corrective work was to be completed) to confirm that the corrective action has been made. When completed, the re-inspection form is filed with the Facility's inspection log.

In summary, the inspector observes Facility operations and equipment on a periodic basis in accordance with a specified schedule and inspection elements. Discrepancies are identified by the inspector and then re-inspected at the next scheduled time. If the discrepancy involves a significant problem with monitoring, safety or security, the inspector will monitor the situation on a daily basis until the problem has been corrected. The Remedial Work Order forms are attached to the inspection form for further review and filing.

In cases where specialized outside contractors are used to perform testing or inspection services, the results are reported on the contractor's forms. These reports are made part of the Facility's operating record.

F-2b General Facility Inspection

The general Facility inspection includes the Facility perimeter and those items within the property that are common (i.e., not process-specific) to all operations. The general Facility inspection encompasses the following:

- security devices;
- environmental monitoring systems (including stormwater containment structures);
- safety and emergency equipment; and
- truck scales, sampling and parking areas.

F-2b(1) Types of Potential Problems

The general inspection schedules, including inspection parameters and frequencies, are determined by the types of problems that may occur related to general Facility operations, such as the following:

- Breach of security, either intentional or unintentional by persons, livestock, or natural (e.g., climatological) events. Such breaches may occur due to failure of the surveillance system, damage to fences or entry control structures, or obstruction, damage or loss of warning signs.
- 5
- Releases not detected by environmental monitoring equipment due to malfunction or failure. Such problems may also occur due to failure of containment structures if these are not properly maintained.
 - Health and safety equipment failure, absence, or inaccessibility.
 - Transportation units are not properly staged and/or are leaking.

10 **F-2b(2) General Inspection Schedules**

The general inspection schedules are based on the Facility's operational mode, potential failure modes, and an assessment of the hazard magnitude posed by a particular malfunction, failure or discrepancy.

- 15 Schedules designed for inspection of security devices are shown in Table F-2-1; for Environmental Monitoring Systems in Table F-2-2; for Safety and Emergency Equipment in Table F-2-3; and for the truck scale, and sampling and parking areas in Table F-2-4.

F-2c Process-Specific Inspection Activities/Schedules

20 The operational units and process systems listed below are subject to process-specific inspection schedules and procedures presented in this section:

- Container Management Units;
- Tank Management Units;
- Landfills; and
- Containment Building Units.

- 25 Schedules designed for inspection of container management units are shown in Tables F-2-5a, F-2-5b and F-2-5c; for tank management units in Tables F-2-6a, F-2-6b, F-2-6c and F-2-6d; for landfill units in Table F-2-7; and for containment building units in Table F-2-8.

30 Equipment and structures at each unit are inspected regularly for malfunction, deterioration, failure, operator errors, and other problems that could endanger human health or the environment. The types of potential problems and the hazards uniquely associated with each of

the Facility's process units are used to establish the parameters and frequency of inspection presented in the following sections.

5 Units subject to 40 CFR Subpart CC air emission controls are either container or tank management units. Presently there are no surface impoundment units at the facility. An outline of the inspection, monitoring and repair program for the units subject to 40 CFR Subpart CC controls are presented in Exhibit F-A of this section.

F-2c(1) Container Management Units

The potential problems related to the Facility's container management units include:

- 10
- spills in loading/unloading area;
 - deteriorated, damaged, leaking, or open containers;
 - failure or deterioration of secondary spill containment structures; and
 - improper placement of containers or stacking of drums.

15 In addition to the above potential problems, potential problems for containers subject to 40 CFR Subpart CC controls include:

- deteriorated, damaged, leaking, or open containers and control devices.

The elements and frequency of inspection for the container management units are shown in Tables F-2-5a, F-2-5b, and F-2-5c.

F-2c(2) Tank Management Units

20 The types of potential problems which can occur at/near storage and treatment tank areas are:

- spills during loading and unloading of tanks;
- structural failure of tanks or secondary containment;
- operating equipment (e.g., pump, valve) failure or malfunction; and
- monitoring equipment failure resulting in overfilling or in operation outside of the
25 design specifications.

In addition to the above potential problems, potential problems for tanks subject to 40 CFR Subpart CC controls include:

- deteriorated, damaged, leaking or open tank roofs, closure devices or closed vent systems; and

- removal efficiency of pollution control devices below 95 percent.

The elements and frequency of inspection for the Facility's storage and treatment tank units are summarized in Tables F-2-6a, F-2-6b, F-2-6c and F-2-6d. Procedures and criteria for the inspection of tank shell thicknesses are provided in Subsection F-2-5 of this section.

5 **F-2c(3) Landfill Units**

The types of problems which can increase the potential for unplanned or unknowing release of hazardous waste to the environment from the active and closed landfill trenches include:

- obstruction of surface water (run-on) diversion drainage ditches;
- accumulation of leachate in the collection system or diminished integrity of the leachate collection system riser pipes;
- wind dispersal of wastes; and
- loss of integrity of final cover of closed and inactive trenches.

Landfill inspection parameters and frequencies are indicated in Table F-2-7.

- 15 Proper construction and installation of landfill liners, leachate collection systems, above-grade containment berms, and final covers are monitored using the quality control procedures.

F-2c(4) Containment Building Units

Potential problems related to these units include:

- spills in loading/unloading;
- structural failure of secondary containment walls and floor;
- malfunction of operating equipment such as dust filters and collectors;
- proper operation of the leak detection system; and
- adequate controls for air emissions.

The elements and frequencies of inspection for these units are shown in Table F-2-8.

25 **F-2d Unit Specific Inspection Activities/Schedules**

The following table specifies the inspection schedules for the units at the Facility:

Inspection Schedules

Unit	Description	Process Types ¹	Tables ²
406	Container Storage Unit	C	F-2-5
520	Container & Tank Management Unit	C, T	F-2-5; F-2-6
600	Tank Management Unit	T	F-2-6
602	Container Storage Unit	C	F-2-5
603	Container Storage Unit	C	F-2-5
604	Container Management Unit	C	F-2-5
700	Container Management Unit	C	F-2-5
702	Container Management Unit	C	F-2-5
703A	Container Management Unit	C	F-2-5
708	Laboratory Tank Storage Unit	T	F-2-6
900	Wheel Wash and Tank Storage Unit	T	F-2-6
1200A	Containment Building / Container & Tank Management Unit	C, T, B	F-2-5; F-2-6; F-2-8
1400	Tank Management Unit	T	F-2-6
1700	Leachate Tank Storage Units	T	F-2-6
2000	Container Management Unit	C	F-2-5
2200	Container Storage Unit	C	F-2-5
Landfill	Landfill Units	L	F-2-7

¹ Process types are: C - Container Management, T - Tank Management, B - Containment Building, and L- Landfill.

² F-2-5 includes F-2-5a, b and c where applicable. F-2-6 includes F-2-6a, b, c, and d where applicable.

F-2e Tank Shell Thickness Inspections

This subsection summarizes the procedures to be followed to conduct the annual tank shell thickness inspections in accordance with Section D-2 of this Application. The tanks used for waste storage incorporate a corrosion allowance that is designed to provide for protection from any potential corrosion of the tank wall that could occur. Protective coatings are also sometimes used. Each aboveground and on-ground tank in which hazardous waste is managed will be inspected annually, as described herein, to ensure that minimum code shell thickness is maintained, and that adequate corrosion allowance is available for continued service.

Non-destructive ultrasonic testing is used to determine actual shell thicknesses, using ASME Standard Procedures as per Section V, Article 23. In so doing, there is no need to remove the contents from the tank. A grid is superimposed over the entire tank wall area, and a test is run

in each unit of the grid. The ultrasonic test involves measuring the time required for wave propagation through the tank wall and back to the source. This time is directly proportional to the tank wall thickness. The test is effective for both full and empty tanks, and can be used to examine seam thickness as well.

5

The data obtained is used to calculate the thickness of the sidewalls. The use of a succession of measurements allows determination of the uniformity of the tank wall thickness, and the need for tank wall repair or replacement because of corrosion or erosion problems. The degree and uniformity of tank wall erosion will be used to determine whether tanks will be decommissioned and replaced or whether they will be emptied, cleaned, and renovated using protective inner coatings.

10

Since ultrasonic or other external test techniques are used, it is not necessary for anyone to enter tanks to determine tank wall thinning. However, if internal inspections become necessary, OSHA procedures (29 CFR 1910.94) and/or API entry procedures (2013, 2015, and 2045A) will be adhered to.

15

When performing internal inspection, the tanks may first be emptied. This involves unloading the contents into a tanker truck or transferring them to another tank. Waste materials to be emptied will be compatible with the receiving vehicle or vessel (and the current or previous contents thereof). To ensure that no incompatibles are commingled, wastes will be analyzed as per the Waste Analysis Plan. The tank does not require decontamination or rinsing in order to perform the external inspection.

20

In the event the ultrasonic testing of the wall thickness indicates a substantial change from the previous tests (which would be considered to reflect an accelerated rate of corrosion), or if the total wall thickness has diminished to the minimum code thickness, the tank may require internal inspection. During all internal inspections the bottom of non-elevated tanks will be observed and ultrasonically tested. The annual tank wall thickness inspections (and internal inspections, if required) will be conducted under the direction of a registered professional engineer, who will refer to the appropriate design standards to determine if the tank wall thicknesses are below acceptable limits. Any tank found to have a wall thickness below the acceptable design requirement, will be taken out of service until repairs or replacement can be conducted.

25

30

F-3 Preparedness and Prevention Requirements

The Facility is not requesting a waiver from preparedness and prevention requirements of Part 264, Subpart C and ADEM Administrative Code Rule 335-14-5-.03.

35

F-3a Communications

The Facility's telephone system provides external communication for the purpose of calling for outside assistance. The Facility believes that this telephone system complies with 40 CFR 264.32(b) and ADEM Administrative Code Rule 335-14-5-.03(3)(b). The internal communication system is addressed in Subsection G-3c of Section G of this Application. Access to communication and alarms is addressed in Subsection G-3c and Figure G-4 of Section G of this Application.

F-3b Fire Control Equipment

Fire Loop System - Underground pipe system supplied from a 500,000-gallon tank. The fire loop supplies water to automatic sprinkler systems in most major Facility buildings and to 22 fire hydrants located strategically on the loop as shown on Figure G-5 in Section G of this Application. Sprinkler systems are located in units/buildings 200, 201, 300, 402, 404, 520, 602, 603, 604, 606, 700, 702, 703, 707, and 708.

Fire Truck - 1,000-gallon pumper capable of supplying 1/2 - 2" hoses from an internal tank, fire hydrants or by siphoning from surface impoundments. It is also equipped with top mounted water cannon. The truck is equipped with self-contained breathing apparatuses (SCBA's) and 6 spare bottles. Two spare SCBA's will be maintained in the fire bay, along with an adequate set of fireman's turnout gear.

Water Wagon - A mobile water wagon that is used primarily for dust suppression, may also be equipped with a top mounted water cannon capable of use as a backup firefighting unit (not always available).

Fire Extinguishers - Fire extinguishers of various sizes and types are located strategically across the Facility. The types of fire extinguishers include Class ABC for ordinary combustibles, flammable liquids and electrical; halon for use on computer equipment; Carbon Dioxide, for use in the laboratory area and Class D for metal fires. These extinguishers are not water based and can be used on water reactive material. The choice of which type of extinguisher to use is based on the conditions and types of materials involved in the fire.

In case a fire occurs within the active trench, the fire will be suppressed with cover material placed by mechanical means.

F-3c Testing and Maintenance of Equipment

Table F-2-3 of the Inspection Plan (see Subsection F-2) sets forth the inspection schedule for testing and maintaining the preparedness of safety and emergency equipment. As shown, the alarm, communication systems, and fire extinguishers and fire equipment are checked weekly

or monthly. In addition, as provided in the Emergency Response Plan (see Section G), all fire, safety, and emergency equipment is inspected and returned to full operating order, if necessary, after each emergency. The Facility believes these procedures comply with 40 CFR 264.33 and ADEM Administrative Code Rule 335-14-5-.03(4).

5

Additionally, the Facility performs maintenance on site equipment on an as needed basis. Any fluids or materials generated as part of this maintenance is treated (if needed) and disposed of onsite or sent offsite to be disposed of as necessary.

F-3d Aisle Space

10 The configurations of container storage and staging in each of the container management units at the Facility is described in Section D-1 of this Application. Aisle space is maintained within container management units as described in Section D-1. Aisle space is maintained within containment building management units as described in Section D-9. In addition, ample space is provided for access into the container management units and containment building
15 management units at the Facility.

At all other units where wastes are stored in tanks or are processed, there is adequate internal access to tanks and equipment in order to respond effectively to fires or spills. Likewise, there is adequate external access to all buildings throughout the Facility, as shown in Figures B-3 and
20 B-4 in Appendix B-2 to Section B of this Application.

Good access to and into the landfill trenches are provided by haul roads and by the haul ramps into the trenches (see Section D-6).

25 The Facility believes the Facility complies with 40 CFR 264.35 and ADEM Administrative Code Rule 335-14-5-.03(6).

F-3e Spill/Release Equipment

Emergency Response Trailer - The Facility maintains a mobile trailer that is equipped with PPE and spill/release control equipment used solely for emergency situations. A list of equipment is
30 contained in Appendix G-3 of Section G of this Application.

Other Equipment - The Facility uses various pieces of equipment in its normal operations, which can be made available for use in an emergency situation. These are listed in Subsection G-4b(3) of Section G of this Application.

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The Facility also has an inventory of small equipment and supplies, which can be made available for use in an emergency situation. These are also listed in Subsection G-4b(3) of Section G of this Application.

F-3f Arrangements with Local Authorities

The outside authorities expected to respond to an emergency are sent a copy of the Emergency Response Plan (Contingency Plan) each time it is revised. More details about arrangements with outside authorities are provided in Subsection G-7 of Section G of this Application.

5 F-4 Prevention Procedures, Structures, and Equipment

The Facility is equipped with a variety of features to prevent spills, on-site and off-site contamination, and personnel injuries, as described in the following subsections.

F-4a Loading and Unloading Operations

10 Loading and unloading operations are conducted in a manner to minimize spills and leaks and to contain any spills or leaks that do occur. Loading and unloading areas are designed with proper secondary containment systems, are roofed (in most cases), and also have specific equipment necessary for the type of material and containers received (e.g., quick-connect piping, raised loading/unloading platforms, forklifts). Details of these loading and unloading areas within applicable units are indicated on the drawings provided in Appendix D-1 to Section
15 D of this Application.

Forklift trucks may be used to transfer containers within and between units. As described in Section D-1, the forklift trucks are equipped with grabbing tongs to handle non-palletized drums, and with forks to handle palletized containers. No manual handling of containers is required,
20 and all containers are handled and moved top side up. Also, the drivers of forklift trucks are trained to handle and move containers with care so as to avoid dropping or puncturing them. These procedures prevent spills of wastes from the handling of containerized wastes.

If a leaking container is received, it is either immediately processed or re-packed in over-sized
25 drums. Leaked material is appropriately cleaned up according to the type of material and the appropriate land disposal restrictions.

F-4b Site Contamination

Several design features and procedures are employed to prevent on-site contamination from waste spills, leaks, and waste dragout from the landfill trenches. All waste storage and
30 processing are conducted in buildings or areas having secondary containment systems and, in many cases, roofs and sides. Spilled wastes are intercepted, contained, and removed for appropriate treatment and/or disposal. Also, as described above, loading, and unloading operations are conducted within contained areas and, in most cases, under a roof. Spilled wastes are intercepted, contained, and removed for appropriate treatment and/or disposal.
35 Landfilling, as described in Section D-6, is conducted either below grade or above grade within containment berms, and therefore in a contained manner. In short, the dominant potential

sources of on-site contamination are well controlled. Additionally, the roofing or enclosing of many of the storage and process units minimizes the amount of direct rainfall onto or into these units.

5 To deal with the potential on-site contamination caused by incoming waste delivery trucks, the Facility has designed traffic patterns that largely confine these trucks to the paved and curbed process area of the Facility (see the discussion of traffic patterns as provided in Subsection B-6 of Section B of this Application). Any leaks of wastes from these delivery trucks are controlled by adding absorbent to the spilled material and either drumming the mixture or stabilizing and
10 then disposal of the material per established procedures.

To deal with potential on-site contamination from waste dragout from the landfill trenches and cells, several procedures are employed. First, the number of delivery trucks having to enter and off-load in the trenches is minimized. As shown in the traffic patterns in Subsection B-6 of
15 Section B of this Application, these vehicles will travel an abbreviated traffic route which will avoid travel onto the processing area of the Facility.

A second procedure for minimizing waste dragout from the trenches or cells is the Wheel Wash Unit 900. Drawings for this unit are provided in Appendix D-1 to Section D of this Application.
20 All delivery trucks and on-Facility trucks that have entered and off-loaded wastes into the trenches will have to proceed through this unit for exterior wheel wash before exiting the Facility.

Finally, the following procedures will be followed to minimize waste dragout from landfill operations:

- 25 • continuous placement of intermediate cover on the operating floor of the trenches or cells so that traffic on wastes is avoided;
- periodic scraping of the haul roads to and ramps into the trenches or cells; and
- periodic watering of haul roads and ramps during dry weather to minimize dust and accompanying dragout of dusty materials (principally, chalk which increases the
30 sediment load within surface run-off drainage).

In summary, the Facility believes it can minimize potential contamination to the point where off-site dragout of wastes by truck traffic and on-site and off-site contamination of surface run-off is virtually eliminated. With these established procedures, it is believed that surface runoff from the Facility needs only to be normally controlled for reduction of sediment load (i.e., sediment
35 that derives from the extensive earth-moving operations at the Facility and which is composed of the native chalk materials).

F-4c Storm Water Runoff

The objective of storm water control systems at the Facility is to control the discharge of sediment to the surface waters of Bodka Creek and the Factory Creek watershed. To meet this objective, sediment basins, silt traps, and brush dams are constructed in the drainage channels of the Facility. These drainage structures are sized and designed to provide sufficient flow-through retention of storm water drainage to reduce sediment loads to acceptable levels.²

In April 1990, most recently updated in July 2012, the Facility received a National Pollutant Discharge Elimination System (NPDES) permit from ADEM to discharge non-contaminated stormwater to Bodka Creek in accordance with Permit No. AL0050580. As part of the NPDES permit requirements, the Facility prepared a Sediment Control Plan that identifies specific sediment controls for the Facility.

Eight (8) sediment basins have been constructed to serve as sediment controls for the facility. Sediment levels within the basins are visually inspected and periodically drained, excavated to design grades, and surveyed as needed. Future development of landfill trenches may require construction of additional sediment basins in the natural drainage channels serving these areas. The Facility believes that by implementing the surface water management plan and the sediment control plan, the Facility will adequately control sediment discharges to off-site surface waters.

F-4d Water Supplies

There is no known public or private use of the downstream surface waters of Bodka or Factory Creeks for drinking water. However, these waters are probably used, to some extent, for livestock watering. As described above, the Facility believes that surface water run-off from the Facility is adequately controlled to prevent any contamination of these surface waters and any adverse effects from their use for livestock watering or other purposes.

There is no known use of the saturated zone of the Selma Formation for water supply. Groundwater yields from the Selma Formation are too low to enable practical use of this formation for water supply, even for private users. Groundwaters in the Eutaw Formation are used, although not extensively, for water supply. As discussed in Section E, Groundwater Monitoring, the Facility believes that any contamination of these groundwaters as a result of Facility activities is extremely remote. In summary, the Facility believes that any and all water supplies in the vicinity of the Facility are well protected and will not be affected by Facility operations.

² These sediment basins are not RCRA-regulated units, although they potentially provide tertiary containment (i.e., backup to the Facility's secondary containment systems) capacity for management of spills.

F-4e Equipment and Power Failure

The Facility receives commercial electric power, which is used to power lights, pumps, and various motors that run equipment in the process area. The Facility does not maintain a Facility-wide, back-up electric power generating capacity to serve in the event of a power interruption. However, the Facility has installed a diesel-powered standby pump on the water supply loop to assure maintenance of water pressure for fire control purposes in the event of a power failure. All of the waste process and treatment operations can accommodate power interruptions without adverse effects other than inconvenience and lost time. A generator or manual cleaning may be used for the wheel wash: trucks will not exit the Facility without the wheels being cleaned.

With respect to pumps, heavy equipment, firefighting equipment and other equipment and materials, the Facility has an inventory which includes two or more of virtually every type of equipment and material that would be needed in an emergency. Hence, the non-availability of necessary equipment is, by virtue of operating failure or being out of service for maintenance or repair, unlikely to occur.

F-4f Personnel Protection

All Facility personnel are required to wear hard hats, safety glasses, steel-toe shoes, or boots. Other personal protective equipment (e.g., coveralls, gloves, hearing protection, respirators), is provided as necessary for specific areas of the Facility. In addition, all employees are provided personnel protection and safety training to emphasize the importance of wearing protective equipment, following the Facility's safety rules and personal hygiene procedures (see Training Program in Section H).

To avoid the off-site carryout of toxic contaminants on employees' clothing and persons, an employee locker and shower facility (Building 404) is provided. Employees must pass through this facility when coming to work and change from street clothes to Facility-supplied uniforms and protective clothing. When leaving work, employees again must pass through this facility to remove their uniforms and protective clothing, shower and change back to their street clothes.

The Facility believes that these procedures and features provide excellent protection of personnel and prevent inadvertent removal of contaminants in soiled work clothing.

F-5 Prevention of Reactions of Ignitable, Reactive, and Incompatible Wastes

Pursuant to the Waste Analysis Plan, all wastes entering the Facility are assessed and analyzed for their ignitability, reactivity and incompatibility. These assessments and analyses are performed, per the Waste Analysis Plan (WAP) provided in Section C of this Application, as

wastes pass through various storage and processing units at the Facility. These analyses enable the Facility to identify ignitable and incompatible wastes so that they can be managed in a manner to prevent ignition or unplanned reactions. The following subsections summarize the precautions taken, but Sections D-1, D-2, D-6, D-9, E, G, and H of this Application should be referred to for further details.

F-5a Ignitable Wastes

To prevent unintended ignition of ignitable wastes, smoking, welding, open flames or other ignition sources and activities in container and tank storage areas and waste processing areas are prohibited. No Smoking signs are placed conspicuously in areas where ignitable or reactive wastes are stored or there is a hazard from ignitable or reactive waste. Smoking is permitted only in designated areas. All storage tanks are vented to prevent the buildup of ignitable vapors. The container processing/decanting area in Unit 700 is also separated from the staged lots of containerized wastes in the unit by a firewall.

The Facility believes that these procedures and devices provide adequate precaution for the prevention of accidental ignition of ignitable wastes to comply with 40 CFR 264.17 and ADEM Administrative Code Rule 335-14-5-.02(8).

F-5b Reactive Wastes

No incompatible wastes that cause any of the types of reactions listed in 40 CFR 264.17(b) and ADEM Administrative Code Rule 335-14-5-.02(8)(b) will be placed in the landfill trenches or cells. No untreated reactive wastes are, or will be, landfilled at the Facility. Corrosive wastes will have been neutralized before being landfilled. The Facility believes that these procedures will prevent the landfill disposal of incompatible wastes as well as the landfill disposal of wastes that could generate incompatible leachate; that is, wastes of leachate that would react to produce any of the reactions listed in 40 CFR 264.17(b) and ADEM Administrative Code Rule 335-14-5-.02(8)(b). Therefore, The Facility believes that these procedures will enable compliance with 40 CFR 264.17(b) and 264.313 and ADEM Administrative Code Rules 335-14-5-.02(8)(b) and 335-14-5-.14(14).

F-5c Incompatible Wastes

As described in Section D-1 of this Application, each truckload delivery of containers of wastes (60-80 containers) is placed in a separate lot on the floor of a container management unit until all of the containers in the delivery are inspected, sampled, and analyzed. To the extent that there are any containers of incompatible wastes in the delivery, these will be held in the same lot during staging as described in Section B and Section D-1 of this Application. This staging period is provided so that the laboratory can perform the necessary analysis to determine the hazard class (see the Waste Analysis Plan provided in Section C of this Application for a

discussion of hazard classes). However, these containers are separated from potentially incompatible wastes in other lots of wastes undergoing acceptance procedures. As soon as acceptance procedures are completed, containers holding compatible wastes within a class of wastes are moved to a separate staging area (or slot) to await treatment and/or transfer for disposal. Thus, as soon as receiving procedures enable an identification and classification of containers of wastes, they are segregated and staged in separate lots of compatible wastes.

Before any waste is placed in a tank, its compatibility with the wastes in the tank and the materials of construction of the tank will be assessed. The procedures outlined in the Waste Analysis Plan will be followed. These procedures will assure that incompatible wastes are not placed in the same tank, and that wastes incompatible with the materials of construction of the tank are not placed in the tank. If a waste is to be placed in a tank that has previously held an incompatible waste, residuals of the previous waste will be removed from the tank, and the tank will be cleaned before storage of the new waste. With regard to waste compatibility, Section D-2 of this Application provides procedures for tank cleaning and verification. The Facility believes that these procedures will enable compliance with 40 CFR 264.17(b) and 40 CFR 264.199, and ADEM Administrative Code Rules 335-14-5-.02(8)(b) and 335-14-5-.10(10).

[End of Section F Text]

SECTION F
PROCEDURES TO PREVENT HAZARDS

TABLES

TABLE F-2-1
GENERAL INSPECTION SCHEDULE
SECURITY DEVICES

Equipment	Inspection Element/Type of Problem	Inspection Frequency
Fence	inspect entire perimeter for breaches, damage	Monthly
Gates	check for proper gate lock function	Weekly
Warning Signs	check for presence and legibility of warning signs	Monthly
Lighting System	check for operability	Weekly

TABLE F-2-2

GENERAL INSPECTION SCHEDULE

ENVIRONMENTAL MONITORING SYSTEMS

Equipment	Inspection Element/Type of Problem	Inspection Frequency
Ground Water Monitoring Network	check if wells are visible and accessible to personnel	Weekly
	check for accidental damage to pipe/protective cover	Weekly
	check for tampering or inadvertent opening of cap/lock	Weekly
	check for operation of pumps (1st year)	Quarterly
	check for operation of pumps (remaining)	Semi-Annually
Surface Water and Wastewater Dis-charge Monitoring	check water surface for oil sheen/waste presence	Weekly
	monitor wastewater treatment plant effluent discharge per NPDES Permit	As Required
Meteorological Monitoring System	check for operation of vane and anemometer, recording equipment	Weekly
	manually check rain gauge for operation	Semi-Annually
Stormwater Containment Structures	check structure for breaches, erosion, seepage of water	Monthly and after storms ³
	monitor water quality as per PDES Permit	As Required
Sedimentation Basins (Non-Hazardous)	check dikes for breaches, erosion, seepage of water	Monthly and after storms ³
	check freeboard	Monthly and after storms ³

³ Defined as a rainfall event in which rainfall averages 0.1 in./hour or greater over a 24-hour period or rainfall that measures 1 inch or greater in one hour or less, as measured on-site.

TABLE F-2-3

GENERAL INSPECTION SCHEDULE

SAFETY AND EMERGENCY EQUIPMENT

Equipment	Inspection Element/Type of Problem	Inspection⁴ Frequency
Emergency Transport Vehicle ^{4a}	check accessibility check for deterioration, damage	Monthly & after each use Monthly & after each use
Fire Truck ^{4b}	check accessibility check for adequate supplies check for deterioration, damage	Quarterly & after each use Quarterly & after each use Quarterly & after each use
Hazmat Trailer	check accessibility check for adequate supplies check for deterioration, damage	Quarterly & after each use Quarterly & after each use Quarterly & after each use
Fire Extinguishers ^{4c}	check pressure gauge for full charge indication/punch tag check inspection records to ensure annual maintenance service is up-to-date check seal to ensure no one has used extinguisher check accessibility	Monthly Monthly Monthly Monthly
Self Contained Breathing Apparatus (SCBA's) ^{4d}	check for accessibility check for adequate supply, full charge on air tanks check for deterioration, damage check if functioning	Monthly Monthly Monthly Monthly
First Aid Room	check for adequate supplies	Quarterly

TABLE F-2-3 (CONT.)
GENERAL INSPECTION SCHEDULE
SAFETY AND EMERGENCY EQUIPMENT

Equipment	Inspection Element/Type of Problem	Inspection⁴ Frequency
Fire System ^{4e}	activate audible alarm	Monthly
	check accessibility	Monthly
Emergency Showers/Eye Wash ^{4f}	check that units activate and shut off properly	Monthly
	check accessibility	Monthly
Alarm System ^{4g}	check accessibility	Bi-monthly
	Activate audible alarm	Bi-monthly

⁴ Where a regulatory reference is noted, frequencies of tests and inspections shall be in accordance with the most current reference.

^{4a} Alabama Department of Health, Administration Code 420-2-1.

^{4b} Based upon guidance found in NFPA 1911

^{4c} 29 CFR 1910.157

^{4d} 29 CFR 1910.134

^{4e} 29 CFR 1910 Subpart L

^{4f} ANSI Z358.1

^{4g} 29 CFR 1910.165

TABLE F-2-4
GENERAL INSPECTION SCHEDULE
TRUCK SCALE, SAMPLING AND PARKING AREA

Equipment	Inspection Element/Type of Problem	Inspection Frequency
Bulk Sampling Area	visually check for evidence of leaking or spilled material	Daily, when managing waste
	removal of spill absorbent and cleanup material	Daily, when managing waste
	removal, containment and repair of leaking vehicle	Daily, when managing waste
Truck Scale	check for evidence of spills in area	Daily, when managing waste
	removal of spill absorbent	Daily, when managing waste
Truck Parking Areas	visually check for evidence of leaking or spilled material	Daily, when managing waste
	removal of spill absorbent and cleanup material	Daily, when managing waste
	removal, containment and repair of leaking vehicle	Daily, when managing waste

TABLE F-2-5a

CONTAINER MANAGEMENT UNITS INSPECTION SCHEDULE

Equipment	Inspection Element/Type of Problem	Inspection Frequency
Container Loading	check for damage to containers on slab and ramps	Daily, when managing waste
	check for removal of used absorbent and cleaning materials	Daily, when managing waste
	check for prompt container removal from receiving area	Daily, when managing waste
Container Storage Areas	check for evidence of spilled material on slab, ramps, drains, sumps	Weekly
	check for removal of absorbent materials and cleanup rags	Weekly
	check for cracks and gaps in base, concrete slab, sump and drains	Weekly
	check protective coatings on containment areas	Weekly
	check protective coatings under protective layer	Initially and Annually thereafter
	check for corrosion of grating over drains & sumps	Weekly
	check accessibility and operability of sump pumps	Weekly
	check for condition and availability of overpack containers	Weekly
	check for condition of temporary containment berms (if applicable)	Weekly
	Stored Containers	check for drum leaks or swelling, deterioration & corrosion
check that the drums are not open		Weekly
check for proper placement of drums		Weekly
check adequacy of aisle space		Daily, when managing waste
Container Handling and Staging Areas	check for spills	Daily, when managing waste
	check for removal of used absorbent & cleaning materials	Daily, when managing waste
	check for obvious deformation of conveyor in staging/treatment area	Weekly
	check dust filters and exhaust operability (if applicable)	Weekly

TABLE F-2-5b
CONTAINER LEVEL 1 INSPECTION SCHEDULE

Equipment	Inspection Element/Type of Problem	Inspection Frequency
Customer Containers	check to ensure that cover and closure devices are secured in the closed position	Within first day of acceptance and Annually thereafter
	visually inspect the container and its cover and closure devices for visible cracks, holes, gaps, or other open spaces into the interior of the container	Within first day of acceptance and annually thereafter
Site-generated Containers	check to ensure that cover and closure devices are secured in the closed position	Initially and once annually
	visually inspect the container and its cover and closure devices for visible cracks, holes, gaps, or other open spaces into the interior of the container	Initially and once annually

TABLE F-2-5c

CONTAINER LEVEL 2 INSPECTION SCHEDULE

Equipment	Inspection Element/Type of Problem	Inspection Frequency
Customer Containers	ensure that the container meets the requirement of 264.1086(d)(1)	Upon acceptance
	check to ensure that cover and closure devices are secured in the closed position	Within first day of acceptance and annually thereafter
	visually inspect the container and its cover and closure devices for visible cracks, holes, gaps, or other open spaces into the interior of the container	Within first day of acceptance and annually thereafter
Site-generated Containers	check to ensure that cover and closure devices are secured in the closed position	Initially and once annually
	visually inspect the container and its cover and closure devices for visible cracks, holes, gaps, or other open spaces into the interior of the container	Initially and once annually
	perform Method 21 (40 CFR Part 60, Appendix A) testing on those containers greater than 119 gallons and in light material service	Annually

TABLE F-2-6a**TANK MANAGEMENT INSPECTION SCHEDULE**

Equipment	Inspection Element/Type of Problem	Inspection Frequency
Tank Truck Loading/Unloading Area	check for evidence of spills in unloading area	Daily, when managing waste
	check for removal of spill absorbent and cleanup materials	Daily, when managing waste
	check sump, grating and curbs for cracks, damage	Daily, when managing waste
	inspect hoses for deterioration or leakage	Daily, when managing waste
	inspect hose coupling and valves for leakage	Daily, when managing waste
Storage & Treatment Tank Containment Area	check for evidence of spilled materials	Daily, when managing waste
	check for cracks and gaps in base	Daily, when managing waste
	check protective coatings on containment areas	Daily, when managing waste
	check for evidence of seepage outside containment (e.g., discoloration)	Daily, when managing waste
	check for debris, cleanup residue, improperly stored equipment	Daily, when managing waste
Storage and Treatment Tanks	inspect tank exterior for cracks, leaks, discoloration and obvious deformation	Daily, when managing waste
	perform wall thickness inspections, leak tests, or visual inspections	Annually
Access Hatches, Vents, and Sampling Ports	check for leaks	Daily, when managing waste
	check for damage	Daily, when managing waste

TABLE F-2-6a (CONT.)

TANK MANAGEMENT INSPECTION SCHEDULE

Equipment	Inspection Element/Type of Problem	Inspection Frequency
Fill/Drain Pumps and Piping	inspect piping for leaks	Daily, when managing waste
	check for damage	Daily, when managing waste
	inspect valve seals for leaks	Daily, when managing waste
	check that handles are not bent or damaged	Daily, when managing waste
Liquid Levels	check tank liquid level indicators (overflow control monitors) for operability	Daily, when managing waste
Temperature Gauges, Pressure Gauges	check for operability (if applicable)	Daily, when managing waste
Safety Vents, Rupture Discs	check for blockage, tampering, or rupture	Daily, when managing waste
Flanges, Pumps, Valves	check for evidence of leaks from seals	Daily ⁵ , when managing waste
	monitor pumps and valves in light liquid service for leaks	Monthly ⁵
	check pipe flanges and connections for leaks	Weekly
Cathodic Protection Systems	check for proper operation of cathodic protection (if present)	Six months after initial installation, and annually thereafter
	test source of impressed current (if present)	Bimonthly (every other month)

⁵ This requirement applies to equipment containing hazardous wastes with organic concentrations of a least 10 percent by weight.

TABLE F-2-6b
TANK LEVEL 1 INSPECTION SCHEDULE

Equipment	Inspection Element/Type of Problem	Inspection Frequency
Fixed Roof	inspect roof section joints and between the interface of the roof edge and the tank wall for visible cracks, holes, gaps, or other open spaces	Annually
Closure Devices	check for broken or missing hatches, access covers, or caps	Annually
	check to ensure that closure devices are secured in the closed position	Annually
	check for visible cracks, holes, gaps, or other open spaces between closure device and the perimeter of the opening	Annually
	inspect seals and gaskets for damage	Annually
Conservation Vents	check device for damage	Annually
	inspect seals and gaskets for damage	Annually

TABLE F-2-6c
TANK LEVEL 2 INSPECTION SCHEDULE

Equipment	Inspection Element/Type of Problem	Inspection Frequency
Fixed Roof	inspect roof section joints and between the interface of the roof edge and the tank wall for visible cracks, holes, gaps, or other open spaces	Annually
Closure Devices	check for broken or missing hatches, access covers, or caps	Annually
	check to ensure that closure devices are secured in the closed position	Annually
	check for visible cracks, holes, gaps, or other open spaces between closure device and the perimeter of the opening	Annually
	inspect seals and gaskets for damage	Annually
Conservation Vents	check device for damage	Annually
	inspect seals and gaskets for damage	Annually

TABLE F-2-6d

**CLOSED-VENT SYSTEM AND CONTROL DEVICE
INSPECTION SCHEDULE**

Equipment	Inspection Element/Type of Problem	Inspection Frequency
Piping	check for visible cracks, holes, and gaps in hard and flexible piping	Annually
Permanently or Semi-permanent Sealed Connection	monitor using Method 21 for <i>no detectable emissions</i> visually inspect for defects in seals gaskets, or loose connections	Initially Annually
	monitor any components or connections which have been repaired, replaced, or unsealed using Method 21 for <i>no detectable emissions</i>	As Required
Components or Connections <u>not</u> Permanently or Semi-permanently Sealed	monitor using Method 21 for <i>no detectable emissions</i> (e.g., conservation vents, valves, quick connect caps and plugs)	Annually
Control Devices	monitor to check operation	Daily

TABLE F-2-7
LANDFILL INSPECTION SCHEDULE

Equipment	Inspection Element/Type of Problem	Inspection Frequency
Primary Leachate Collection System/Primary Liner on slopes & near haul road of Active Trench	minor damage caused by local slope failures, severe erosion or equipment	Weekly and after storms ⁶
Run-on/Run-off Control Systems On Active Trench	check channels for erosion, siltation and debris check for cracks or leaks in dikes	Weekly and after storms ⁶ Daily
Wind Dispersal On Active Trench	check for intermediate cover check for effectiveness of fugitive dust suppression on roads check for evidence of waste or reagent particulate dispersal	Weekly Weekly Weekly
Final Cover of Inactive/Closed Trenches	check for erosion, standing water, non-uniform subsidence, maintenance of grass cover (until vegetative cover is in place) check for erosion, standing water, non-uniform subsidence, maintenance of grass cover (remaining post-closure care period)	Weekly and after storms ⁶ Quarterly and after storms ⁶
Primary Leachate Collection System Trenches 19, 21 and Subsequent Trenches	check for presence of leachate in sumps above operating limits check for level of leachate in sumps check pumps for operability check for damage to riser pipes	Weekly and after storms ⁶ Monthly Weekly and after storms ⁶ Monthly

TABLE F-2-7 (CONT.)
LANDFILL INSPECTION SCHEDULE

Equipment	Inspection Element/Type of Problem	Inspection Frequency
Secondary Leachate Collection System	check for presence of leachate in sumps	Weekly and after storms ⁶
Trench 21 and Subsequent Trenches	check pumps for operability	Weekly after storms ⁶
	check for damage to riser pipes	Monthly
Surveyed Benchmarks	check for damage	Annually

⁶ Defined as a rainfall event in which rainfall averages 0.1 in./hour or greater over a 24-hour period or rainfall that measures 1 inch or greater in one hour or less, as measured on-site.

TABLE F-2-8
CONTAINMENT BUILDING INSPECTION SCHEDULE

Equipment	Inspection Element/Type of Problem	Inspection Frequency
Waste Treatment Area	check for spills	Daily, when managing waste
	check for removal of cleanup materials	Daily, when managing waste
	check for obvious deformation of conveyor systems, if applicable	Weekly
Containment Area	check for cracks and gaps in base, concrete slab and sumps	Weekly
	check sumps, grating and curbs for cracks, damage	Weekly
	check for evidence of seepage outside containment	Weekly
	check for debris, cleanup residue, improperly stored equipment	Weekly
	check that waste is not stored above height of the the containment wall in accordance with Section D-9 of the Application	Daily, when managing waste
Doors, windows, cracks	check for visible dust emissions	Daily, when managing waste
	check for prevention of waste tracking out of unit	Daily, when managing waste
Leak Detection	check for presence of liquids in leak detection system	Weekly

[End of Section F Tables]

SECTION F
PROCEDURES TO PREVENT HAZARDS

FIGURES

Figure F-2-1

Remedial Work Order and Re-inspection Report

DATE/TIME OF _____

RWO ASSIGNED TO _____

INSPECTOR _____

FOR AREAS/SHIFT _____

#	Description of Issue	Priority	Corrective Action taken	Date/Time	In.	Re-inspection Date/Time	In.

SAMPLE

- Priority #1: Immediate attention required
- Priority #2: End of shift
- Priority #3: Requires Engineering/Maintenance assistance

EMD Close-out Verification: _____ Date: _____
--

RWO # _____

EXHIBIT F-A

SECTION F

RCRA SUBPART CC

INSPECTION, MONITORING AND REPAIR PROGRAM

EXHIBIT F-A
RCRA SUBPART CC
INSPECTION, MONITORING AND REPAIR PROGRAM
CHEMICAL WASTE MANAGEMENT
EMELLE, ALABAMA FACILITY

F-A-I Definitions

Closed-vent system means a system that is not open to the atmosphere and that is composed of piping, connections, and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a control device.

Closure device means a cap, hatch, lid, plug, seal, valve, or other type of fitting that blocks an opening in a cover such that when the device is secured in the closed position it prevents or reduces air pollution emissions to the atmosphere.

Connector means flanged, screwed, welded, or other joined fittings used to connect two pipelines or a pipeline and a piece of equipment.

Container Level 1 control consists of a) a container that meets the DOT regulations on packaging hazardous materials for transportation, or b) a container equipped with a cover and closure devices that form a continuous barrier over the container openings such that when the cover and closure devices are secured in the closed position there are no visible holes, gaps, or other open spaces into the interior of the container.

Container Level 2 control consists of a) a container that meets the DOT regulations on packaging hazardous materials for transportation, or b) a container that operates with *no detectable organic emissions*.

Control device means an enclosed combustion device, flare, or a device designed and operated to reduce the total organic content of the inlet vapor stream vented to the control device by at least 95% by weight.

Control device shutdown means the cessation of operation of a control device for any purpose.

Equipment means each valve, pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, or flange, and any control device or system required by this subpart.

First attempt at repair means to take rapid action for the purpose of stopping or reducing leakage of organic material to the atmosphere using best practice.

No detectable emission means no escape of organics from a device or system to the atmosphere as determined by an instrument reading less than 500 ppm by volume (ppmv) above the background level at each joint, fitting, and seal when measured in accordance with the requirements of Method 21 in 40 CFR part 60, Appendix A, and by no visible openings or defects in the device or system such as rips, tears, or gaps.

Pressure release means the emission of material resulting from the system pressure being greater than the set pressure of the pressure relief device.

Repaired means that equipment is adjusted, or otherwise altered, to eliminate a leak.

Tank Level 1 control requirements consist of a fixed roof with all opening sealed. A conservation vent, which vents to the atmosphere, is used to control tank pressure and limit organic emissions.

Tank Level 2 control requirements consist of a fixed roof with all openings sealed. The tank is vented through a closed-vent system to a control device (e.g. carbon filter) designed and operated to reduce the total organic content of the inlet vapor stream by at least 95 percent by weight.

F-A-2 Tank Level 1 Program

F-A-2a Scope

Level 1 controls apply to those tanks on-site, which are used to manage site-generated leachate. These tanks include Tanks 1405 thru 1420, 1701 thru 1704, 520, 634 through 636, and T-A.

F-A-2b Initial (prior to 12/6/96)

Determine the maximum organic vapor pressure for the waste to be managed in the tank using one of the methods specified in 265.1084(c)(3)(ii).

Visually inspect the fixed roof and its closure devices for defects that could result in air pollution emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof

sections or in between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

F-A-2c Yearly

Determine the maximum organic vapor pressure of the material to be placed in the tank whenever a change in the hazardous waste managed in the tank could potentially cause the vapor pressure to increase to a level equal or greater than the level specified in 265.1085(b)(1)(i).

Visually inspect the fixed roof and its closure devices for defects, as described above.

F-A-2d Repair

A first effort to repair defects shall be made no later than 5 calendar days after detection, and repair shall be completed as soon as possible but no later than 45 calendar days after detection.

Repair of a defect may be delayed beyond 45 calendar days if it is determined that repair of the defect requires emptying or temporary removal from service of the tank as no alternative tank capacity is available at the site to accept the hazardous waste normally managed in the tank. In this case, the defect will be repaired the next time the process or unit that is generating hazardous waste managed in the tank stops operation. Repair of the defect shall be completed before the process or unit resumes operation.

F-A-3 Tank Level 2 Program

F-A-3a Scope

Level 2 controls apply to those tanks on-site, which manage hazardous waste and do not meet Level 1 conditions. Currently, there are no active Level 2 tanks at the facility.

F-A-4 Closed-Vent System and Control Devices Program

F-A-4a Scope

The closed-vent system was formerly associated with the Level 2 tanks; however, currently there is no closed-vent system at the Facility.

F-A-5 Container Level 1 Program

F-A-5a Scope

Level 1 controls apply to those containers which are used to manage hazardous waste and have a design capacity greater than 26 gallons and less than or equal to 119 gallons; or a container greater than 119 gallons that is not in light material service.

To meet Level 1 controls a container must be either 1) a container that meets the DOT regulations on packaging hazardous waste materials for transportation, or 2) a container equipped with a cover and closure devices that form a continuous barrier over the container openings such that when the cover and closure devices are secured in the closed position there are no visible holes, gaps, or other open spaces into the interior of the container (e.g. roll-off boxes).

F-A-5b Initially

When hazardous waste is first placed into a container or within 24 hours of the facility accepting possession of a container of hazardous waste a visual inspection of the container and its cover and closure devices will be made to detect any visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position.

The facility shall maintain a copy of the procedure used to determine that containers with a capacity of 119 gallons or greater, which do not meet applicable DOT regulations, are not managing hazardous waste in light material service.

F-A-5c Yearly

In the case when a container used to manage hazardous waste remains at the facility for a period of 1 year or more, the container will be reinspected at least once every 12 months, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position.

F-A-5d Repairs

When a defect is detected for the container, cover, or closure devices, a first effort to repair the defect shall be attempted no later than 24 hours after detection, and repair shall be completed as soon as possible but no later than 5 calendar days after detection. If repair of a defect cannot be completed within 5 calendar days, then the hazardous waste shall be removed from the container and the container shall not be used to manage hazardous waste until the defect is repaired.

F-A-6 Container Level 2 Program

F-A -6a Scope

Level 2 controls apply to containers having a design capacity greater than 119 gallons that are in light material service.

To meet Level 2 controls a container must be either; 1) a container that meet the DOT regulations on packaging hazardous materials for transportation, or 2) a container that operates with *no detectable emissions* using Method 21, or 3) a container that has been demonstrated within the preceding 12 months to be vapor-tight by using Method 27.

F-A-6b Initial

Site containers, which require Level 2 controls, will either be determined to be DOT approved, monitored for *no detectable emission* using Method 21, or determined to be vapor-tight using Method 27.

Within 24 hours of accepting possession of a container of hazardous waste a visual inspection of the container and its cover and closure devices will be made to detect any visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position.

F-A-6c Yearly

Site containers which require Level 2 controls will either be determined to be DOT approved, monitored for *no detectable emission* using Method 21, or determined to be vapor-tight using Method 27.

In the case when a container used for managing hazardous waste remains at the facility for a period of 1 year or more, the container will be reinspected at least once every 12 months to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position.

F-A-6d Repairs

When a defect is detected for the container, cover, or closure devices, a first attempt to repair the defect will be attempted no later than 24 hours after detection, and repair shall be completed as soon as possible but no later than 5 calendar days after detection. If repair of a defect cannot be completed within 5 calendar days, then the hazardous waste shall be removed from the container and the container shall no be used to manage hazardous waste until the defect is repaired.

[End of Exhibit F-A]