

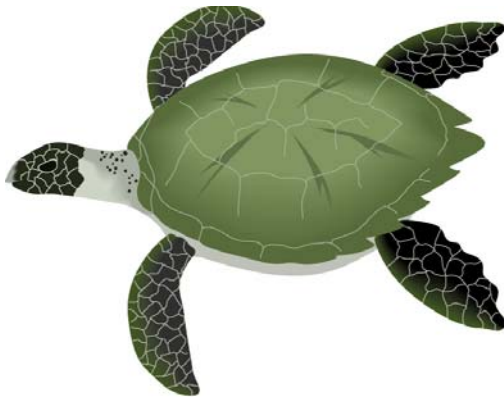


United States Air Force
15th Airlift Wing
Environmental Restoration Program

Final
WORK PLAN

FEASIBILITY STUDY AT
SITES LF01, LF23, LF24, AND AOC 18,
BELLOWS AFS AND MCTAB

BELLOWS AIR FORCE STATION
OAHU, HAWAII



APPENDIX E
Project-Specific
Investigation-Derived
Waste-Management Plan

Appendix E

Project-Specific Investigation-Derived Waste Management Plan

E.1 Introduction

This appendix presents the Project-Specific Investigation-Derived Waste-Management Plan (IDWMP) for the *Final Work Plan for Feasibility Study at Sites LF01, LF23, LF24, and AOC 18, Bellows AFS and MCTAB, Oahu, Hawaii*.

This Project-Specific IDWMP provides process information and limited site-specific or activity-specific practices for the Feasibility Study (FS) field investigation at Sites LF01, LF24, and Area of Concern (AOC) 18. This plan also addresses specific best-management practices for IDW and the anticipated IDW volumes. The IDWMP will be amended, as necessary, if unaddressed conditions arise (such as when a new waste type is anticipated or waste volumes change such that a different best-management practice applies).

The IDW management process for this project incorporates the U.S. Air Force's (USAF's) waste segregation, minimization, and management preferences as set forth in the *Waste Management Plan Guidelines for 15th Air Base Wing Contractors* (U.S. Department of the Air Force, March 1998) and guidance contained in *Management of Investigation-Derived Waste During Site Inspections* (EPA, May 1991). Waste-management options in order of preference are reuse, recycling, treatment, and disposal. Onsite options are preferred over offsite/on-Base options, and on-Base options are preferred over off-Base options. However, because of the small quantities of IDW anticipated during the FS supplemental investigation, an exception to the reuse and recycling options is incorporated into this project-specific IDWMP: for IDW soil and water, reuse and recycling options do not exist. Anticipated materials to be removed from Sites LF01 and LF24 for recycling or disposal on-island may include, but are not limited to, broken glass, scrap metal, and other solid waste.

IDW will consist of solid waste from surface-soil-cleaning activities at Sites LF01 and LF24; potentially contaminated groundwater from long-term monitoring (LTM) sampling activities at Sites LF01, LF24, and AOC 18; and potentially contaminated groundwater from direct-push system (DPS) and pore-water sampling activities at Site LF24.

This IDWMP is comprised of the following sections:

- Section E.2 – Onsite Material Handling and Staging Plan
- Section E.3 – IDW Water Management

- Section E.4 – Personal Protective and Disposable Sampling Equipment Management
- Section E.6 – References

E.2 Onsite Material Handling and Staging Plan

During soil-cleaning activities at Site LF24, glass and metal fragments (>0.25 inches in diameter) will be segregated from clean soil by a mechanical screen. This glass and metal will be temporarily stored onsite before recycling or final disposal. This temporary onsite storage will be secured with a temporary fence. Cleaned soil will be placed back in the excavation and graded to match the existing grade.

At Site LF01, surface debris (metal fragments, glass, and wire) will be removed manually, and temporarily stored in drums or roll-off bins before disposal or recycling.

E.3 IDW Water

Approximately fourteen 55-gallon drums of IDW water are expected to be generated during each round of LTM sampling activities at Sites LF01, LF24, and AOC 18. IDW water generated during LTM sampling activities will consist of monitoring-well purge water. IDW water derived from purging monitoring wells will be contained in Hawaii Department of Transportation (HDOT)-approved steel drums at the time it is generated. Drums will be staged at the Bellows IDW storage area until the laboratory analytical results have been evaluated and an appropriate management option can be selected. Based upon analytical results obtained in previous investigations, it is expected that IDW water will be below action levels for the chemicals of concern. In this case, the IDW water will be reinfiltated at its site of origin. If analytical results indicate concentrations above action levels, the water will be evaporated in an evaporation basin that will be constructed in the Bellows IDW storage area.

Approximately 10 gallons of IDW water are expected to be generated during DPS groundwater and interstitial pore water-sampling activities at Site LF24. IDW water generated during DPS groundwater and interstitial pore water-sampling activities will consist of temporary microwell and drive-point development and purge water. IDW water derived from DPS groundwater and interstitial pore water-sampling activities will be reinfiltated at the site of origin following the collection of groundwater and pore-water samples.

E.4 Personal Protective and Disposable Sampling Equipment

IDW consisting of used personal protective equipment (PPE) and spent disposable sampling equipment will be generated during the FS supplemental investigation. This equipment is expected to consist of gloves (nitrile or otherwise), used microwell casing, and downhole sample tubing. Some or all of these materials will be generated in small quantities throughout the field investigation.

Unstained PPE and disposable sampling equipment will be disposed of as municipal solid waste at the time of generation. This is expected to be the primary management process for PPE and disposable sampling equipment. If equipment is stained by contact with other IDW or sampled media, it will be decontaminated, then disposed of as municipal solid waste.

E.5 References

U.S. Department of the Air Force. March 1998. *Waste Management Plan Guidelines for 15th Air Base Wing Contractors*.

U.S. Environmental Protection Agency (EPA). Office of Emergency and Remedial Response. May 1991. *Management of Investigation-Derived Wastes During Site Inspections*.

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