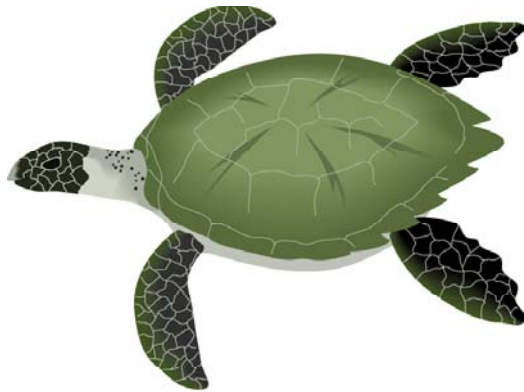




**United States Air Force
15th Air Base Wing
Environmental Restoration Program**

***Final*
WORK PLAN
FOR REMOVAL SITE EVALUATION
AT PIER DUMP SITE (LF24)
Bellows Air Force Station
Oahu, Hawaii**



APPENDIX G

**Applicable or Relevant and Appropriate Requirements
or To-Be-Considered Criteria**

Appendix G

Potential Applicable or Relevant and Appropriate Requirements or To-Be-Considered Criteria

This appendix presents a preliminary list of federal and state laws and regulations considered to be potential applicable or relevant and appropriate requirements (ARARs) or to-be-considered requirements (TBCs) for field activities at the Pier Dump Site at Bellows Air Force Station. The list comprises Tables G-1 (potential location-specific ARARs), G-2 (potential chemical-specific ARARs), and G-3 (potential activity-specific ARARs), and represents the complete set of potential ARARs and TBCs.

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TABLE G-1

Potential Location-Specific ARARs for the Pier Dump Site, Bellows AFS
Pier Dump Site RSE, Bellows AFS

Location	Potential ARAR	Prerequisite	Comments	ARAR Assessment
Archeological Resources	Archeological Resources Act 16 USC 470, 36 CFR 65	Alteration of terrain that threatens significant prehistoric, historical, or archeological data.	15 CEVR has developed an Archeological Monitoring Plan for Environmental Projects.	Potentially applicable and relevant for intrusive activities
Historic Buildings	National Historic Preservation Act 16 USC 470, 36 CFR 800	Alteration of property included on or eligible for the National Register of Historic Places.	The Pier Dump does not include protected property.	Not ARAR
Natural Landmarks	Historic Sites, Buildings, and Antiquities Act 16 USC 461, 40 CFR 6.301	Alteration of landmarks on National Registry of Natural Landmarks.	The Pier Dump does not include protected landmarks.	Not ARAR
Wetlands	Executive Order 11990, 40 CFR 6, Dredge and Fill Permits, Section 404 of Clean Water Act 40 CFR 230.10, CFR 320-330	Actions that cause destruction, loss, or degradation of wetlands. Dredge or fill activities in surface waters including wetlands. Under USCOE Nationwide Permit 38, wetlands may be disturbed to allow for cleanup of hazardous or toxic wastes.	Potential remedies at the Pier Dump could affect drainage ditches.	Potentially applicable and relevant
Wetlands	40 CFR 6.302(a)	Activities affecting wetlands. Requires actions taken to avoid adverse effects on wetlands and prohibits discharges to wetlands	Potential remedies at the Pier Dump could affect drainage ditches.	Potentially applicable and relevant
Coastal Zone	Coastal Zone Management Act 16 USC 451, 15 CFR 930.30	Activities affecting the coastal zone including wetland, floodplain, estuary, beach, dunes, reef and fish and wildlife habitat in the coastal zone. Federal activities must be consistent with state coastal zone management plan (see next item).	The Pier Dump is located in the coastal zone.	Potentially applicable and relevant
Coastal Zone, Wetlands	Section 6217 of Coastal Zone Management Act Reauthorization and Amendments, HRS Chapter	Activities affecting structure of land and water use controls; provides federal consistency determinations	The Pier Dump is located in the coastal zone.	Potentially applicable and

TABLE G-1

Potential Location-Specific ARARs for the Pier Dump Site, Bellows AFS
Pier Dump Site RSE, Bellows AFS

Location	Potential ARAR	Prerequisite	Comments	ARAR Assessment
	205A	for wetland-related activities.		relevant
Shoreline, Coastal Resources	Shoreline Management Act Chapter 25 of Revised Ordinances of Honolulu (ROH)	Protects coastal resources that include rare, threatened, or endangered species.	Military lands are included within the SMA, but may be exempt.	Potentially applicable and relevant (if not exempt)
Critical Habitat of Endangered or Threatened Species	Endangered Species Act 16 USC --- 40 CFR 402	Activities affecting species listed as endangered or threatened or their critical habitat. Action must not threaten continued existence of listed species or destroy critical habitat. Consultation required with USFWS.	At Bellows AFS, endangered or threatened species include green sea turtle, hawksbill turtle, Hawaiian stilt, Hawaiian owl, Hawaiian duck, Hawaiian coot, and Hawaiian monk seal.	Potentially applicable and relevant
Habitat of Endangered or Threatened Species	Hawaii Endangered & Threatened Species Regulations 13 DOH 122 & 124	Activities affecting species listed as endangered or threatened or their critical habitat. Prohibits the taking, harassment, harming, or killing endangered or threatened species of flora and fauna.	Taking of endangered or threatened species not associated with study or potential remedies of the Pier Dump.	Potentially applicable and relevant at the Pier Dump if the site includes protected and/or sensitive habitat.
Indigenous Wildlife, Endangered and Threatened Wildlife, and Introduced Wild Birds	Hawaii Conservation Regulations HAR Title 13, Part II, Chapter 124	Taking of all wild species in the state including native, introduced, and pest species regulated by DLNR.	Taking of wildlife birds or mammal species not associated with site study or potential remedies.	Not ARAR

TABLE G-2
 Potential Chemical-Specific ARARs for the Pier Dump Site, Bellows AFS
Pier Dump Site RSE, Bellows AFS

Media	Potential ARAR	Prerequisite	Comments	ARAR Assessment
Groundwater	Hawaii DOH Tier 1 Action Levels for Groundwater, Revised 11/96	Conservative, default standards recommended for all contaminant release sites.	Tier I non-drinking water standards are based on state surface water standards or, if these are not available, are based on MCLs for drinking water. Tier 2 standards can be calculated to incorporate a limited set of site-specific data, and Tier 3 standards are a complete risk assessment.	Potentially applicable and relevant
Groundwater	Hawaii Underground Injection Control Standards 11 DOH 23	Aquifers containing >5,000 mg/L total dissolved solids and seaward (makai) of UIC line are exempted as underground sources of drinking water. Federal MCLs will not apply to sites with high TDS or seaward of UIC line.	The Pier Dump is seaward of UIC	Not ARAR
Drinking Water	Safe Drinking Water Act Maximum Contaminant Level (MCL)s 40 CFR 141 and Secondary MCLs 40 CFR 143	Water that is delivered to any user of a public water system.	Groundwater is not a potential source of drinking water because of salinity.	Not ARAR
Drinking Water	Safe Drinking Water Act MCL Goals.	A non-enforceable concentration of a drinking water contaminant that is protective of adverse human health. To Be Considered only.	Groundwater is not a potential source of drinking water because of salinity.	Not TBC

TABLE G-2

Potential Chemical-Specific ARARs for the Pier Dump Site, Bellows AFS

Pier Dump Site RSE, Bellows AFS

Media	Potential ARAR	Prerequisite	Comments	ARAR Assessment
Soil	Hawaii DOH Tier 1 Action Levels for Soil, Revised 11/96	<p>Conservative, default standards recommended for all contaminant release sites.</p> <p>Action levels vary if drinking water is threatened. Tier I soil action levels are set at 10⁻⁶ cancer risk and HI of 1 for non-carcinogens and using a residential exposure scenario.</p> <p>Tier 2 standards can be calculated to incorporate a limited set of site specific data and Tier 3 standards are a complete risk assessment.</p>	Soil is a medium of concern at the Pier Dump.	TBC
Soil	EPA Soil Screening Guidance OSWER 9355.4-14FSA, June 1996	Numeric, risk based, screening levels for soil using a future residential scenario. Generic screening levels provided most common contaminants at NPL sites. Generic levels use conservative default assumptions and are more stringent than site specific levels. Includes methodology for developing site specific screening levels.	Soil is a medium of concern at the Pier Dump.	TBC
Soil	TSCA, PCB Regulations 40 CFR 761	Cleanup standards for current releases of PCBs. Historic release cleanup levels are set on a case-by-case basis.	It is not known whether there are current sources of PCBs at the Pier Dump.	TBC
Air	Clean Air Act, National Primary and Secondary Ambient Air Quality Standards, 40 CFR 50	Standards for ambient air quality standards	Air is not a medium of concern at the Pier Dump.	Not ARAR

TABLE G-3

Potential Activity-Specific ARARs for the Pier Dump Site, Bellows AFS
Pier Dump Site RSE, Bellows AFS

Activity	Potential ARAR	Prerequisite	Comments	ARAR Assessment
Discharge to Surface Waters	Clean Water Act, National Pollution Discharge Elimination System (NPDES), 40 CFR 122 HRS Chapter 342D, HAR Chapters 11-54 and 11-55	Discharge of pollutants to waters of the US/state from a point source	Applicable if point source discharges exist at the Pier Dump.	Potentially relevant and appropriate
Discharge to Publicly Owned Treatment Plant	Clean Water Act, National Pretreatment Standards 40 CFR 403	Effluent standards for discharges to publicly owned treatment works (POTWs)	Activities at the Pier Dump are not anticipated to include discharges to POTWs.	Not ARAR
Stormwater Runoff from Construction Activities	Stormwater Regulations under Clean Water Act, NPDES 40 CFR 122.26	Construction activities including clearing, grading, and excavation activities that disturb 5 acres or more	Excavation of trenches and test pits are planned during the study and remedies may also include clearing, grading, and/or excavation.	Applicable if sites clearing, grading, or excavation activities disturb 5 acres or more
Solid Waste Disposal	Solid Waste Disposal Act 40 CFR 241	Establishes procedures and minimum requirements for land disposal of solid waste	If solid wastes are stored or disposed offsite, all RCRA permitting regulations must be complied with.	Applicable
Solid Waste Disposal	Hawaii Solid Waste Pollution Act HAR 19 342H	Regulates discharge, deposit, injection, dumping, spilling or leaking of solid waste onto land or in water.	If solid wastes are stored or disposed offsite, all state permitting regulations must be complied with.	Applicable
Hazardous Waste Generation, Handling, Storage, and Disposal	RCRA, Hazardous Waste Regulations 40 CFR 260 – 268 Hawaii Hazardous Waste Management Act, HRS Title 19, Chapter 342	Establishes procedures for identifying, handling, storing, transporting, and disposing of hazardous wastes	Characterization of wastes generated during a study or a remedial action would be conducted to determine if such wastes are hazardous.	To be determined. Substantive and procedural portions of requirements would be ARAR for hazardous wastes transported offsite.
Land Placement of Hazardous Waste	RCRA, Land Disposal Restrictions 40 CFR 268	Prohibits land placement of certain hazardous wastes unless treated to specified criteria.	Land disposal of hazardous wastes is not planned as part of the RI at the canals.	Not ARAR
PCB Handling	TSCA, PCB Regulations	Establishes cleanup and disposal standards for PCBs	It is not known whether there are current sources of PCBs at the Pier Dump.	TBC

TABLE G-3

Potential Activity-Specific ARARs for the Pier Dump Site, Bellows AFS
Pier Dump Site RSE, Bellows AFS

Activity	Potential ARAR	Prerequisite	Comments	ARAR Assessment
	40 CFR 761			
Worker Safety	Occupational Safety and Health Act	Regulates worker health and safety	Will apply to site workers.	Applicable
	29 USC 651-678			
Worker Protection	Hawaii Occupational Safety and Health Standards HAR Title 12, Chapter 99	Requires procedures for the protection of employees against exposure to health and safety risks during hazardous substance cleanup operations.	Could apply if hazardous substances are encountered.	Potentially applicable and relevant
Transportation of Hazardous Materials	Hazardous Materials Transportation Act 49 CFR 171-177	Established standards for packaging, labeling and transportation of hazardous materials	Could apply if hazardous materials are encountered and transported offsite.	To be determined. Substantive and procedural portions of requirements would be ARAR for hazardous wastes transported offsite.
Habitat Restoration	40 CFR 1508.20, USFWS Mitigation Policy (46 FR 7644 to 7663, 1981)	Permit activities that could effect habitat for federally protected species.	Potential remedies at the Pier Dump may affect habitat.	Potentially applicable and relevant
Modification of Surface Waters	Fish and Wildlife Coordination Act 16 USC 1531-666	Requires consultation with USFWS when a Federal entity proposes or authorizes any modification of a stream or other water body. If impacts cannot be avoided, mitigation will be required for protection of fish and wildlife resources.	Potential remedies at the Pier Dump may affect habitat.	Potentially applicable and relevant