

# **Attachment 6**

**RCRA Part B Permit Application**

## **Procedures to Prevent Hazards**

**US Ecology Tulsa, Inc.**

**EPA ID: OKD000402396**



**Tulsa, Oklahoma**

**Permit Application**

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## **PROCEDURES TO PREVENT HAZARDS**

In accordance with 40 CFR 264.31, the US Ecology Tulsa, Inc. facility is designed, constructed, maintained, and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or water which could threaten human health or the environment. US Ecology Tulsa, Inc. also is constructed and has in place safety procedures and equipment to prevent hazards in unloading operations, runoff from hazardous waste areas, contamination of water supplies, effects of equipment/power failure, exposure of personnel to hazardous waste, and releases to atmosphere as required by 40 CFR 270.14(b)(8).

### **1. PREVENTING HAZARDS IN UNLOADING OPERATIONS: 40 CFR 270.14(b)(8)(i)**

Unloading operations at the facility take place adjacent to container and tank storage and treatment areas with equipment designed to minimize manual lifting and handling of waste which include forklifts, drum dollies, electric and manual pallet jacks, and drum grabber equipment. For bulk liquid loads, flexible hoses with "quick connect" couplings may be used to transfer wastes directly to treatment or storage tanks.

The flood walls provide containment structures for all operating areas within the 100-year flood plain. Details of the wall construction, storage volume needed to contain waste liquids, and precipitation information are discussed in Section B, Facility Description. Hazardous waste activities will not be conducted in areas within the designated 100-year flood plain. Solid waste management also includes solid waste transfer station activities in accordance with state flood protection requirements of OAC 252: 520-5-7.

### **2. PREVENTING HAZARDS OF RUNOFF FROM HW AREAS: 40 CFR 270.14(b)(8)(ii)**

The area of the facility within the 100-year flood plain is diked by a reinforced concrete wall. The wall is designed for flood protection, but also serves to contain

precipitation run-off within this portion of the facility (i.e., accumulated precipitation is contained within the perimeter of the wall). Where hazardous waste management areas are subject to precipitation run-off/run-on (container storage and tank systems), secondary containment systems as required under Subparts I and J of 40 CFR 264 are provided (see Attachment 10-Process Information for additional details regarding container and tank management practices). Precipitation accumulated in containment areas (including liquids accumulated within the flood wall) will be managed in accordance with state and federal regulations.

**3. PREVENTION OF CONTAMINATION OF WATER SUPPLIES: 40 CFR 270.14(b)(8)(iii)**

Waste management practices and facility structures have been designed to prevent contamination of water supplies with the hazardous constituents managed on-site. Hazardous waste storage areas are equipped with secondary containment systems. Secondary containment systems for hazardous waste tank and container storage areas are coated with an impervious, chemically resistant material. Incidental spills will be contained and collected; the residuals will be managed in accordance with state and federal regulations.

**4. MITIGATION OF EFFECTS OF EQUIPMENT FAILURE AND POWER OUTAGES: 40 CFR 270.14(b)(8)(iv)**

US Ecology Tulsa, Inc. relies on the local power company for power supply. Operations may be shut down when power supply is interrupted. US Ecology Tulsa, Inc. may utilize generator power supplies to operate facility process units.

Equipment failure and malfunction will be recorded in the operating record. Maintenance personnel will inspect and repair malfunctioning equipment as needed. Equipment and instrument calibration will be performed as needed by qualified

contractors to provide US Ecology Tulsa, Inc. with quality data reporting. The inspection schedule and inspection log sheets provide for inspection of tanks and accessories to minimize the potential for releases to the environment.

5. **PREVENTION OF EXPOSURE OF PERSONNEL TO HW: 40 CFR 270.14(b)(8)(v)**

All facility personnel handling hazardous wastes are provided initial and annual training (see Attachment 7- Training Programs and Documents) to minimize the potential for harmful exposure to hazardous waste or hazardous waste constituents. Training includes a 24-hour training (as required by 29 CFR 1910.120), general characteristics of hazardous wastes handled at the facility, how to select proper personnel protection for the different hazardous wastes handled, and the locations and use of facility decontamination equipment. Operations personnel are trained to wear Personal Protective Equipment (PPE) for specific tasks when handling hazardous waste. Specific PPE will be selected based on the protection required for various tasks.

The facility maintains the following PPE to facilitate undue exposure:

- Air Purifying Respirators and appropriate cartridges
- Tyvek
- Chemical resistant gloves
- Face shields
- Safety Glasses
- Hard Hats
- Other miscellaneous items such as sleeves, leather gloves, side shields

6. **PREVENTION OF RELEASES TO ATMOSPHERE: 40 CFR 270.14(b)(8)(vi)**

US Ecology Tulsa, Inc. utilizes multiple methods to prevent releases to the atmosphere. As identified in the Waste Analysis Plan, US Ecology Tulsa, Inc. does not accept waste with a VOC content greater than 500ppm, which minimizes any excess release of material to the atmosphere. Containers are kept closed when not sampling or processing

waste to prevent releases. Containers are also inspected daily to ensure they are in acceptable condition and will prevent release of its contents to the atmosphere. Tanks on site that store waste are inspected to make sure the roofing, valves, and other associated items are in acceptable condition and will prevent release of its contents to the atmosphere.

-----END OF ATTACHMENT-----