SUPPLEMENTAL COMPREHENSIVE INVESTIGATION INVESTIGATION DERIVED WASTE MANAGEMENT PLAN

FOR
THE ALABAMA ARMY NATIONAL GUARD (AANG)
ORGANIZATIONAL MAINTENANCE SHOP (OMS-28)
THE FORMER BROOKLEY AIR FORCE BASE
MOBILE, ALABAMA

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PREPARED FOR:

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PREPARED BY:

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PREFACE

This Investigation Derived Waste Management Plan (IDWMP) was prepared for the United States Army Corps of Engineers – Mobile District (USACE) for the purpose of implementing a Supplemental Comprehensive Investigation (CI), Alabama Risk Based Corrective Action (ARBCA) evaluation, and three groundwater monitoring events and associated Groundwater Monitoring Reports associated with the Alabama Army National Guard (AANG) Organizational Maintenance Shop 28 (OMS-28). The limited objective, along with the evolving knowledge of site conditions and chemical effects on the environment and health, must be considered when evaluating this plan.

AEROSTAR is conducting the work under contract with the United States Army Corps of Engineers (USACE), Mobile District, Mobile, Alabama. Ms. Melissa Shirley is the USACE Technical Manager. The AEROSTAR Program Manager is Mr. Marshall Eschete.

This document provides guidance for the management of investigative-derived wastes (IDW) resulting from work conducted for the Comprehensive RI, ARBCA evaluation, and two groundwater monitoring events. The IDW will include soil cuttings, purged groundwater, decontamination fluids, disposable sampling equipment, and disposable personal protective equipment (PPE). The National Contingency Plan (NCP) requires that management of IDW generated during site investigations comply with all applicable or relevant and appropriate requirements (ARARs) to the extent practicable. In addition, other legal and practical considerations may affect the handling of the IDW.

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LIST OF ACRONYMS

AANG	Alabama Army National Guard
AEROSTAR	Aerostar Environmental Services, Inc.
ARAR	Applicable or Relevant and Appropriate Requirements
ARBCA	Alabama Risk Based Corrective Action
CAA	Clean Air Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CI	Comprehensive Investigation
CWA	Clean Water Act
DOT	Department of Transportation
ECBSOPQAM	Environmental Compliance Branch Standard Operating Procedures and Quality Assurance Manual
IDW	Investigative-Derived Waste
IDWMP	Investigative-Derived Waste Management Plan
NCP	National Contingency Plan
OMS	Organizational Maintenance Shop
PPE	Personal Protective Equipment
RI	Remedial Investigation
SDWA	Safe Drinking Water Act
TSCA	Toxic Substances Control Act
USACE	United States Army Corps of Engineers
WP	Work Plan

1.0 PURPOSE OF THE INVESTIGATIVE-DERIVED WASTES MANAGEMENT PLAN

The purpose of the Investigation Derived Waste Management Plan (IDWMP) is to assure that the following requirements are met:

- Following the completion of the investigation, the site will be in no worse condition than that which existed prior to the investigation.
- During the investigation, all wastes will be contained and removed from the site.
- All federal ARARs will be adhered to, to the extent practicable.
- All state ARARs will be followed, as practicable.
- IDW management will be performed following careful preparation and coordination.
- The quantity of generated wastes will be minimized to the utmost extent possible during the investigation.

This IDWMP for the supplemental activities at the Alabama Army National Guard Organizational Maintenance Shop 28 (OMS-28) site is based upon general information and conditions at the site as described in the Work Plan (WP). The IDWMP was prepared using guidance specified in EPA guidance document Management of Investigative-Derived Wastes During Site Inspections, PB91-921331 (OERR Directive 9345.3.02), May, 1991, the Alabama Environmental Investigation and Remediation Guidance, March 2002, revised October 2002, revised September 2005, and the United States Environmental Protection Agency, Region IV, Environmental Services Division, Environmental Compliance Branch Standard Operating Procedures and Quality Assurance Manual, November, 2001 (ECBSOPQAM).

It is anticipated that during the filed activities associated with the Comprehensive CI, ARBCA evaluation, and three groundwater monitoring events conducted at OMS-28, many different types of potentially contaminated investigation-derived wastes (IDW) will be generated (i.e., soil cuttings, development water, purged groundwater, decontamination fluids, disposable sampling equipment, and disposable personal protective equipment (PPE). These wastes are required, under the National Contingency Plan (NCP), to be handled in accordance to all applicable or relevant and appropriate requirements (ARARs) to the extent practicable. AEROSTAR has prepared this IDWMP to ensure that the handling of IDW will be consistent with and adherent to all ARARs. IDW from field activities conducted at OMS-28 may contain hazardous substances as defined by CERCLA. Some CERCLA hazardous substances are also hazardous wastes under Subtitle C of the Resource Conservation and Recovery Act (RCRA), while other substances are regulated by other federal laws such as the Safe Drinking Water Act (SDWA), Clean Air Act (CAA), Toxic Substances Control Act (TSCA), and the Clean Water Act (CWA).

As specific conditions and additional information warrant, this IDWMP will be amended or revised to include additional site-specific IDW handling procedures. Should additional phases of work be required, an addendum will be prepared to cover those activities.

2.0 IDENTIFICATION OF INVESTIGATIVE-DERIVED WASTES

There will be several types of IDW generated during the Comprehensive CI and three groundwater monitoring events conducted at OMS-28, including: (1) soil cuttings monitoring well installations; (2) development and purge water removed from wells before groundwater samples are collected; (3) decontamination fluids; (4) PPE; and (5) disposable sample equipment. To handle IDW in compliance with regulations, reasonable efforts will be made to characterize these wastes.

The nature of the IDW generated during the Soil Excavation, Transportation, and Disposal activities will be assessed by applying best professional judgment and using readily available information about the site (i.e., results of previous studies conducted at the site). Direct observation of the IDW for discoloration, odor or other indicators of contamination will also be incorporated in the effort to characterize the waste materials. In addition, laboratory analysis will be conducted on the solid IDW waste streams. Table 2-1 in the WP identifies the IDW matrix and analytical method of analysis. Analytical data from soil samples will provide the primary line of data for the presence or non-presence of volatile contaminants. If necessary, following receipt of laboratory analytical samples from field collection data, the IDW itself will be sampled for analysis. The presence of contaminants will determine the need to sample the IDW itself as a secondary line of data for the presence or non-presence of volatile contaminants in the IDW at levels either as hazardous or non-hazardous. The decontamination IDW will be disposed of with the soil.

3.0 IDW GENERATION

As discussed previously, several types of IDW will be generated during the Comprehensive CI and groundwater monitoring events conducted at the project site. Among these are included: (1) soil cuttings from monitoring well installations; (2) development and purge water removed from wells before groundwater samples are collected; (3) decontamination fluids; (4) PPE; and (5) disposable sample equipment. Each of these is addressed in the following sections.

The location where the investigation will occur is covered in concrete so no wastes will be placed back on the site following investigation activities.

3.1 SOIL CUTTINGS

During the investigation activities, 4 shallow Type II, and 3 deep Type III monitoring wells will be installed. Additionally, a single soil boring for to collect soil samples for laboratory analysis of soil physical properties will be installed at the site. The installation of each monitoring well or soil boring will result in the generation of potentially contaminated soil cuttings. Cutting wastes will be collected in drums and maintained until testing of the soil and groundwater samples are complete. The test results will allow decisions to be made by the project team as to how disposal off-site will occur.

3.2 DEVELOPMENT/PURGE WATER

The development and sampling of the 7 new wells and 6 existing wells will generate up to 500 gallons of groundwater. The development/purge water will be collected in drums and maintained on site until testing of the groundwater samples are complete. The test results will allow decisions to be made by the project team as to how disposal off-site will occur.

3.3 DECONTAMINATION FLUIDS

As required in the WP, a decontamination station will be constructed on-site to allow contained decontamination of all drilling and sampling equipment. The facility will be of sufficient size to retain all decontamination fluids, soil, etc. within its boundaries. The retained material will then be collected in drums and maintained on-site until testing of soil and groundwater samples are complete. The test results will allow decisions to be made by the project team as to how disposal off-site will occur.

3.4 PPE AND DISPOSABLE SAMPLE EQUIPMENT

IDW from PPE and disposable sample equipment will be double-bagged and placed in an on-site industrial dumpster or transported to a local municipal landfill.

4.0 IDW MANAGEMENT

4.1 MINIMIZATION OF IDW

The generation of IDW will be minimized, to the extent possible, to limit the potential for exposure. AEROSTAR will select investigation methods that will minimize the generation of PPE, disposable sample equipment, soil cuttings, decontamination fluids and other IDW. AEROSTAR will also attempt to minimize the amount of waste groundwater in excess of the required purge volumes for each well.

The most effective waste management minimization will be management of IDW within the area of origin.

4.2 ON-SITE HANDLING AND MANAGEMENT OF IDW

The IDW to be generated during the investigation conducted at former AANG OMS-28 site are anticipated to be classifiable as non-hazardous RCRA wastes. AEROSTAR intends to leave these wastes on-site, until groundwater and soil testing is complete. These wastes will be handled in the following manner:

- Soil cuttings, development/purge water, decontamination fluids resulting from well installation and sampling activities will be stored in properly labeled Department of Transportation (DOT) drums placed on pallets near the source or stored in a nearby area designated by the MAA or USA.
- IDW from PPE and disposable sample equipment will be "double-bagged" and placed in an on-site industrial dumpster or local municipal landfill.

While awaiting results from chemical testing, all IDW will have labels on the drums that will include, but not be limited to, the boring/well number from which the waste was generated, the United States Army Corps of Engineers (USACE)'s point of contact's name and telephone number, and a description of the material contained within the drum. In addition, AEROSTAR will clearly place its name and telephone number on the drum. The area(s) in which the drums will be stored will be flagged with caution tape.

Following test results of samples the IDW will be disposed of off-site following all applicable regulations.