

Hazard Communication Plan and Hurricane Preparedness Plan

ASARCO – Encycle Facility
Soil Remediation Project

(month) (day), 2012

(soil remediation contractor name and
logo here)

(Soil Remediation Contractor name and signature here)

(Soil Remediation Contractor principal manager name and signature here)

**Hazard Communication
and Hurricane
Preparedness Plan**

ASARCO – Encycle Facility
Soil Remediation Project

Prepared for:
ASARCO – Encycle Facility
Soil Remediation Project
Corpus Christi, Texas

Project Reference: _____

Prepared by:

(Soil Remediation Contractor
name and address here)

Date:
(Month)(Day), 2012

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1.0 Purpose

This Hazard Communication Plan (Plan) establishes methods for providing information for individuals and contractors working on the ASARCO-Encycle soil remediation project located at 5500 Up River Road, Corpus Christi, TX (site). Site specific topics covered under this plan include soil remediation work areas, constituent concentrations in the soils, training, site orientation, emergencies, check-in and check-out procedures, and hurricane preparedness procedures.

2.0 Scope

This Plan establishes communication requirements for work activities at the site that include excavation and on-site treatment (stabilization) of affected soils including characteristically hazardous soils, transport of the soils to authorized landfill(s), loading and transport of wooden railroad ties to authorized landfill(s), and backfilling of the soil excavation areas and O1 Landfill capping with clean fill. Specifically, this plan identifies labels and other hazard warning methods, Material Safety Data Sheets (MSDSs), hazardous material evaluations, employee information and training required to be posted and/or implemented during the course of the this project, and hurricane preparedness activities to be implemented during hurricane season (June 1 through November 30). The Plan will ensure that:

- Employees have proper training and awareness of hazardous materials and hazardous areas at the site;
- Material Safety Data Sheets (MSDS) are on file for employee access;
- Proper hazard identification posting and labeling are accomplished; and
- Employees are aware of the procedures to be followed in the event of a forecasted approaching tropical storm or hurricane.

3.0 Responsibilities

This Plan applies to employees, subcontractors, transportation contractors, and visitors entering the site that may come in contact with or be exposed to hazardous materials or situations at the workplace while performing their normal duties or during emergency conditions.

Management Shall:

- Provide training and maintain records of training;
- Ensure a list is maintained of all hazardous materials and locations as they are known in the workplace;
- Ensure that MSDSs are readily available and the locations of MSDS information are identified to employees;
- Evaluate the hazard potential of new hazardous materials being discovered in the workplace and develop work strategies as needed;
- Provide guidance for labeling of hazardous materials and areas, and;
- Ensure workplace inspections include evaluations of material safe handling and storage practices.

Supervisors and Crew Supervisors Shall:

- Evaluate the soil remediation bid package and the May 27, 2005 report entitled “*Corrective Measures Study and Corrective Measures Implementation Work Plan*” (CMS) as they relate to the locations and concentrations of constituents present in the soils and wooden railroad ties in the project work areas;
- Identify the affected soil locations associated with jobs under their supervision and make sure their employees have received the appropriate hazard communication training (both general and specialized) before they begin any work assignment involving hazardous materials or hazardous work areas;
- Ensure personnel who may come into contact with affected soils have received Hazardous Waste Site Operations and Emergency Response (HazWoper) 40-Hour OSHA Training (29 CFR 1910.120) and subsequent annual 8-hour annual HazWoper refresher training (29 CFR 1910.120);
- Ensure personnel employ the protective measures prescribed by work plans and local operating instructions when working with hazardous materials or in hazardous work areas;
- Ensure personnel use, transport, and store hazardous materials in a safe manner, and;
- Ensure hazardous material containers are labeled properly.

Staff Shall:

- Familiarize themselves with the facility map, soil excavation and treatment areas, wooden railroad tie locations, hazard postings, hazard labels, and MSDSs so they can use this information as needed, and;
- Employ the protective measures prescribed by work plans and local operating instructions when working with hazardous materials or in hazardous areas.

4.0 Training

Initial training shall be provided for all employees, subcontractors, transportation contractors, and visitors before entering the site. This training will cover the following topics:

- Overview of Plan policy, including individuals “rights to know”;
- Operations in the work area where hazardous materials are present;
- How to read warning labels and identify the presence or release of hazardous materials;
- Emergency procedures for spills/accidents, including fire hazards, first aid, clean-up, and disposal, and;
- Location and availability of this Plan, the CMS, hazardous materials lists, and MSDSs.

4.1 Site Orientation and Site Check-in

All project staff and site visitors must receive an initial site orientation by the soil remediation Contractor. The site orientation shall be developed to brief the individual on the scope of work, site plans, work procedures, personal protective equipment (PPE), and active work areas. Once the person or group has been through the orientation they will sign an acknowledgement form prepared by the soil remediation Contractor indicating that they are familiar with the site protocols.

All personnel, subcontractors, and visitors are required to sign in at the soil remediation Contractor project office trailer. By doing so, project management can keep track of who is on-site, what activities they are performing, and approximately where they can be found. Project foreman and crew supervisors will be given a 2-way radio by the soil remediation Contractor and also be required to list a contact cell phone number as an alternate method to contact the crew.

4.2 Specialized Training

Specialized training shall also be provided by the soil remediation Contractor on an as-needed basis as new hazards are introduced into the workplace and for hazards that are newly discovered (e.g., from revised sampling and characterization data).

4.3 Recurring Training

On-going site-specific training will be provided to soil remediation Contractor employees and their subcontractors by the soil remediation Contractor. Training certificates will be kept in the office trailer and shall be available for review by any member of the project staff. Records will be periodically reviewed to ensure staff certifications are current. Workers will be assigned to work tasks based on experience level and qualifications. Under no circumstance will staff be permitted to work on the site without proper certifications.

5.0 Hazard Information

A list of workplace hazardous materials, soil excavation and treatment areas, wooden railroad tie locations, and hazardous areas shall be provided in binders distributed among managers, superintendents, and crew supervisors by the soil remediation Contractor. In addition, copies of these binders shall be kept in the project office files. Excavation, storage and treatment of soils including characteristically hazardous soils; and loading and transport of wooden railroad ties including characteristically hazardous wooden railroad ties; must include the appropriate labeling and paperwork as required by local, state, and federal law. Copies of all transportation documentation shall be kept at the office trailer. Workplace MSDSs shall be located in the project office trailer.

5.1 Exclusion Zones

Exclusion zones will be established by the soil remediation Contractor for several work elements identified below:

- Areas where affected soils are excavated;
- Areas where characteristically hazardous wooden railroad ties are located; and
- Areas where affected soils are treated (soil stabilization).

Depending on the type of work being performed, exclusion zones maybe delineated using warning tape, warning signs, barricades, fencing, by posting a watch person, or a combination of approved methods. Only authorized personnel with the appropriate training will permitted in exclusion zones.

5.2 Hazard Clearance

Following excavation of each of the affected soil areas, verification soil samples will be collected from each excavation area by the Trustee representative for laboratory analyses. Immediately following verification soil sample collection, the soil excavation area will be covered by the soil remediation Contractor using 6-mil polyethylene sheeting (Visqueen) or Trustee-approved equal. If the analytical results of the verification soil samples show that soils in portions of the soil excavation area remain above the soil cleanup standards, the soil remediation contractor will conduct further soils excavation in those portions of the excavation as described above until verification soil samples show the soil cleanup standards for the entire soil excavation area have been met. The soil remediation contractor will then be notified by the Trustee when the entire excavation has met the soil cleanup standards. The soil remediation contractor shall then backfill the entire soil excavation area to original ground surface elevation.

5.3 Storage

All of the excavated soils shall be stored in the Lettered Bins Building at the end of each day. Excavated soils can be temporarily stored on 6 mil polyethylene sheeting (or Trustee-approved equal) within 100 feet of the area undergoing soils excavation during the work day, for subsequent loading and transport to the Lettered Bins Building that same day. No excavated soils shall be stockpiled above-ground overnight. If an excavated soil stockpile cannot be loaded and transported to the Lettered Bins Building the same day it is excavated, the soil stockpile shall be returned to the excavation that same day by the soil excavation contractor. All active/open soil excavation areas shall be covered with 6 mil polyethylene sheeting (or Trustee-approved equal) at the end of each day.

6.0 Transportation

As empty trucks enter the facility, they will check-in at the office trailer. During check-in each driver will state the purpose for being at the site and be given a numbered identification card to be placed in the cab window of the truck. If the driver is new they will be given a site orientation outlining the plans and procedures developed for the site. In addition, drivers will be given a facility map and specific access and egress instructions.

Prior to filling each roll off box with excavated soils, the truck driver will proceed to the designated truck scale area near the Lettered Bins Building, where the empty truck weight will be recorded by the scale attendant. After the empty truck has been weighed, the truck shall proceed to the soil excavation area to be loaded with excavated soils, then covered with a tarp. The truck driver shall then proceed back to the designated truck scale area to determine the weight (tons) of excavated soils, which shall be recorded by the scale attendant. The truck driver shall then proceed to the Lettered Bins Building to unload the excavated soils into one of the soil treatment bins as determined by the soil remediation Contractor. Each bin will be assigned to a specific SWMU, signs will be posted at each bin entrance with the SWMU name, and only soils from that SWMU shall be placed into that bin.

The soils in the soil treatment bins will be sampled by the Trustee to determine if the target soil stabilization treatment limits have been met. If soil sample analytical results show the target soil

stabilization treatment limits have been met, the soil remediation Contractor will be notified by the Trustee that those soils can be transported to the designated landfill. Once the truck has been loaded with the treated soils, it will be tarped, then proceed to the office trailer to check out of the facility. During checkout, the driver will return the identification card, be given the appropriate paperwork/manifest for the material being transported, and the vehicle and trailer will be inspected by the soil remediation Contractor for placarding and safety.

7.0 Site Communication

Supervisors and managers will be equipped with 2-way radios by the soil remediation Contractor. The project channel shall be designated as channel 7. As a backup to the primary communication method at the site, cell phone numbers of project management and other key personnel will be posted and copies available at the office trailer.

8.0 Emergency Notification Procedures

An emergency evacuation plan shall be posted at the office trailer and reviewed with site personnel during initial orientation. The plan shall identify the following information at a minimum:

- Evacuation Routes;
- Rally Points;
- Emergency Phone Numbers;
- Utility Company Emergency Contacts, and;
- Locations of Spill Containment Equipment and PPE.

Identification of an emergency will be broadcast via the 2-way radio system. In the event of an emergency dial 911. To familiarize emergency services with the facility layout, rally points, and evacuation procedures, a practice drill or walk through will be conducted with local emergency services. This will enable more efficient routing of emergency personnel to various areas of the site, familiarize emergency personnel with site critical points of contact, and enhance response time.

In the event of an emergency situation (fire, chemical release, etc) as a result of the soil remediation related activities that may impact the nearby Dona Park neighborhood or industrial facilities, project management will implement the following emergency response procedures:

- Contact Local Emergency Planning Committee (LEPC) at 361-826-3960 or 361-880-3960. Project management will provide the LEPC team pertinent information regarding the type, location, and severity of the situation. The public may then call 826-INFO (4636) to find out more information during a significant emergency.
- Contact Texas Commission on Environmental Quality (TCEQ) Region 14 office in Corpus Christi at 361-825-3100. The project team will report the emergency to the TCEQ Region 14 to assist in a

coordinated response as well as to provide another point of contact for information regarding the event.

- Contact the local fire department and police department -911. Emergency services will be contacted to coordinate response efforts.
- Public evacuation orders will be managed and coordinated by project management, law enforcement, and the civil emergency communication system.

9.0 Hurricane Preparedness Procedures

Due to the location of the Site in an area that is susceptible to hurricane activity, the following guidelines have been prepared in the event that hurricane landfall in the area is possible or imminent. Some of the preparatory guidelines were selected from the document “Emergency Management Guide for Business and Industry: A step-by-step approach to emergency planning, response, and recovery for companies of all sizes” (FEMA, 1993).

This document includes information regarding preliminary activities that should be performed to help plan and prepare for a potential hurricane. In addition, a generalized timeline of activities has been developed to outline procedures for evacuation of the site in the event of a hurricane.

The following sections are included below:

- **General:** Includes general hurricane information
- **Preparatory Activities:** Provides general preparatory guidelines related to site preparation, authority, team development, training, etc.
- **Evacuation Guidelines:** Includes the evacuation steps required in the event that a hurricane is approaching or imminent.

General:

A hurricane brings torrential rains and a storm surge of ocean water that crashes into land as the storm approaches. Hurricane advisories are issued by the National Weather Service as soon as a hurricane appears to be a threat. The hurricane season extends from June through November.

Hurricane Watch – An announcement that hurricane conditions (sustained winds of 74 mph or higher) are *possible* within the specified coastal area. Because hurricane preparedness activities become difficult once winds reach tropical storm force, the hurricane watch is issued 48 hours in advance of the anticipated onset of tropical-storm-force winds. An evacuation may be necessary.

Hurricane Warning – An announcement that hurricane conditions (sustained winds of 74 mph or higher) are *expected* somewhere within the specified coastal area. Because hurricane preparedness activities become difficult once winds reach tropical storm force, the hurricane warning is issued 36 hours in

advance of the anticipated onset of tropical-storm-force winds. Take precautions at once. If advised, evacuate immediately.

Preparatory Activities:

The following groups of activities should be performed prior to a potential hurricane and maintained during the hurricane season. Following these guidelines will aid in the safety of site personnel, property, and the environment by reducing confusion and establishing a plan of action during evacuation.

Establish Lines of Communication and Authority:

- Identify a planning team;
- Define the duties of personnel with an assigned role during an evacuation. Establish procedures for each position and prepare checklists for all procedures;
- The assigned roles during an evacuation should include at a minimum:
 - Incident Command – Individual with authority to order evacuation, initiate/guide activities according to the plan.
 - Communication Lead – Individual to maintain communication and track all employees and functional groups during the evacuation. The communication lead will also be responsible for coordinating the evacuation location of all personnel and maintaining contact following the emergency.
- Determine lines of succession to ensure continuous leadership, authority, and responsibility in key positions;
- Determine equipment and supply needs for each response action, and;
- Provide Training.

Protecting Site Facilities:

Protecting the site facilities, equipment, and vital records is essential to restoring operations following an emergency. The following items should be performed prior to an evacuation event:

- Ensure that key site documents can be quickly compiled and transported, and;
- Obtain response equipment and supplies, for example:
 - Spare generator and fuel.
 - Emergency lighting (plugged and battery powered).
 - 5/8" marine plywood, pre-cut to size of trailer windows/entrance.
 - Fire Extinguishers.
 - Rain gear.
 - Trash pump and hose.

Evacuation Preparation:

- Determine the conditions under which an evacuation will be necessary (see below);
- Establish a clear chain of command. Identify personnel with authority to order an evacuation. Designate "evacuation wardens" to assist others in an evacuation and to account for personnel;
- Establish specific evacuation procedures. Establish a system for accounting for personnel. Consider employees' transportation needs for community-wide evacuations;

- Post evacuation procedures;
- Designate personnel to continue or shut-down critical operations while an evacuation is underway. They must be capable of recognizing when to abandon the operation and evacuate themselves;
- Coordinate plans with the local emergency management office, and;
- Designate primary and secondary evacuation routes/destinations.

Training and Information:

- Conduct training meetings or activities with personnel to ensure all employees are aware of hurricane precautions and procedures;
- Post the plan and contact lists;
- Assist employees with emergency preparedness for their families, and;
- Ensure access to important personal information for employees (home phone, next-of-kin, medical) in an emergency. (e.g.; storing information on CD or in sealed envelopes).

Evacuation Guidelines:

The national weather service provides hurricane watch and warning notifications based on the criteria stated in the definitions above (including up to 48 hours notice). Various weather services also provide approximate landfall predictions in advance of the watch or warning determination. Due to the amount of time that will be required for site evacuation, the Incident Command will need to use both of these information sources as a determining factor in ordering an evacuation.

Due to the nature of site activities, it is necessary that extensive preparatory measures be taken if a hurricane threatens the area. As a result, the following guidelines are presented according to a two-stage approach. These stages include:

- **Evacuation Preparation** – Activities conducted in preparation of a storm based on initial weather service indications that the geographic area is in a “probability zone” for hurricane landfall.
- **Imminent Evacuation** – Preparation has already occurred and the national weather service has issued a watch/warning. Includes the final site security procedures and personnel evacuation.

Activities that will be performed during the respective response stages have are provided below.

Evacuation Preparation Stage:

If the National Weather Service issues a Hurricane Watch or Advisory that includes the possibility of landfall in the Corpus Christi area, the following site preparation activities will be conducted by the soil remediation Contractor at least five days prior to projected landfall, or immediately following issuance if the Hurricane Watch or Advisory is issued in less than five days from projected landfall. Prioritization of these activities is provided below, and will be updated at least daily by the Incident Command:

1. Cease all soil excavation activities;
2. Immediate transport of all excavated soil stockpiles, if any, from the soil excavation areas to the truck scale, then the Lettered Bins Building;

3. Cover all active soil excavation areas (areas where soils have been excavated but not yet backfilled with clean fill) with Visqueen. Secure plastic sheeting using sand bags or cinder blocks, or Trustee approved equal;
4. Ensure storm water diversion berms are in place around the perimeters of the active soil excavation areas;
5. Notification to employees of the preliminary evacuation activities. Conduct an “all hands” meeting to inform personnel of authority, lines of communication, evacuation stages, and planned activities;
6. Obtain available trucks to load and transport soils in the Lettered Bins Building that meet the soil stabilization treatment limits to the designated landfill to the extent possible based on truck availability;
7. Remove all loose trash/garbage to the extent possible;
8. Supplement tie-down provisions on equipment, containers, trailers, etc. as needed;
9. Additional labeling and securing of all wastes and containers that will remain on-site.
10. Verify availability of evacuation equipment and supplies;
11. Reserve accommodations for personnel;
12. Compile key electronic and paper documents and remove archives to alternate location. Maintain only essential documents and electronics on-site; and
13. Photograph and/or videotape the site.

Imminent Evacuation Stage:

These activities will be conducted approximately 1-2 days prior to the storm landfall following determination that an evacuation will be required. Prioritization of these activities will be determined by the Incident Command.

- Advise site personnel of communication protocols;
- Evacuate any personnel not required for this stage;
- Review site for potential flying debris and secure debris to the extent possible;
- Install plywood or shutters on site trailers;
- Remove documents and electronics;
- Final photos and/or video of the site;
- Notify local emergency response and TCEQ that site is evacuated, and;
- Secure the site gates.

Reference

(FEMA 1993). *Emergency Management Guide for Business and Industry: A step-by-step approach to emergency planning, response, and recovery for companies of all sizes*. Federal Emergency Management Association. 1993.