

US EPA ARCHIVE DOCUMENT

FINAL

**RESOURCE CONSERVATION AND RECOVERY ACT PERMIT
EPA ID TT9 570 090 002
FOR JOHNSTON ATOLL FACILITY**

December 21, 2018

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
HAZARDOUS WASTE MANAGEMENT FACILITY PERMIT**

PERMITTEE: United States Air Force, Johnston Atoll Facility
RCRA IDENTIFICATION NUMBER: TT9 570 090 002

Pursuant to the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as further amended by the Hazardous and Solid Waste Amendments (HSWA) of 1984, 42 U.S.C. 6901 et seq. (RCRA), and regulations promulgated thereunder by the United States Environmental Protection Agency (EPA) (codified and to be codified in Title 40 of the Code of Federal Regulations (C.F.R.)), EPA is issuing a Permit to the United States Air Force (hereafter called the Permittee or US Air Force) for their Johnston Atoll facility, to perform corrective action activities required by RCRA at their facility located at Johnston Atoll, located in the Pacific Ocean about 717 nautical miles west-southwest of Hawaii. The US Air Force is the owner and operator of the facility.

Section 3004(u) of RCRA (42 U.S.C. 6924(u)) and 40 CFR § 264.101 require that all Permits issued after November 8, 1984, address corrective action for releases of hazardous waste or hazardous constituents from any solid waste management unit (SWMU), regardless of when waste was placed in the unit or whether the unit is closed. A SWMU is any discernible unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Section 3005(c)(3) of RCRA requires that each Permit issued under Section 3005 of RCRA contain terms and conditions as the EPA determines necessary to protect human health and the environment.

This Permit is issued for corrective action activities only. The facility closed the hazardous waste management unit previously operated. The facility no longer has regulated hazardous waste management units, nor accepts hazardous waste from offsite.

The following SWMUs or Areas of Concern (AOC), previously identified in the 2004 Permit and described further in Module III, are actively managed under this Permit:

- SWMU No. 1 - Solid Waste Burn Pit
- SWMU No. 2 - Former Herbicide Orange Storage Area
- SWMU No. 6 - Mixed Metal Debris Area and Stabilized Solid Waste Incinerator Ash Disposal Area
- SWMU No. 16 - Power Plant Spill Site, and AOC No. 1, Motor Gasoline (MOGAS) Area
- AOC No. 2 - Swimming Pool Area, and AOC No. 3, Taxiway Area

The Permittee shall investigate the following Newly-Identified SWMU Assessment Units to determine if there is evidence of a release of hazardous waste or constituents, and should be included into the corrective action process via a Permit modification:

- Red Hat Storage Area Bunkers Construction Rubble Debris Area (CRDA) (Johnston Island)
- Primary CRDA (Johnston Island)
- Swimming Pool CRDA (Johnston Island)
- East Island CRDA (Hikina Island)
- Sand Island CRDA

- North Island CRDA (Northern)
- North Island CRDA (Southern)

This Permit issuance formalizes the No Further Action (NFA) (corrective action complete) for the following units:

- SWMU No. 5 - Recycle Yard
- SWMU No. 9 - Hazardous Waste Storage Area
- SWMU No. 15 - Above Ground Jet Propulsion Fuel, Grade 5 (JP-5) Storage Tanks

Within the boundaries of the facility, the U.S. Army operated and subsequently clean-closed separate RCRA-Permitted treatment and storage units associated with the Johnston Atoll Chemical Agent Disposal System (JACADS). Permit TT0-570-090-001 was assigned to the U.S. Army's operation of JACADS and the associated Red Hat Storage Areas. Although that permit is closed, for purposes of this Permit the facility includes the JACADs area to the extent the area has been disturbed since clean closure.

This Permit, consisting of Modules I through III, attached figures, and this cover sheet, constitutes a RCRA Permit under applicable regulations contained in 40 CFR Parts 260 through 266, 268, 270 and 124, as specified in this Permit. This Permit is based upon the applicable regulations which are in effect on the date of the issuance of the Permit, in accordance with 40 CFR § 270.32(c). The Permittee must comply with all terms and conditions of this Permit.

This Permit is based on the premise that the information submitted in the Permit Application is complete and accurate, and that the facility will be operated as specified in the Permit Application. Any inaccuracies found in the submitted information may be grounds for the termination, revocation and reissuance, or modification of this Permit in accordance with 40 CFR §§ 270.41, 270.42 and 270.43, and/or potential enforcement. The Permittee must inform the EPA of any deviation from or changes in the information in the Permit Application which would affect the Permittee's ability to comply with the applicable regulations or Permit conditions.

This Permit is issued as of the date below. Pursuant to 40 CFR § 124.15, this Permit shall become effective upon issuance and shall remain in effect for 10 years from the date of its issuance unless revoked and reissued, or terminated under 40 CFR §§ 270.41 and/or 270.43, or continued in accordance with 40 CFR § 270.51(a) or (d).



Jeff Scott, Director
Land Division

12/21/18

Date

TABLE OF CONTENTS

MODULE I GENERAL PERMIT CONDITIONS.....7

- I.A. EFFECT OF PERMIT.....7
- I.B. PERMIT CONDITIONS.....7
- I.C. SEVERABILITY.....7
- I.D. DEFINITIONS.....7
- I.E. DUTIES AND REQUIREMENTS.....9
 - I.E.1. Duty to Comply.....9
 - I.E.2. Duty to Reapply.....9
 - I.E.3. Permit Expiration.....10
 - I.E.4. Need to Halt or Reduce Activity Not a Defense.....10
 - I.E.5. Duty to Mitigate.....10
 - I.E.6. Proper Operation and Maintenance.....10
 - I.E.7. Permit Modification, Revocation and Reissuance, and Termination.....10
 - I.E.8. Duty to Provide Information.....11
 - I.E.9. Inspection and Entry.....11
 - I.E.10. Monitoring and Records.....11
 - I.E.11. Reporting Planned Changes.....12
 - I.E.12. Reporting Anticipated Noncompliance.....13
 - I.E.13. Certification of Addition, Construction or Modification.....13
 - I.E.14. Transfer of Permits.....13
 - I.E.15. Twenty-Four Hour Reporting.....13
 - I.E.16. Compliance Schedule.....14
 - I.E.17. Other Noncompliance.....14
 - I.E.18. Other Information.....14
- I.F. SIGNATORY REQUIREMENT.....15

I.G.	REPORTS, NOTIFICATIONS, AND SUBMISSIONS TO THE DIRECTOR...	15
I.H.	CONFIDENTIAL INFORMATION.....	15
I.I	DISPUTE RESOLUTION.....	15
MODULE II GENERAL FACILITY CONDITIONS.....		17
II.A.	DESIGN AND OPERATION OF FACILITY.....	17
II.B.	WASTE HANDLING.....	17
II.C.	SECURITY.....	17
II.D.	GENERAL INSPECTION REQUIREMENTS.....	17
II.E.	PERSONNEL TRAINING.....	17
II.F.	PREPAREDNESS AND PREVENTION.....	17
II.G.	CONTINGENCY PLAN.....	18
	Table II.1 Remote Monitoring and Response for SWMU No. 6.....	18
II.H.	RECORDKEEPING AND REPORTING.....	18
	II.H.1. Operating Record.....	19
	II.H.2. Imagery Record.....	19
II.I.	GENERAL CLOSURE REQUIREMENT.....	19
MODULE III CORRECTIVE ACTION FOR SOLID WASTE MANAGEMENT UNITS.....		20
III.A.	SUMMARY OF SWMUS REQUIRING ACTION UNDER THIS PERMIT.....	20
	Table III.1 SWMUs and AOCs under the corrective action process.....	20
	Table III.2 Newly-Identified SWMU Assessment Units.....	20
III.B.	STANDARD CONDITIONS.....	21
	Table III.3 Corrective Action Schedule.....	21
III.C.	REPORTING REQUIREMENTS.....	22
III.D.	NOTIFICATION REQUIREMENTS FOR AND ASSESSMENT OF NEWLY IDENTIFIED SOLID WASTE MANAGEMENT UNIT(S).....	23
III.E.	NOTIFICATION REQUIREMENTS FOR NEWLY-DISCOVERED RELEASES AT SWMUs OR AOCs.....	25
III.F.	SWMU ASSESSMENT WORKPLAN.....	26
III.G.	SWMU ASSESSMENT WORKPLAN IMPLEMENTATION.....	27

III.H. SWMU ASSESSMENT WORKPLAN FINAL REPORT AND SUMMARY
REPORT.....27

III.I. CORRECTIVE MEASURES STUDY (CMS).....28

III.J. PERMIT MODIFICATION FOR REMEDY.....28

III.K. SITE SPECIFIC ECOLOGICAL RISK ASSESSMENT.....29

III.L. MODIFICATION OF THE CORRECTIVE ACTION MODULE.....29

III.M. “NO FURTHER ACTION” DETERMINATION FOR SWMUs AND AOCs...29
Table III.4 SWMUs that have achieved NFA.....30

III.N. CORRECTIVE ACTION CRITERIA: SWMUs and AOCs UNDER THE
CORRECTIVE ACTION PROCESS.....30
Table III.5 CORRECTIVE ACTION CRITERIA.....31

FIGURES.....33

MODULE I

GENERAL PERMIT CONDITIONS

I.A. EFFECT OF PERMIT

The Permittee is allowed to conduct corrective actions of Solid Waste Management Units (SWMU) and Areas of Concern (AOC) in accordance with the conditions of this Permit. Compliance with this Permit generally constitutes compliance, for purposes of enforcement, with Subtitle C of Resource Conservation and Recovery Act (RCRA) and with Hazardous and Solid Waste Amendments (HSWA), except as indicated at 40 CFR § 270.4. Issuance of this Permit does not convey any property rights of any sort (40 CFR § 270.30(g)) or any exclusive privilege; nor does it authorize any injury to persons or property or any invasion of other private rights. Compliance with the terms of this Permit does not constitute a defense to any order issued or any action brought under Sections 3008(a), 3008(h), 3013, or 7003 of RCRA; Section 106(a), 104, or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) (42 U.S.C. §§ 9601 *et seq.*), or any other law providing for protection of public health or the environment. Compliance with this Permit does not relieve Permittee of its obligations to comply with other applicable federal laws.

I.B. PERMIT CONDITIONS

- I.B.1. Pursuant to Section 3005(c)(3) of RCRA, 40 CFR Parts 260 through 270, and 40 CFR § 270.32(b), this Permit contains conditions necessary to protect public health and the environment.
- I.B.2. Applicable requirements of 40 CFR Parts 264 and 266 through 268 were directly incorporated or used as a basis to establish Permit conditions based on these parts.

I.C. SEVERABILITY

The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstances is held invalid, the application of such provision to other circumstances and the remainder of this Permit shall not be affected thereby, as provided by 40 CFR § 124.16(a).

I.D. DEFINITIONS

For purposes of this Permit, terms used herein shall have the same meaning as those in 40 CFR Parts 124, 260, 264, 266, 268, and 270, unless this Permit specifically provides otherwise; where terms are not defined in the regulations or the Permit, the meaning associated with such terms shall be defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

“Area of Concern” or “AOC” shall mean any area of the Facility under the control or ownership of the owner or operator where a release to the environment of hazardous waste or hazardous constituents has occurred, is suspected to have occurred or may occur, regardless of the frequency or duration of the release.

“Corrective Measures Study (CMS)” means the investigation and analysis culminating in the Comprehensive Corrective Measures Study (CCMS) submitted by the Permittee.

“COC” means contaminant of concern.

“Director” means the Director of the Land Division, or successor divisions, EPA Region IX, or his or her designee or authorized representative.

“EPA” means the United States Environmental Protection Agency.

“Facility” means the four islands that comprise Johnston Atoll and all property contiguous thereto under the control of the owner or operator seeking a Permit under Subtitle C of the RCRA; except for the units associated with EPA ID No. TT0 570 090 001 which were clean-closed pursuant to a separate hazardous waste Permit, to the extent the Permittee has not used or disturbed the area since clean closure.

“Facility Contact” means the Air Force group responsible for the implementation of the responsibilities of this RCRA permit and the physical location of the records retained under this permit (e.g., operating record).

RCRA Permit
Air Force Civil Engineer Center
10471 20th St, Ste 345
Joint Base Elmendorf-Richardson, AK 99506
1-800-222-4137

“Hazardous constituent” means any constituent identified in 40 CFR Part 261 Appendix VIII, or any constituent identified in 40 CFR Part 264 Appendix IX.

“Hazardous waste” means a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

“Permit” consists of Modules I through III, attached figures and the cover sheet.

“Permit Application” the Permit Application received from the Air Force dated September 13, 2018.

“RCRA Facility Assessment (RFA)” means the investigation culminating in the RFA Final Report dated May 1990. This report identifies several SWMUs on Johnston Atoll and recommends further corrective action for some.

“RCRA Facility Investigation (RFI)” means the investigation culminating in the RCRA Facility Investigation Final Report dated September 1994 including revised pages dated 10 May 1995.

“Release” means any spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping, or disposing of hazardous wastes (including hazardous constituents) into the environment, including the abandonment or discarding of barrels, containers, and other closed receptacles containing hazardous wastes or hazardous constituents.

“Site” has the same meaning as “Facility”.

“Soil” shall include surface and subsurface soil or fill unless otherwise specified.

“Solid Waste Management Units (SWMU)” means any discernable unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at the facility in which solid wastes have been routinely and systematically released.

“Subsurface Soil” means soil greater than 2 feet below ground surface (bgs).

“Surface Soil” means soil from the ground surface to a depth of 2 feet bgs.

I.E. DUTIES AND REQUIREMENTS

I.E.1. Duty to Comply

The Permittee shall comply with all conditions of this Permit, except to the extent and for the duration such noncompliance is authorized by an emergency Permit. Any Permit noncompliance, other than noncompliance authorized by an emergency Permit, constitutes a violation of RCRA and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a Permit renewal application. [40 CFR § 270.30(a)]

I.E.2. Duty to Reapply

If the Permittee wishes to continue an activity allowed by this Permit after the expiration date of this Permit, the Permittee shall submit a complete application for a new Permit at least 180 days prior to Permit expiration. [40 CFR §§ 270.10(h), 270.30(b)]

I.E.3. Permit Expiration

Pursuant to 40 CFR § 270.50, this Permit shall be effective for a fixed term of 10 years. This Permit and all conditions herein will remain in effect beyond the Permit's expiration date, if the Permittee has submitted a timely, complete application and, through no fault of the Permittee, the Director has not issued a new Permit, as set forth in 40 CFR § 270.51. [40 CFR §§ 270.10, 270.13-270.14, and 270.29]

I.E.4. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the Permitted activity in order to maintain compliance with the conditions of this Permit. [40 CFR § 270.30(c)]

I.E.5. Duty to Mitigate

In the event of noncompliance with this Permit, the Permittee shall take all reasonable steps to minimize releases to the environment and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment. [40 CFR § 270.30(d)]

I.E.6. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance/quality control procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Permit. [40 CFR § 270.30(e)]

I.E.7 Permit Modification, Revocation and Reissuance, and Termination

This Permit may be modified, revoked and reissued, or terminated for cause, as specified in 40 CFR §§ 270.41, 270.42, and 270.43. The filing of a request for a Permit modification, revocation and reissuance, or termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee, does not stay the applicability or enforceability of any Permit condition. [40 CFR § 270.30(f)]

I.E.8. Duty to Provide Information

The Permittee shall furnish to the Director, within a reasonable time, any relevant information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Permit, or to determine compliance with this Permit. The Permittee shall also furnish to the Director, upon request, copies of records required to be kept by this Permit. [40 CFR §§ 264.74(a), 270.30(h)]

I.E.9. Inspection and Entry

Pursuant to 40 CFR § 270.30(i), the Permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- I.E.9.a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Permit;
- I.E.9.b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
- I.E.9.c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and
- I.E.9.d. Sample or monitor, at reasonable times, for the purposes of assuring Permit compliance or as otherwise authorized by RCRA, any substances or parameters at any location.

I.E.10. Monitoring and Records

- I.E.10.a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample to be analyzed must be the appropriate method from Appendix I of 40 CFR Part 261 or an equivalent method approved by the Director. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods SW-846, Standard Methods of Wastewater Analysis, or an equivalent method. [40 CFR § 270.30(j)(1)]
- I.E.10.b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this Permit, the certification required by 40 CFR § 264.73(b)(9), and records of all data used to complete the application for this

Permit for a period of at least 10 years from the date of the sample, measurement, report, record, certification, or application. These periods may be extended by request of the Director at any time and are automatically extended during the course of any unresolved enforcement action regarding this Facility. [40 CFR §§ 264.74(b) and 270.30(j)(2)]

I.E.10.c. The Permittee must retain all notices, certifications, demonstrations, waste analysis data, and other documentation produced pursuant to 40 CFR § 268.7 for at least 10 years from the date that the waste is subject to such documentation. Records on LDR waste must be maintained in the operating record for 10 years or until the Facility is closed. [40 CFR § 268.7(a)(6)]. The Permittee shall maintain records for all ground water monitoring wells and associated ground water surface elevations for the full duration of the Permit.

- i. The data must be immediately available for review by authorized inspector personnel; and
- ii. A hardcopy of the data shall be made available for review by authorized inspection personnel within 24 hours of the request being made.

I.E.10.d. Pursuant to 40 CFR § 270.30(j)(3), records of monitoring information shall specify:

- i. The dates, exact place, and times of sampling or measurements;
- ii. The individuals who performed the sampling or measurements;
- iii. The dates analyses were performed;
- iv. The individuals who performed the analyses;
- v. The analytical techniques or methods used; and
- vi. The results of such analyses.

I.E.11. Reporting Planned Changes

The Permittee shall give notice to the Director, as soon as possible, of any planned physical alterations or additions to the Permitted Facility. [40 CFR § 270.30(l)(1)]

I.E.12. Reporting Anticipated Noncompliance

The Permittee shall give advance notice to the Director of any planned changes in the Permitted Facility or activity which may result in noncompliance with Permit requirements. [40 CFR § 270.30(l)(2)]

I.E.13. Certification of Addition, Construction or Modification

This permit does not authorize treatment of hazardous waste. Any proposed hazardous waste treatment requires a permit modification pursuant to 40 CFR §§ 270.41 or 270.42.

I.E.14. Transfer of Permits

This Permit is not transferable to any person, except after notice to the Director. The Director may require modification or revocation and reissuance of the Permit pursuant to 40 CFR § 270.40. Before transferring ownership or operation of the Facility during its operating life, the Permittee shall notify the new owner or operator in writing of the requirements of 40 CFR Parts 264 and 270 of this Permit. [40 CFR §§ 270.30(l)(3), 264.12(c)]

I.E.15. Twenty-Four Hour Reporting

- I.E.15.a. The Permittee shall report to the Director any noncompliance which may endanger health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the circumstances. The report shall include the following:
- i. Information concerning release of any hazardous waste that may cause an endangerment to public drinking water supplies.
 - ii. A description of the occurrence and its causes.
 - iii. Any information of a release or discharge of hazardous waste or of a fire or explosion from the Facility which could threaten the environment or human health outside the Facility.
 - iv. Any release (1) of any hazardous waste if the released quantity exceeds 100 kilograms, or (2) of any material which becomes a hazardous waste, or (3) of any amount of hazardous waste where there is a potential for endangerment of human health or the environment.
- [40 CFR § 270.30(l)(6)(i)]

- I.E.15.b. The description of occurrence and its cause shall include:
- i. Name, address, and telephone number of the owner or operator;
 - ii. Name, address, and telephone number of the Facility;
 - iii. Date, time, and type of incident;
 - iv. Name and quantity of materials involved;
 - v. The extent of injuries, if any;
 - vi. An assessment of actual or potential hazards to the environment and human health outside the Facility, where this is applicable; and
 - vii. Estimated quantity and disposition of recovered material that resulted from the incident.
- [40 CFR § 270.30(l)(6)(ii)]

I.E.15.c. The Permittee shall submit in writing any noncompliance within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period(s) of noncompliance (including exact dates and times); whether the noncompliance has been corrected; and, if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Director may waive the 5-day written notice requirement in favor of a written report within 15 days. [40 CFR § 270.30(l)(6)(iii)]

I.E.16. Compliance Schedule

The Permittee shall notify the EPA of reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Permit no later than 14 days following each schedule date. [40 CFR § 270.30(l)(5)]

I.E.17. Other Noncompliance

The Permittee shall report all other instances of noncompliance not otherwise required to be reported above in Permit Conditions I.E.11 through 16 at the time monitoring reports are submitted. The reports shall contain the information listed in Permit Condition I.E.15. [40 CFR § 270.30(l)(10)]

I.E.18. Other Information

Whenever the Permittee becomes aware that it failed to submit any relevant facts in the Permit application, or submitted incorrect information in a Permit application or in any report to the Director, the Permittee shall promptly submit such facts or information. [40 CFR § 270.30(l)(11)]

I.F. SIGNATORY REQUIREMENT

All applications, reports, or information submitted to or requested by the Director, his designee, or authorized representative, shall be signed and certified in accordance with 40 CFR §§ 270.11 and 270.30(k).

I.G. REPORTS, NOTIFICATIONS, AND SUBMISSIONS TO THE DIRECTOR

The Permittee shall ensure that all plans, reports, notifications, and other submissions to the Director required in Table III.3 are signed and certified in accordance with 40 CFR § 270.11. Failure to submit the information required in Table III.3, or falsification of any submitted information, is grounds for termination of this Permit (40 CFR § 270.43). One copy of these plans, reports, notifications or other submissions shall be submitted electronically to R9LandSubmit@epa.gov, with a notification sent to the current EPA project manager for the permit, or sent to the Director via certified mail or hand delivered at the following address:

Jeff Scott, Director
Land Division
United States Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, California 94105
(415) 972-3311

I.H. CONFIDENTIAL INFORMATION

In accordance with 40 CFR § 270.12, if the Permittee considers any information required to be submitted by this Permit to be confidential business information, it may make that claim at the time of submittal, by following the procedures at 40 CFR Part 2 and 40 CFR § 270.12.

I.I. DISPUTE RESOLUTION

I.L.1. Whenever the Permittee is unable, after using good faith and best efforts, to informally resolve a dispute with respect to this Permit, the following dispute resolution procedures shall apply:

I.L.1.a. The Permittee may invoke the dispute resolution procedures by sending a Dispute Resolution Notice to the Director in writing in accordance with the Permit. Within the first 14 days after receipt of any such Notice, the Permittee and the EPA manager responsible for the RCRA Branch (the “RCRA manager”) will attempt to resolve any disputes. If requested by the Permittee, a meeting will be held between the RCRA manager and the Permittee and/or the representative(s) of the Permittee to discuss the matter. Unless otherwise agreed to by the RCRA manager, the meeting will be held at the EPA Region IX office in San Francisco, California, or by video or teleconference.

- I.I.1.b. If agreement is not reached between the RCRA manager and the Permittee within the initial 14-day period after receipt of written notice to the Director in accordance with Permit Condition I.I.1.a., and the Permittee wishes to continue the Dispute Resolution process, the Permittee must submit written arguments and evidence to the Director or his/her designee who has not been previously involved in consideration or issuance of this Permit for resolution. The written arguments and evidence shall be submitted to the Director or his/her designee within 30 days of the end of the initial 14-day period (i.e., within 44 days after EPA's receipt of the Dispute Resolution Notice) at the addresses identified in the Permit.
- I.I.1.c. If written arguments and evidence are submitted by the Permittee to the Director or his/her designee, the Director or his/her designee will resolve the dispute within a reasonably prompt time period. The Director's resolution of the dispute will include a written response to the evidence and arguments submitted by the Permittee, and will state the basis for EPA's decision. The Permittee shall comply with the Director's decision regardless of whether the Permittee agrees with the decision.
- I.I.2. Unless otherwise agreed to by the Director, invocation of dispute resolution by the Permittee(s) shall not extend, postpone, or affect in any way any obligation of the Permittee(s) under this Permit not directly in dispute.
- I.I.3. Generally, during the period of the resolution of a dispute in accordance with this Permit Condition I.I. any relevant deadline or other compliance obligation or requirement that is the direct subject of the dispute shall be temporarily extended, postponed or otherwise held in abeyance unless disapproved by the Director. The length of time delay shall not exceed the length of time it takes to resolve the dispute, unless the Director specifies a longer time period for compliance as part of the resolution of the dispute. However, where the Director directs the Permittee to conduct emergency interim corrective measures, the Permittee shall implement such measures, as instructed by the Director, simultaneously during any such invocation of the Permit's dispute resolution procedures.

MODULE II

GENERAL FACILITY CONDITIONS

II.A. DESIGN AND OPERATION OF FACILITY

The Permittee shall construct, maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned, sudden or non-sudden release of hazardous constituents to air, soil, or surface water which could threaten human health or the environment. [40 CFR § 264.31]

II.B. WASTE HANDLING

- II.B.1. This Permit does not authorize the treatment of any hazardous waste.
- II.B.2. The Permittee shall not receive any imported waste from off-site for treatment or storage.
- II.B.3. In the event waste is generated on-site the Permittee shall follow the waste analysis procedures required by 40 CFR § 264.13 and waste generator requirements at 40 CFR Part 262.

II.C. SECURITY

The Permittee shall comply with the security provisions of 40 CFR § 264.14(b)(2)(i).

II.D. GENERAL INSPECTION REQUIREMENTS

The Permittee shall inspect the Facility through aerial imagery quarterly and on-site once every 5 years. The Permittee shall remedy any deterioration or malfunction discovered by an inspection, as required by 40 CFR § 264.15(c) in accordance with the Contingency Plan II.G. Records of inspection shall be kept, as required by 40 CFR § 264.15(d).

II.E. PERSONNEL TRAINING

The Permittee shall ensure that contracted personnel and other site-workers have adequate training and supervision, as required by 40 CFR § 264.16. The Permittee shall ensure that any contracted entities maintain all training documents and records for all site-workers while working at the remote Facility, and copies will be maintained off-site by the Facility Permit Contact indicated on EPA OMB Form 2050-0024, as required by 40 CFR § 264.16(d) and (e).

II.F. PREPAREDNESS AND PREVENTION

The Permit does not allow hazardous waste generation, treatment, storage, or disposal and thus the requirements outlined in 40 CFR §§ 264.30 to 264.37 are not incorporated directly. If during the term of this Permit the Permittee generates hazardous waste, it must follow the requirements at 40 CFR Part 262 applicable to hazardous waste generators.

II.G. CONTINGENCY PLAN

The Permittee is not expected to generate hazardous waste, and is not permitted to treat, store or dispose of hazardous waste. Therefore, 40 CFR §§ 264.52 and 264.53 of 40 CFR Part 264 Subpart D, Contingency Plan and Emergency Procedures, are not incorporated in this Permit. The Permittee is, however, responsible for responding to potential releases of hazardous waste or constituents throughout the Facility, as required by 40 CFR § 264.51. The table below sets out the contingency plan equivalent for SWMU No. 6 requirements for remote monitoring through aerial imagery and response actions. Copies of the remote monitoring and response actions taken under the response required will be kept off-site at the location of the Facility Permit Contact.

The Permittee shall perform site-specific contingency planning as shown below in Table II.1. Based on the quarterly remote monitoring, if the Permittee observes the condition described in “Site Condition” column, it will implement the response as outlined in “Response Required by the Air Force” column.

Table II.1 Remote Monitoring and Response for SWMU No. 6

Applicable Unit		Site Condition	Remote Monitoring Frequency	Response Required by the Air Force
SWMU No. 6 Mixed Metal Debris Area (Scrap Metal Dump) and Stabilized Solid Waste Incinerator Ash Disposal Area	1	Shoreline Erosion, No Release	Quarterly	Inspect and maintain every 5 years
	2	Inland Erosion, No Release	Once every 2 months	Inspect and stabilize during next scheduled visit
	3	Cap requires maintenance, No Release (geotextile fabric intact)	Monthly	Perform required maintenance next scheduled visit
	4	Shoreline is up to concrete rubble area and cap requires maintenance, Potential Release (geotextile fabric not intact)	Monthly	Perform required maintenance next scheduled visit
	5	Shoreline at concrete rubble area, No Release	Monthly	Program maintenance, stabilization, or removal
	6	Catastrophic Release	Monthly	Immediate USAF response including deployment of personnel. Program maintenance, stabilization, or removal.

II.H. RECORDKEEPING AND REPORTING

The Permittee is not expected to generate hazardous waste, and is not permitted to treat, store or dispose of hazardous waste; thus, the requirements outlined in 40 CFR Part 264 Subpart E, Manifest System, Recordkeeping and Reporting, are not incorporated in this permit. If the Permittee generates hazardous waste, it must follow the requirements at 40 CFR Part 262 Subparts B and C (The Manifest and Pre-Transport Requirements). In addition, the Permittee shall ensure that any records for the Facility are maintained off-site by the Facility Permit Contact indicated on EPA OMB Form 2050-0024 (RCRA Subtitle C Reporting Instruction and

Forms, submitted with the Permit Application). The records described below must be maintained.

II.H.1. Operating Record

The Permittee shall maintain records required under 40 CFR § 264.73(4) and (6), and all inspections and reports required under the Permit. The operating record will be retained at the Facility Permit Contact address in the application.

II.H.2. Imagery Record

The Permittee shall maintain a record of any and all remote monitoring imagery collected for SWMU No. 6 for all efforts conducted in accordance with Table II.1 monitoring. Records will be maintained at the Facility Contact address in the application for 10 years.

II.I. GENERAL CLOSURE REQUIREMENT

II.I.1. The Permittee shall close the Facility, as required by 40 CFR § 264.111.

MODULE III

CORRECTIVE ACTION FOR SOLID WASTE MANAGEMENT UNITS

The Permittee must take corrective action as necessary to protect human health and the environment from all releases of hazardous waste and/or constituents from any Hazardous Waste Management Unit, Solid Waste Management Unit and/or Area of Concern at the Facility, regardless of when the waste was placed in the unit, in accordance with Section 3004(u) of RCRA as amended by the HSWA, and 40 CFR § 264.101.

III.A. SUMMARY OF SWMUS REQUIRING ACTION UNDER THIS PERMIT

III.A.1. SWMUs and AOCs determined to require corrective action are identified in Table III.1 and their location is shown on the attached Figure.

Table III.1 SWMUs and AOCs under the corrective action process

SWMU or AOC (as identified in RFA)	Description
SWMU No. 1	Solid Waste Burn Pit
SWMU No. 2	Former Herbicide Orange Storage Area
SWMU No. 6	Mixed Metal Debris Area (Scrap Metal Dump) and Stabilized Solid Waste Incinerator Ash Disposal Area
SWMU No. 16	Power Plant Spill Area
AOC No. 1	Motor Gas (MOGAS) Area
AOC No. 2	Swimming Pool Area and POL System
AOC No. 3	Taxiway Area

III.A.2. Newly-identified units that have been identified and are being assessed for inclusion to the corrective action program will be evaluated in accordance with Section III.D and are identified in Table III.2:

Table III.2 Newly-Identified SWMU Assessment Units

Unit	Description
Red Hat Storage Area Bunkers CRDA (Johnston Island)	Bunkers are located on the southwest part of the island. Available records need to be reviewed. Previously clean-closed under EPA ID TT9 570 090 001.
Primary CRDA (Johnston Island)	Approximately 8.0 acres in the northeast corner of the island.

Unit	Description
Swimming Pool CRDA (Johnston Island)	Approximately 0.2 acres in the center of the island.
East Island CRDA (Hikina Island)	Approximately 0.1 acres in the center west part of the island.
Sand Island CRDA	Approximately 0.1 acres on the western lobe of the island.
North Island CRDA (Northern)	Approximately 0.1 acres in the center part of the island.
North Island CRDA (Southern)	Approximately 0.3 acres in the southcentral part of the island.

III.B. STANDARD CONDITIONS

- III.B.1. All plans and schedules required by the conditions of Table III.3 are, upon approval of the Director, incorporated into this Corrective Action Module by reference and become an enforceable part of this Permit. Any noncompliance with such approved plans and schedules shall be deemed noncompliance with this Permit.
- III.B.2. All requests for extensions to due dates for submittals must be made in writing to the Director at least one week in advance of the due date for the subject submittal. The request for extension should explain the circumstances requiring additional time and request a specific revised due date. Extensions of the due dates for submittals may be granted or denied by the Director.
- III.B.3. If the Director determines that further actions beyond those provided in this Corrective Action Module, or changes to that which is stated herein, are warranted, the Director shall modify the Corrective Action Module either according to procedures of this Permit, or according to the Permit modification process under 40 CFR § 270.41.
- III.B.4. All raw data, such as laboratory reports, drilling logs, bench-scale or pilot-scale data, and other supporting information gathered or generated during activities undertaken at the Facility shall be maintained in the operating record during the term of this Permit, including any reissued Permits.

Table III.3 Corrective Action Schedule

Facility Requirement	Record/ Schedule
Remote Monitoring (Site-specific SWMU No. 6).	Permittee shall perform remote monitoring of SWMU 6 quarterly unless site conditions change from Scenario 1 (as defined in Table II.1); then as defined in Table II.1. Maintain all remote monitoring imagery records for 10 years.
Progress Reports	Permittee shall submit a progress report as described in Section III.C. annually to include a summary of the actions undertaken during the year.

Facility Requirement	Record/ Schedule
Install and maintain warning signs	Permittee shall install and maintain signs that indicate fishing is prohibited. New signs shall be installed every 5 years.
Sediment sampling	Permittee shall perform onsite sampling of sediment as detailed in Table III.5 once every 5 years. Submit workplan as described below.
Groundwater sampling	Permittee shall perform onsite sampling of groundwater monitoring wells once every 5 years. Submit workplan as described below.
Site Specific Ecological Risk Assessment	Permittee shall perform a Site Specific Ecological Risk Assessment for the Facility initiating the work by December 2020. Submit workplan for EPA approval no less than 90 days before initiating work. The work may not commence until EPA has given approval on the Site Specific Ecological Risk Assessment workplan.
Work Plan(s) Related to Monitoring and Management-Based Performance Criteria	Permittee shall submit Work Plans required under this Permit for EPA review and comment no later than 90 days prior to implementation of the plans. These include but are not limited to the Cap Maintenance Plan, the Groundwater Monitoring Plan, and the Sediment Monitoring Plan. Table III.5 outlines the required contents of the workplans. The workplans may not be implemented if there are unresolved EPA comments on the workplan.
Written notification of newly-identified SWMUs	Within 30 calendar days after discovery.
Newly-Identified SWMU Assessment Plan	Within 90 calendar days after receipt of request for plan, or as approved by the Director.
Implementation of Newly-Identified SWMU Assessment Plan	Within 30 calendar days after written approval of plan, or as approved by the Director.
Newly-Identified SWMU Assessment Report	Within 90 calendar days from completion of plan implementation, or as approved by the Director.
Further investigations for newly-identified SWMU	Negotiated with the Director.
Written notification of newly-discovered release(s) at SWMU(s)	No later than 30 calendar days after discovery.
SWMU Assessment Workplan	No later than 30 calendar days after the Permittee has received written approval the Permittee shall begin implementation of the SWMU Assessment Workplan.
SWMU Assessment Workplan Final Report	Within 90 calendar days from completion of the work specified in the approved SWMU Assessment Plan.

III.C. REPORTING REQUIREMENTS

III.C.1. The Permittee shall submit to the Director a signed progress report on all activities (e.g., remote monitoring, maintenance events, monitoring-based controls, and SWMU Assessment,) on an annual basis. If the Director determines that these progress reports are not adding value to the Corrective Action process, the Director may reduce or eliminate the reporting requirement. These reports shall contain:

III.C.1.a A description of work completed;

- III.C.1.b Summaries of all findings, including summaries of laboratory data;
- III.C.1.c Summaries of all problems or potential problems encountered during the reporting period and actions taken to rectify problems; and
- III.C.1.d Projected work for the next reporting period.
- III.C.2. Copies of other reports (e.g., inspection reports), drilling logs and laboratory data shall be made available to the Director upon request.
- III.C.3. The Director may require the Permittee to conduct new or more extensive assessments, investigations, or studies, as needed, based on information provided in these progress reports or other supporting information.
- III.C.4 No less than 90 days before initiation of a sampling event, the Permittee shall prepare a workplan of the work to be performed. The work shall not proceed unless EPA has had at least 90 days to review the workplan. To the extent that EPA provides comments, the Permittee shall incorporate the comments into the workplan and resolve any concerns prior to initiation of the sampling effort.
- III.C.5 The workplan shall include conservation measures that will be taken to ensure protectiveness of threatened and endangered species at the Facility. The measures will take into account the threatened and endangered species that could be encountered during the ocean passage to Johnston Atoll and species that could be encountered during sediment monitoring. The workplan shall be provided to the United States Fish and Wildlife Service no less than 90 days prior to the sailing date for Johnston Atoll. To the extent that the Fish and Wildlife Service provides comments on the mitigation measures for the threatened and endangered species, the Permittee shall incorporate the comments applicable to the Facility into the workplan and resolve any concerns before sailing or sampling, whichever activity would impact the listed species. The workplans shall be sent to:

US Fish and Wildlife Service
Pacific Islands Refuges & Monuments Office
300 Ala Moana Blvd., Rm 5-231
Honolulu, HI 96850

III.D. NOTIFICATION REQUIREMENTS FOR AND ASSESSMENT OF
NEWLY-IDENTIFIED SOLID WASTE MANAGEMENT UNIT(S)

- III.D.1. The Permittee shall notify the Director in writing of any newly -identified, newly-discovered, or newly-created AOCs or SWMUs no later than 30 calendar days after discovery.

- III.D.2. After such notification, the Director may request, in writing, that the Permittee prepare a SWMU Assessment Plan and a proposed schedule of implementation and completion of the Plan for any additional SWMU(s) discovered subsequent to the effective date of this Permit.
- III.D.3. Within 90 calendar days after receipt of the Director's request for a SWMU Assessment Plan, or as otherwise allowed by the Director, the Permittee shall prepare a SWMU Assessment Plan for determining past and present operations at the unit, as well as any sampling and analysis of groundwater, land surface and subsurface strata, surface water, or air, as necessary to determine whether a release of hazardous waste or constituents from such unit(s) has occurred, is likely to have occurred, or is likely to occur. The SWMU Assessment Plan must demonstrate that the sampling and analysis program, if applicable, is capable of yielding representative samples, and must include parameters sufficient to identify migration of hazardous waste or constituents from the newly-discovered SWMU(s) to the environment.
- III.D.4. After the Permittee submits the SWMU Assessment Plan, the Director may either approve or disapprove the Plan in writing.
- If the Director approves the Plan, the Permittee shall begin to implement the Plan within 30 calendar days of receiving such written notification, or as otherwise allowed by the Director.
- If the Director disapproves the Plan, the Director shall either (1) notify the Permittee in writing of the Plan's deficiencies and specify a due date for submittal of a revised Plan, or (2) revise the Plan and notify the Permittee of the revisions. This Director-revised Plan becomes the approved SWMU Assessment Plan. The Permittee shall implement the Plan within 30 calendar days of receiving written approval, or as otherwise allowed by the Director.
- III.D.5. The Permittee shall submit a SWMU Assessment Report to the Director within 90 calendar days from completion of the work specified in the approved SWMU Assessment Plan, or as otherwise allowed by the Director. The SWMU Assessment Report shall describe all results obtained from the implementation of the approved SWMU Assessment Plan. At a minimum, the Report shall provide the following information for each newly-identified SWMU:
- III.D.5.a The location of the newly-identified SWMU in relation to other SWMUs;
 - III.D.5.b The type and function of the unit;
 - III.D.5.c The general dimensions, capacities, and structural description of the unit (supply any available drawings);

- III.D.5.d The period during which the unit was operated;
- III.D.5.e The specifics on all solid wastes that have been or are being managed at the SWMU, to the extent available; and
- III.D.5.f The results of any sampling and analysis required for the purpose of determining whether releases of hazardous waste or constituents have occurred, are occurring, or are likely to occur from the unit.

III.D.6. Based on the results of the SWMU Assessment Report, the Director shall determine the pathway for the specific unit(s) covered in the SWMU Assessment:

- III.D.6.a If the Director determines that there has been no release or no likelihood of release of hazardous waste or hazardous constituents from the SWMU, the EPA will issue a written confirmation that no further assessment is necessary for the SWMU.
- III.D.6.b If the Director determines that the SWMU Assessment Report indicates that further investigations are needed to determine an appropriate path, the Director may require the Permittee to prepare a Workplan for such investigations. SWMU Assessment Plans will be reviewed for approval as described under Permit Condition III.F.3.
- III.D.6.c If the Director determines that the SWMU Assessment Report provides that the unit is a SWMU subject to the required Corrective Action Investigation process, the Permit may be modified to identify the unit in Table III.2. The Director will notify in writing that the permit modification is required to address the SWMU subject to Corrective Action.
- III.D.6.d If the SWMU Assessment Report provides that no further investigation is needed and the Director agrees, the Director will provide, in writing, that based on the information provided the unit will not require corrective action.

III.E. NOTIFICATION REQUIREMENTS FOR NEWLY-DISCOVERED RELEASES AT SWMUs OR AOCs

The Permittee shall notify the Director, in writing, of any release(s) of hazardous waste or constituents, discovered during the course of groundwater monitoring, field investigation, environmental auditing, or other activities undertaken after the effective date of this Permit, no later than 30 calendar days after discovery. The Permittees shall investigate and, if necessary, remediate the discovered spill(s) or release(s). Per conditions stated in (Module I) Section I.E.15.a.iv, additional 24-hour reporting requirements apply for specific release scenarios and situations. Such newly-discovered releases may be from

any unit, regardless of the current or previous status (e.g., No Further Action had been issued) in the corrective action process. The Director may require further investigation of the newly-identified release(s). A plan for such investigation will be reviewed for approval under a SWMU Assessment Workplan, in accordance with III.F.

III.F. SWMU ASSESSMENT WORKPLAN

III.F.1. A SWMU Assessment Workplan shall describe the objectives of the investigation and the overall technical and analytical approach to completing all actions necessary to characterize the nature, direction, rate, movement, and concentration of releases of hazardous waste or constituents from specific units or groups of units, and their actual or potential receptors. The SWMU Assessment Workplan shall detail all proposed activities and procedures to be conducted at the Facility, the schedule for implementing and completing such investigations, the qualifications of personnel performing or directing the investigations, including contractor personnel, and the overall management of the investigation.

In addition, the SWMU Assessment Workplan shall discuss sampling and data collection quality assurance and data management procedures, including formats for documenting and tracking data and other results of investigations, and health and safety procedures

III.F.2. If the Director disapproves the SWMU Assessment Workplan, the Director shall either (1) notify the Permittee in writing of the Workplan's deficiencies and specify a due date for submittal of a revised Plan, or (2) revise the Workplan and notify the Permittee of the revisions. This modified SWMU Assessment Workplan becomes an approved SWMU Assessment Workplan.

III.F.3. After review of any deliverable that is required to be approved by the Director pursuant to this Permit, the Director will either:

III.F.3.a Approve, in whole or in part, the submission;

III.F.3.b Approve the submission on specified conditions;

III.F.3.c Modify the submission to cure the deficiencies;

III.F.3.d Disapprove, in whole or in part, the submission, directing that Permittee modify the submission; or

III.F.3.e Any combination of the above.

Upon approval of any deliverable pursuant to this Permit, including approval on conditions or modification by the Director, the Permittees may either:

- III.F.3.e.i accept the approval, in which case they shall maintain a copy of the approved deliverable, in accordance with the applicable record-keeping provision(s) of this Permit, and proceed to take any action required by and in accordance with the approved deliverable, or
- III.F.3.e.ii seek review of the conditions or modifications to the approval through the dispute resolution procedures in Section I.I. of this Permit.

III.G. SWMU ASSESSMENT WORKPLAN IMPLEMENTATION

No later than 30 calendar days after the Permittee has received written approval from the Director for the SWMU Assessment Workplan, the Permittee shall begin implementation of the SWMU Assessment Workplan according to the schedules specified in the SWMU Assessment Workplan.

III.H. SWMU ASSESSMENT WORKPLAN FINAL REPORT AND SUMMARY REPORT

III.H.1. The SWMU Assessment Workplan Report will be provided after the completion of the SWMU Assessment Workplan in accordance with the schedule outlined in Table III.3. The SWMU Assessment Workplan Report shall describe the procedures, methods, and results of all Facility investigations of SWMUs and their releases, including information on the type and extent of contamination at the SWMU/AOC, sources and migration pathways, and actual or potential receptors. The SWMU Assessment Workplan Report shall present all information gathered under the approved SWMU Assessment Workplan. The SWMU Assessment Workplan Report must contain adequate information to support further corrective action or NFA decisions at the Facility.

III.H.2. After the Permittee submits the SWMU Assessment Workplan Final Report and Summary Report, the Director shall either approve or disapprove the Reports in writing.

If the Director approves the SWMU Assessment Workplan Final Report and Summary Report, the Permittee shall mail the approved Summary Report to all individuals on the facility mailing list established pursuant to 40 CFR § 124.10, within 15 calendar days of receipt of approval.

If the Director determines the SWMU Assessment Workplan Final Report and Summary Report do not fully detail the objectives stated under Permit Condition III.F.1, the Director may disapprove the SWMU Assessment Workplan Final Report and Summary Report. If the Director disapproves the Reports, the Director shall notify the Permittee in writing of the

Reports' deficiencies and specify a due date for submittal of a revised Final and Summary Report. The Summary Report, once approved, shall be mailed to all individuals on the facility mailing list.

III.I. CORRECTIVE MEASURES STUDY (CMS)

III.I.1. The Permittee prepared a CMS for the SWMUs and AOCs addressed in this Permit. If the Director requires the CMS process for a newly-discovered SWMU or AOC or a new release from a SWMU or AOC, the Director will notify the Permittee in writing that a modification to the permit is necessary.

III.J. PERMIT MODIFICATION FOR REMEDY

Based on information the Permittee submits in the SWMU Assessment Workplan Final and Summary Reports, monitoring reports, and other information, the Director will select a remedy and, if necessary, initiate a modification to this Permit.

The modification or other information the Permittee will submit pursuant to this Permit shall specify the selected remedy and include, at a minimum, the following:

- III.J.1 Description of all technical features of the remedy that are necessary for achieving the standards for remedies established under this Permit including length of time for which compliance must be demonstrated at specified points of compliance;
- III.J.2 All concentration levels of hazardous constituents in each medium or alternative controls that the remedy must achieve or implement, respectively, to be protective of human health and the environment;
- III.J.3 All requirements for achieving compliance with hazardous constituent concentration levels or implementation of alternative controls.
- III.J.4 All requirements for complying with the standards for management of wastes;
- III.J.5 Requirements for removal, decontamination, closure, or post-closure of units, equipment, devices, or structures that will be used to implement the remedy;
- III.J.6 A schedule for initiating and completing all major technical features and milestones of the remedy; and
- III.J.7 Requirements for submission of reports and other information.

III.K. SITE SPECIFIC ECOLOGICAL RISK ASSESSMENT

- III.K.1 The Permittee is required to perform a Site Specific Ecological Risk Assessment (SSERA) for the Facility. The SSERA shall consider any species that are designated as being entitled to special or protective status and any sensitive ecosystem receptors.
- III.K.1.a A workplan for the SSERA shall be prepared in advance of the SSERA. EPA must approve the workplan before the Permittee initiates the SSERA work.
- III.K.1.b The SSERA shall determine the applicable COCs in groundwater and sediment by SWMU/AOC and the protective clean-up criteria. The SSERA will evaluate the appropriate sampling media.
- III.K.2 The Permittee shall conduct a coral survey to identify if any listed coral species are present in the vicinity of the Facility. Alternatively, the Permittee can assume that the listed coral is present, and implement appropriate controls to protect the coral.
- III.K.3 EPA will use the results of the SSERA to determine clean-up goals for the Facility. The Permittee will apply for a permit modification in accordance with Section I.E.7 to incorporate the cleanup goals in this Permit, or EPA may modify the permit pursuant to 40 CFR § 270.41.

III.L. MODIFICATION OF THE CORRECTIVE ACTION MODULE

- III.L.1. If at any time the Director or the Permittee determine that modification of this Corrective Action Module is necessary, he or she may initiate a modification pursuant to Section I.E.7.
- III.L.2. Modifications to the Corrective Action Module do not constitute a reissuance of the Permit.

III.M. “NO FURTHER ACTION” DETERMINATION FOR SWMUs AND AOCs

III.M.1. Completed Corrective Action Responsibilities

For the following sites, EPA is determining or has determined that no further action is necessary. This determination is made under this and previous Permits, Remedial Facility Assessments (RFAs), and/or Remedial Facility Investigations (RFIs):

Table III.4 SWMUs that have achieved NFA

SWMU or AOC (as identified in RFA)	Description
SWMU No. 3 & 4	Old Fire Training Pit and Waste Storage Area
SWMU No. 5	Recycle Yard
SWMU No. 7	Vehicle Salvage Yard
SWMU No. 9	Hazardous Waste Storage Area
SWMU No. 10	New Fire Training Area
SWMU No. 12	Red Hat Area Berms 2
SWMU No. 15	Above Ground Jet Propulsion Fuel, Grade 5 (JP-5) Storage Tanks
SWMU No. 18	Temporary Drum Staging Area (Approx.)
SWMU No. 19	Motor Pool
SWMU No. 20	Battery Shop
SWMU No. 21	Maintenance Shop
SWMU No. 22	Paint Shop
	Navy Pier Battery Lagoon

III.M.2 A determination of no further action shall not preclude the Director from requiring further investigations, studies, or remediation at a later date, if new information or subsequent analysis indicates a release or likelihood of release from a SWMU and/or AOC or that the Facility is likely to pose a threat to human health or the environment.

III.M.3 Completion of Ongoing Corrective Action Responsibilities

This Permit does not include a pathway to achieve NFA for the SWMUs addressed herein. Therefore, the process for NFA has not been included in this Permit.

III.N. CORRECTIVE ACTION CRITERIA: SWMUs and AOCs UNDER THE CORRECTIVE ACTION PROCESS

III.N.1 The Permittee shall record the fishing prohibition into the Base Master Plan.

III.N.2 The Permittee shall implement the remedies as described in Table III.5 below.

Table III.5 CORRECTIVE ACTION CRITERIA¹

¹ As stated in Section I.A., compliance with the terms of this permit does not relieve Permittee of its responsibility to comply with applicable laws. In addition to the list set out at 40 CFR § 270.3, EPA recommends the Permittee confirm

SWMU or AOC	Current Performance Criteria
<p>SWMU No. 1 Solid Waste Burn Pit</p>	<p>Final Remedy Selection: Fishing prohibition and sediment monitoring.</p> <p>Monitoring-Based: Conduct sediment monitoring every 5 years in the adjacent lagoon to monitor for any significant increases in sediment COC concentrations, which could indicate that a release(s) has occurred. Sampling shall be conducted in accordance with the workplan submitted pursuant to Table III.3. The COC(s) will be developed during the sediment monitoring plan development. The EPA must approve the list of COCs to be analyzed prior to sampling. Permittee shall submit a Permit modification that incorporates resuming fish tissue monitoring if:</p> <ul style="list-style-type: none"> • Two consecutive sediment monitoring events show that a COC concentration exceeds its upper control limit (UCL) defined as 10-times the baseline arithmetic mean (i.e., $UCL = 10 * \text{mean}$); or • The Air Force proposes to remove the fishing prohibition. <p>Management-Based: Permittee shall maintain warning signs by installing new signs every 5 years, that will be visible at all times. EPA must determine no or acceptable risk to human health for the fishing prohibition and sediment sampling control measures to be removed. The Air Force is responsible for notifying the appropriate agency that has the authority to issue fishing Permits within the area of Johnston Atoll (i.e., DOI or successor agencies) of this prohibition and communicate the risk to human health if the fish are consumed.</p>
<p>SWMU No. 2 Former Herbicide Orange Storage Area</p>	<p>Final Remedy Selection: Fishing prohibition and sediment monitoring.</p> <p>Monitoring-Based: Conduct sediment monitoring every 5 years in the adjacent lagoon to monitor for any significant increases in sediment COC concentrations, which could indicate that a release(s) has occurred. Sampling shall be conducted in accordance with the workplan submitted pursuant to Table III.3. The COC(s) will be developed during the sediment monitoring plan development. The EPA must approve the list of COCs to be analyzed prior to sampling. Permittee shall submit a Permit modification that incorporates resuming fish tissue monitoring if:</p> <ul style="list-style-type: none"> • Two consecutive sediment monitoring events show that a COC concentration exceeds its UCL defined as 10-times the baseline arithmetic mean (i.e., $UCL = 10 * \text{mean}$); or • The Air Force proposes to remove the fishing prohibition. <p>Management-Based: Permittee shall maintain warning signs by installing new signs every 5 years, that will be visible at all times. EPA must determine no or acceptable risk to human health for the fishing prohibition and sediment sampling control measures to be removed. The Air Force will be responsible for notifying the appropriate agency (i.e., DOI or successor agencies) that has the authority to issue fishing Permits within the area of Johnston Atoll of this prohibition and communicate the risk to human health if the fish are consumed.</p>
<p>SWMU No. 6 Mixed Metal Debris Area and Stabilized Solid Waste Incinerator Ash Disposal Area</p>	<p>Monitoring-Based: For as long as stabilized ash is left in place, Permittee shall continue monitoring every 5 years. Monitoring will be conducted under the prepared and submitted Groundwater Monitoring Plan developed in accordance with Section III.C.4; Continue groundwater monitoring at 4 points of compliance; COCs in groundwater are total and dissolved lead. Groundwater cleanup goals for COCs have been set based on ecological risk factors to be 15 ug/L.</p> <p>Management-Based: Inspect and maintain the integrity of the cap every 5 years with remote monitoring performed quarterly unless the site condition scenario changes, then perform remote monitoring and response as defined by Module II Table II.1. Conduct topographical, land, and groundwater elevation surveys for SWMU No. 6 during the next on-site event;</p>

its compliance with: the Migratory Bird Treaty Act, 16 USC §§ 703 - 712 (*see also* 50 CFR Part 10); the Marine Mammal Protection Act, 16 USC Chapter 13; Executive Order 13089, Coral Reef Protection; the Magnuson-Stevens Fishery Conservation and Management Act, 16 USC §§ 1901 et seq.; and the National Wildlife Refuge Administration Act, 16 USC § 668dd-ee.

	<p>identify boundaries and elevation of the SWMU based on survey data. Update groundwater flow based on groundwater elevation survey data. Update Facility records with location data and maintain satellite imagery collected for remote monitoring for 3 years. Install/maintain warning signs restricting access and excavation within this SWMU. Warning signs must be visible at all times and will be maintained by installing new signs every 5 years .</p>
<p>SWMU No. 16, Power Plant Spill Site, and AOC No. 1, Motor Gasoline (MOGAS) Area</p>	<p>Monitoring-Based: Continue groundwater monitoring at 6 groundwater points of compliance every 5 years pursuant to the groundwater monitoring plan. Analyze groundwater samples for the COC(s) that were developed during the groundwater monitoring plan development. The EPA must approve the list of COCs to be analyzed prior to sampling. The Permittee may cease groundwater monitoring if it can demonstrate that 3 consecutive sampling events meet groundwater clean-up criteria. Clean-up criteria for groundwater will be established in the SSERA and implemented in a permit modification.</p> <p>Conduct sediment monitoring every 5 years in the adjacent lagoon to monitor for any significant increases in sediment COC concentrations, which could indicate that a release(s) has occurred. Sampling shall be conducted in accordance with the workplan submitted pursuant to Table III.3. The COC(s) will be developed during the sediment monitoring plan development. The EPA must approve the list of COCs to be analyzed prior to sampling. Permittee shall submit a Permit modification that incorporates resuming fish tissue monitoring if:</p> <ul style="list-style-type: none"> • Two consecutive sediment monitoring events show that a COC concentration exceeds its UCL defined as 10-times the baseline arithmetic mean (i.e., $UCL = 10 * \text{mean}$); or • The Air Force proposes to remove the fishing prohibition. <p>Management-Based: Permittee shall maintain warning signs by installing new signs every 5 years, that will be visible at all times. EPA must determine no or acceptable risk to human health for the fishing prohibition and sediment sampling control measures to be removed. The Air Force will be responsible for notifying the appropriate agency (i.e., DOI or successor agencies) that has the authority to issue fishing Permits within the area of Johnston Atoll of this prohibition and communicate the risk to human health if the fish are consumed.</p>
<p>AOC No. 2, Swimming Pool Area, and AOC No. 3, Taxiway Area</p>	<p>Monitoring-Based: Continue groundwater monitoring at 12 groundwater points of compliance every 5 years pursuant to the groundwater monitoring plan. Analyze groundwater samples for the COC(s) that were developed during the groundwater monitoring plan development. The EPA must approve the list of COCs to be analyzed prior to sampling. The Permittee may cease groundwater monitoring if it can demonstrate that 3 consecutive sampling events meet groundwater clean-up criteria. Clean-up criteria for groundwater will be established in the SSERA and implemented in a permit modification.</p>

FIGURES

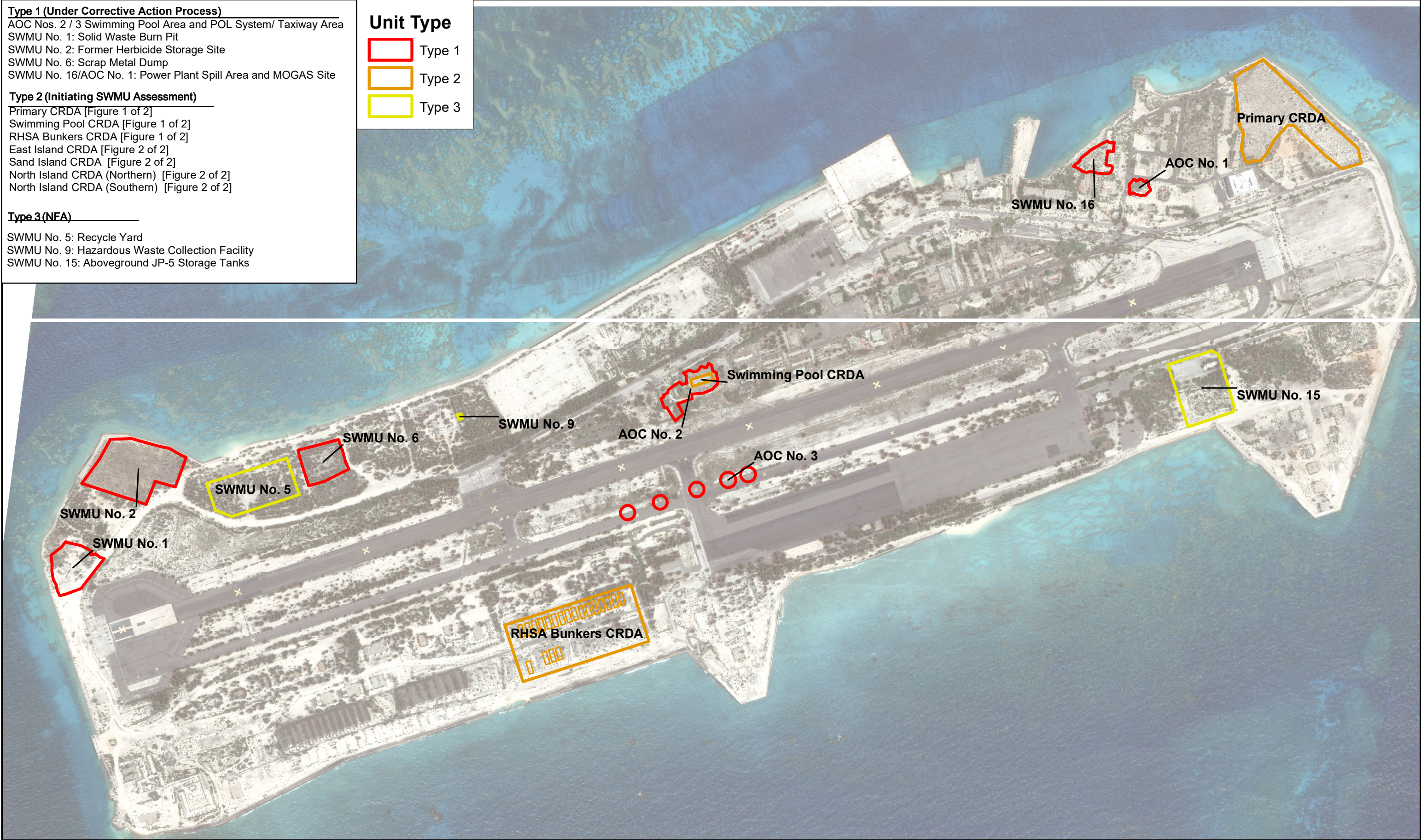
Type 1 (Under Corrective Action Process)
 AOC Nos. 2 / 3 Swimming Pool Area and POL System/ Taxiway Area
 SWMU No. 1: Solid Waste Burn Pit
 SWMU No. 2: Former Herbicide Storage Site
 SWMU No. 6: Scrap Metal Dump
 SWMU No. 16/AOC No. 1: Power Plant Spill Area and MOGAS Site

Type 2 (Initiating SWMU Assessment)
 Primary CRDA [Figure 1 of 2]
 Swimming Pool CRDA [Figure 1 of 2]
 RHSA Bunkers CRDA [Figure 1 of 2]
 East Island CRDA [Figure 2 of 2]
 Sand Island CRDA [Figure 2 of 2]
 North Island CRDA (Northern) [Figure 2 of 2]
 North Island CRDA (Southern) [Figure 2 of 2]

Type 3 (NEA)
 SWMU No. 5: Recycle Yard
 SWMU No. 9: Hazardous Waste Collection Facility
 SWMU No. 15: Aboveground JP-5 Storage Tanks

Unit Type

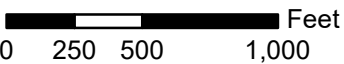
- Type 1
- Type 2
- Type 3

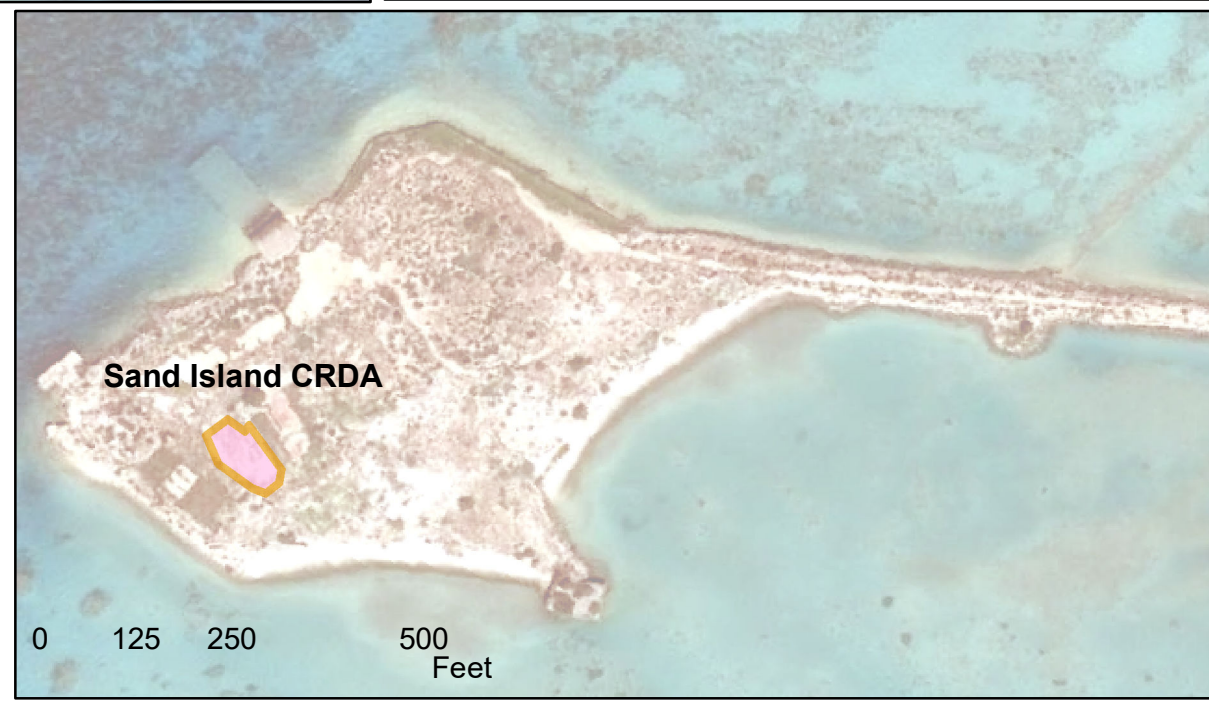
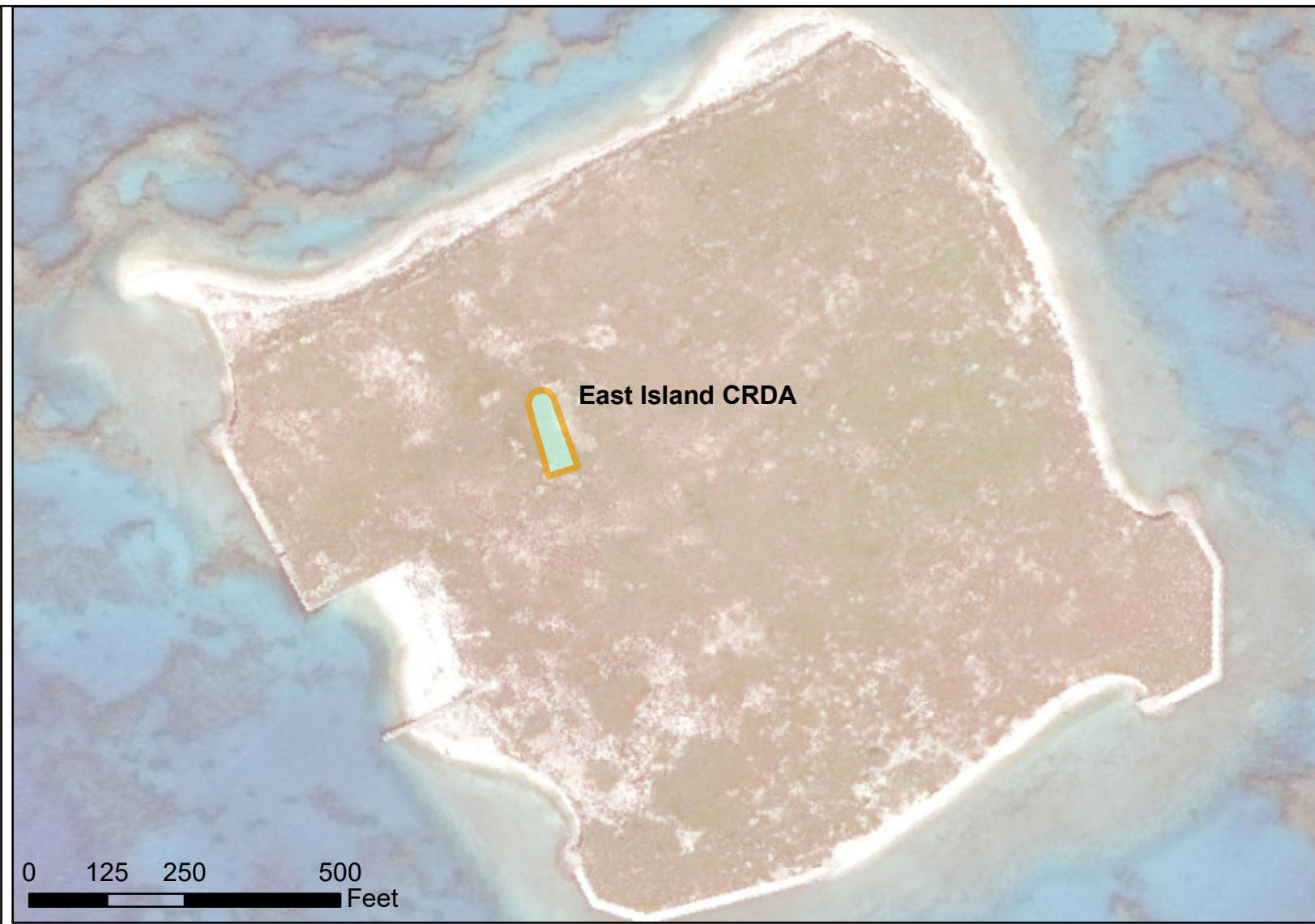
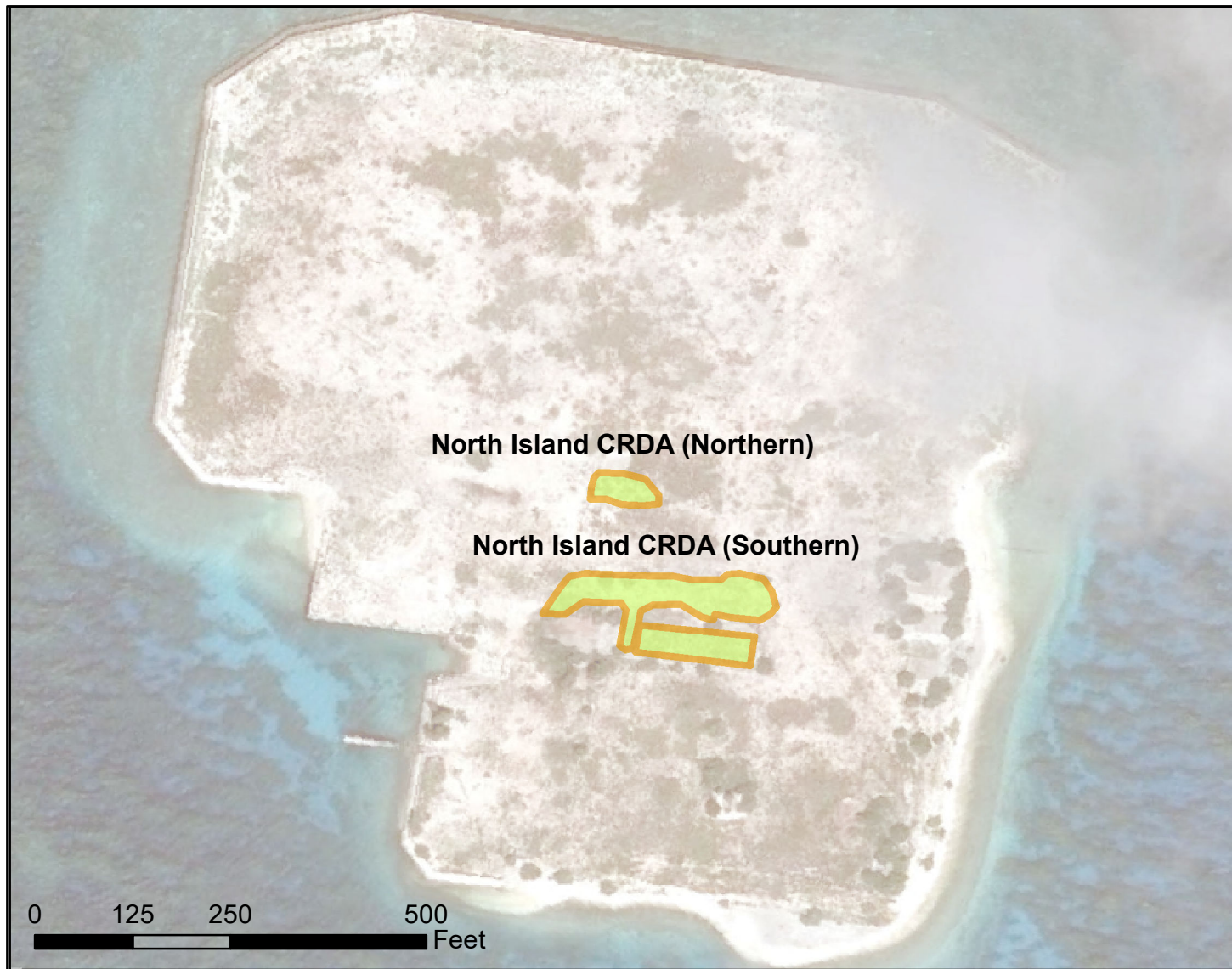


References
 Aerial Data Source: DigitalGlobe Worldview-2 (0.5m) Satellite Image Image Captured April 5, 2013 Processed by Kendra Maty, USFWS-NWRS-RR1
 Type 2 and 5 Location boundaries are approximate; locations digitized from: USAF/CH2M Hill 2004 North Island Demolition, Decommissioning and Wildlife Hazard Mitigation. USAF. 1994. or RCRA Facility Investigation Final Report Vol. 1, August. OR
 USAF. 1995. Management Action Plan. Johnston Atoll. Rev. 4. November.

Acronyms
 AOC: Area of Concern
 CRDA: Construction Rubble Debris Area
 HWCA: Hazardous Waste Corrective Action
 RCRA: Resource Conservation and Recovery Act
 RHSA: Red Hat Storage Area
 SWMU: Solid Waste Management Unit

**Figure 1 (Johnston Island)
 Johnston Atoll RCRA Permit**





Type 2 Units

- North Island CRDA
- East Island CRDA
- Sand Island CRDA

The Outer Islands only have Type 2 units present
 Type 2 units are the CRDA units proposed for
 SWMU Assessment; No Type 1 or 3 units are present
 on the Outer Islands.

References

Aerial Data Source: DigitalGlobe Worldview-2 (0.5m) Satellite Image Image Captured April 5, 2013 Processed by Kendra Maty, USFWS-NWRS-RR1
 Type 2 Location boundaries are approximate; locations digitized from: USAF/CH2M Hill 2004 North Island Demolition, Decommissioning and Wildlife
 Hazard Mitigation. USAF. 1994. or RCRA Facility Investigation Final Report Vol. 1, August. OR
 USAF. 1995. Management Action Plan. Johnston Atoll. Rev. 4. November.

**Figure 2 (Outer Islands)
 Johnston Atoll RCRA Permit**

