U.S. AIR FORCE

Integrated Solid Waste Management Plan

Joint Base Langley-Eustis

Template Version June 2020

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Prepared For:
General Services Administration
819 Taylor Street
Fort Worth, Texas 76102
ATTN: Anthony Brown
and

Air Force Civil Engineer Center
114 Thompson Street, Suite 213
Building 586
Joint Base Langley-Eustis, Virginia 23665
ATTN: J.P. Smith

and
Joint Base Langley Eustis - Langley
37 Sweeney Boulevard
Joint Base Langley-Eustis, VA 23665

Joint Base Langley Eustis - Eustis
1407 Washington Boulevard
Fort Eustis, VA 23604

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Prepared By:

3460 Rockefeller Ct.
Waldorf, MD 20602
1-301-932-0994 • www.haztrain.com

In Association with:

1608 13th Avenue South, Suite 300
Birmingham, Alabama 35205
1-800-806-4001 • www.bhate.com

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 633D AIR BASE WING
JOINT BASE LANGLEY-EUSTIS VA

OFFICE OF THE COMMANDER

MEMORANDUM FOR 633 CES/CC
733 CES/DIR

SUBJECT: Appointment of Qualified Recycling Program (QRP) Manager

1. In accordance with *Memorandum on QRP Guidance*, ADUSD (E), 24 Apr 03, AFMAN 32-7002 and DoDI 4715.23, the 633 ABW has established a Qualified Recycling Program (QRP). A QRP is an installation recycling program that is qualified to retain the direct sales proceeds of certain recyclable materials. The 633 ABW must operate a QRP in accordance with specific requirements to retain proceeds for use at the base.

2. I hereby appoint the following personnel as QRP Managers:

Ms. Joanna Bateman	JBLE-Eustis	Primary
Mr. Tom Gunther	JBLE-Eustis	Alternate
Mr. Shaunell Lattimore	JBLE-Langley	Primary
Ms. Sherry Johnson	JBLE-Langley	Alternate

The QRP Managers will receive payments from recycle broker/buyers and maintain records of financial transactions associated with the JBLE QRP. The QRP Managers will provide semi-annual reports on QRP expenses and income revenues to the Environmental, Safety and Occupational Health Council (ESOHC). The QRP Managers will prepare and maintain a QRP business plan to ensure JBLE maximizes revenues from recycling at the lowest possible cost to the government. The QRP Managers will validate and report progress to the Air Force Civil Engineer Center on Air Force and DoD goals related to solid waste diversion.

HARRY D. HUNG, Colonel, USA
Vice Commander

cc:
633 MSG/CC
733 MSG/CC

ABOUT THIS PLAN

This installation-specific Environmental Management Plan (EMP) is based on the U.S. Air Force's (AF) standardized Integrated Solid Waste Management (ISWM) Plan template. This Plan is not an exhaustive inventory of all Solid Waste (SW) requirements and practices. Where applicable, external resources, including Air Force Instructions (AFIs); Air Force Manuals, Air Force Playbooks; federal, state, local and Final Governing Standards (FGS); and permit requirements are referenced.

Certain sections of this ISWM Plan begin with standardized, AF-wide "common text" language that addresses AF and Department of Defense (DoD) policy and federal requirements. This common text language is restricted from editing to ensure that it remains standard throughout all plans. The common text language is maintained and updated by the designated Office of Primary Responsibility (OPR) with assistance from the Office of Collateral Responsibility (OCR), as appropriate. Immediately following the AF-wide common text sections are installation sections. The installation sections contain installation-specific content to address state, local, and installation specific requirements. Installation sections are unrestricted and are maintained and updated by AF environmental Sections and/or installation personnel.

This document is optimized to be accessed and viewed electronically. The eDASH website at https://cs2.eis.af.mil/sites/10040 is the primary communication tool for AF EMPs.

TABLE OF CONTENTS

DOCUMENT CONTROL

Standardized ISWM Plan Template

In accordance with (IAW) the Air Force Civil Engineer Center (AFCEC) Environmental (CZ) Business Rule (BR) 08, *EMP Review Update and Maintenance*, the standard content in this ISWM Plan template is reviewed periodically, updated as appropriate, and approved by the ISWM Subject Matter Expert (SME).

This version of the template is current as of 2020 and supersedes the 2018 version.

NOTE: Installations are not required to update their ISWM Plan every time this template is updated. When an ISWM Plan is due to be updated, installations should refer to the eDASH EMP Repository to ensure they have the most current version.

Installation ISWM Plan

Record of Updates – The ISWM Plan is updated as changes to waste generation, waste management practices or installation mission occur, including those driven by changes in applicable regulations.

Record of Updates

Change No.	Nature of Change	Date of Change	Approved By	Approved Date
1	Administrative Changes	2020	Working Group	1 Mar 20
2	Administrative Changes	2021	Working Group	1 Dec 21
3	Administrative Changes	2022	Working Group	July 2022

Record of Annual Review – IAW AFMAN 32-7002, *Environmental Compliance and Pollution Prevention*, the ISWM Plan is reviewed annually, updated as appropriate, and approved by the installation Environmental Safety and Occupational Health Council (ESOHC). Formatting and administrative changes do not require ESOHC review.

Record of ESOHC Annual Review

Review Date	Review Participants	Notes/Remarks	Result in Plan Update? (Yes or No)
2020	ESOH Council	Approved by COL Vedder	Yes
2021	ESOH Council	Approved by COL Hung	Yes
2022	ESOH Council	Approved by COL Hung	Yes

1 OVERVIEW AND SCOPE

This ISWM Plan contains procedures for the management of SW. In lieu of federal, state, or FGS requirements, AFMAN 32-7002 acts as the main driver for the ISWM Plan. The ISWM Playbook serves as supplemental guidance to this Plan.

This plan addresses the management of SW. SW is defined in 40 Code of Federal Regulations (CFR) 261.2, and includes but is not limited to: wastes from aircraft originating from overseas, military munitions identified as a SW in 40 CFR 266.202, and industrial SW. This Plan does not address the management of Hazardous Waste (HW) or other non-SW, including universal waste, Polychlorinated Biphenyls (PCBs), asbestos, lead, regulated medical waste, radioactive waste, or mixed waste.

Installation Supplement – Overview and Scope

Joint Base Langley-Eustis (JBLE) manages SW through an integrated approach incorporating reduction, recycling, mulching, energy recovery (incineration) and land filling. The management of non-hazardous SW traditionally involved curbside collection and disposal at a landfill or incineration. In recent years, the number of landfills has diminished significantly, and tipping fees are projected to increase annually. Efforts have been made to minimize the amount of SW generated and disposed of.

This document details how JBLE manages SW collection and disposal, and how it integrates recycling and composting programs into that process. The ultimate goal of the ISWM Program is to reduce the amount of SW disposed of or generated.

The JBLE recycling program is defined under one contract, however, JBLE-Langley and JBLE-Eustis operate separately and have separate Qualified Recycling Program (QRP) account numbers. Therefore, there are separate QRPs listed in Appendix D-1 for JBLE-Langley and D-2 for JBLE-Eustis.

Purpose of ISWM Plan

The purpose of this ISWM Plan is to comply with federal, state, and local regulations as well as AF policy and guidance on the management of non-hazardous SW. It describes JBLE's functional management of SW disposal and recycling.

Solid Waste Management Program Overview

It is the policy of JBLE to follow federal, state, and local regulations for SW management and pollution prevention (P2). Not only does JBLE strive to meet the regulatory requirements for managing SW, but JBLE also supports a strong pollution prevention program, which emphasizes the importance of source reduction, reuse, and recycling. JBLE operates its SW and P2 programs to meet the broad objectives of the Pollution Prevention Act, which outlined the preferred hierarchy of SW management: source reduction, reuse, recycling, mulching, waste-to-energy incineration, and land filling.

JBLE will continue to pursue the recycling and SW minimization strategies that have already been established. These include:

- Encouraging source reduction and reuse.
- Educating the base populace on recycling programs through JBLE's "Outreach Program," newspaper articles, emails, and presentations.
- Encouraging recycling at all levels in the workplace.
- Emphasizing, enforcing, and tracking the recycling of construction & demolition (C&D) debris to divert as much as possible from landfills

- Promoting educational efforts to strengthen knowledge and awareness of environmental issues and the importance of recycling.

JBLE will continue to emphasize, enforce, and track the recycling and C&D debris to divert as much as possible from landfills.

2 INSTALLATION PROFILE

Scope of Plan	This ISWM Plan is applicable to all commercial and industrial areas of the main installations. This includes all active duty and civilian operations, as well as tenant organizations such as the Defense Commissary Agency (DeCA), the Army and Air Force Exchange Service (AAFES), and the Army Corps of Engineers. However, this plan is not applicable to privatized businesses (e.g., private restaurants), privatized housing, and the NASA facilities located on JBLE.
OPR	The 633d Civil Engineer Squadron/Environmental Element (633 CES/CEIE) is the OPR for the ISWM Plan. The 633d CES/CEIE is responsible for the SW management program at JBLE-Langley. The 733d Civil Engineer Squadron/Environmental Element (733 CES/CEIE) is responsible for the SW management program at JBLE-Eustis. The 633d ABW has overall responsibility for implementing the SW management program and is the lead organization for monitoring compliance with applicable federal, state, and local regulations.
ISW Program Manager	*JBLE-Langley* Name: Shaunell Lattimore Office Symbol: 633 CES/CEIE Phone: (757) 225-7388 Email: shaunell.lattimore@us.af.mil *JBLE-Eustis* Name: Joanna Bateman Office Symbol: 733 CES/CEIE Phone: (757) 878-7378 Email: joanna.bateman@us.af.mil
Recycling Program Manager	See QRP Manager.
QRP Manager	*JBLE-Langley* Name: Shaunell Lattimore Office Symbol: 633 CES/CEIE Phone: (757) 225-7388 Email: shaunell.lattimore@us.af.mil *JBLE-Eustis* Name: Joanna Bateman Office Symbol: 733 CES/CEIE Phone: (757) 878-7378

	Email: joanna.bateman@us.af.mil
Contracting Officer Representative (COR) for ISWM Contracts	*JBLE-Langley* Name: Andrew Frantz Phone: (757) 764-1172 Email: andrew.frantz.1@us.af.mil *JBLE-Eustis* Name: Thomas Gunther Phone: (757) 878-1387 Email: thomas.gunther@us.af.mil
State and local regulatory agencies	Virginia Department of Environmental Quality
Approved SW handling contractors	MARCO-ONOPA JV, LLC
Solid Waste Characterization Study/Waste Stream Analysis (Appendix A)	Has the installation completed a Solid Waste Characterization? No If yes, enter date of study.
Commodity Market & Economic Feasibility Analysis (Appendix B)	Does installation complete an initial Commodity Market Analysis & Feasibility Study and update biannually? Yes The Commodity Market Analysis is in the respectful QRP Business Plans, Appendix D.
Construction and Demolition (C&D) Waste Management Plan	Has the installation completed a C&D Waste Management Plan? Yes The C&D Waste Management Plan is included in the Integrated Solid Waste Management Plan. Does plan include requirement for all C&D contracts to collect C&D tonnage and costs from contractor? Yes If no, describe reason not included. The JBLE C&D requirements can be found on eDASH.
QRP Business Plan	Does installation operate a Qualified Recycling Program (QRP)? Yes, see Appendix D-1 and D-2 If yes, include current QRP Business Plan as Appendix. If no, describe recycling strategies in Section 7.3.

3 ENVIRONMENTAL MANAGEMENT SYSTEM

The AF environmental program adheres to the Environmental Management System (EMS) framework and its Plan, Do, Check, Act cycle for ensuring mission success. Executive Order (EO) 13990, *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*, U.S. Department of Defense Instruction (DoDI) 4715.17, *Environmental Management Systems*, AFI 32-7001,

Environmental Management, and International Organization for Standardization (ISO) 14001, *Environmental management systems - Requirements with guidance for use*, provide guidance on how environmental programs should be established, implemented, and maintained to operate under the EMS framework.

The ISW program employs EMS-based processes to achieve compliance with all legal obligations and current policy drivers, effectively manage associated risks, and instill a culture of continuous improvement. The ISWM Plan serves as an administrative operational control that defines compliance-related activities and processes.

4 GENERAL ROLES AND RESPONSIBILITIES

Detailed information about typical roles and responsibilities are in the ISWM Playbook. Installation-specific roles and responsibilities are described in the table below.

Roles and Responsibilities

Office/Organization/Job Title	Installation Role/Responsibility Description
Wing/Installation Commander	The Wing/Installation Commander maintains overall responsibility for the ISWM Program, establishing a QRP and ensuring it complies with 10 United States Code (U.S.C.) 2577, *Disposal of Recyclable Materials;* DoDI 4715.23, *Integrated Recycling and Solid Waste Management*; and AFMAN 32-7002. The Installation Commander establishes management controls to ensure designated personnel conduct sales of recyclable materials per the law. Management controls for a QRP include the following: • Establishing and operating an efficient and cost-effective QRP that meets legal and policy requirements. • Designating, in writing, a QRP Manager. • Promoting recycling and encouraging participation through policy, memos, and presentations. • Directing internal and external QRP audits from the AF Audit Agency. • Responding to AF Audit Agency findings. • Requesting staff assistance visits from the appropriate Major Command (MAJCOM) and Air Force Civil Engineer Center (AFCEC). • Investigating complaints and, if appropriate, alerting the investigative organization to pursue allegations of fraud, corruption, or theft of services.
ESOHC	IAW AFI 90-801, *Environmental, Safety, and Occupational Health Councils*, each installation establishes an ESOHC. Per AFI 90-801, the ESOHC is the executive-level steering group that reviews policies and programs, establishes goals, monitors progress, and advises leadership. The Installation Deputy Commander chairs the installation's ESOHCs. The ESOHC is responsible for:

	• Overseeing ESOH Management Systems implementation and ESOH performance to ensure continual improvement consistent with AF ESOH goals and objectives. • Providing senior leadership support and guidance to sustain the ESOH Management System and conducting annual assessments of the impacts of ESOH risk and cost on mission performance. • Acting as the primary steering group for environmental and waste management. • Reviewing and approving the ISWM Plan. • Reviewing and approving the QRP.
Comptroller	The Comptroller is responsible for: • Providing financial assistance to the QRP Manager and Civil Engineer, Financial Management Element (CEIAR). • Receiving QRP direct sales payments from the QRP Manager or CEIAR. • Transferring QRP direct sales payments to X-Year O&M Account utilizing Department of Defense Form (DD Form) DD 1131, *Cash Collection Voucher*. • Providing copies of all completed DD Forms 1131 to the QRP Manager. • Disbursing funds in the X-Year O&M Account IAW ESOHC direction and the approved QRP fiscal year (FY) budget. • Transferring QRP proceeds to the designated appropriation or Government Purchase Card (GPC). • Retaining copies of the approved QRP FY budget.
EMS Cross Functional Team (CFT)/Pollution Prevention (P2) Subcommittee	The EMS-CFT is responsible for: • Participating in the QRP Subcommittee. • Implementing, sustaining, and improving the ISWM Plan and QRP at the installation to meet the diversion goals in a cost-effective manner. • Discussing SW and recycling issues. • Serving as an information hub for disseminating and retrieving information. • Establishing QRP goals and objectives. • Providing recommendations for continuous development of the program and identifying opportunities to improve diversion practices, facility enhancements, and equipment purchases. • Proposing and voting on uses/distribution of net proceeds. • Reviewing QRP audit reports.
ISW Manager	The ISW Manager is responsible for: • Managing, monitoring, and implementing the entire QRP operation to ensure compliance with all federal, state, local, and AF requirements. • Monitoring operations of the JBLE-Eustis Solid Waste and Recycling Center (SWRC) and the JBLE-Langley Scrap Metal Yard. • Identifying opportunities to reduce SW stream volumes, enhance P2 measures, and conserve natural resources through source reduction and resource recovery.

	• Maintaining and executing the QRP Business Plan. • Conducting economic analysis and monitoring the market for recyclable commodities. • Ensuring direct sales are conducted in the most cost- effective manner, unless otherwise noted. This includes establishing standardized commodity sales business practices, reviewing paperwork to confirm invoices and proceeds correlate appropriately, and ensuring proceeds are deposited and dispersed appropriately IAW the United States CFR. • Maintaining updated records and spreadsheets for QRP expenditures, sales proceeds, disbursements, and commodity tonnage diverted and landfilled. • Maintaining all records and supporting documentation pertaining to all QRP expenditures, sales proceeds, disbursements, and commodity sales. • Providing SW and diversion data through semi-annual data calls using the Enterprise Environmental, Safety, and Occupational Health Management Information System (EESOH-MIS). • Performing as chairperson to the ESOHC QRP subcommittees and providing updates to the ESOHC recycling subcommittees. • Coordinating with the Unit Environmental Coordinators (UECs) and Facility Managers to identify recycling opportunities. • Promoting and publicizing the QRP. • Advising organizations on collection and disposal requirements of the ISWM Program and QRP. • Investigating complaints and reporting them to the Commander or designated representative.
ISW Manager Alternate	The ISW Manager Alternate is responsible for: • Assisting the QRP Manager, as needed, with tasks listed for QRP Manager. • Assisting with recyclable material handling and shipments. • Acting as the proceeds receiving manager. • Participating on the QRP subcommittee to the ESOHC. • Overseeing the JBLE-Eustis SWRC operations, ensuring proper housekeeping is maintained, and operating the forklift as needed.
QRP Manager	See ISW Manager responsibilities.
QRP Manager Alternate	See ISW Manager Alternate responsibilities.
QRP Subcommittee	N/A
Recycling Center Manager	The Recycling Manager/Staff are the SW/Recycling Contractor employees responsible for managing the JBLE-Langley Scrap Metal Yard and JBLE-Eustis SWRC IAW the JBLE SW contract.
Recycling Center Staff	See Recycling Center Manager responsibilities.
Recycling Monitors	Recycling Monitors are responsible for: • Serving as recycling points of contact (POCs) for their units. • Assisting unit personnel and the Building/Facility Manager with proper reuse and diversion procedures.

	• Serving as a member on the QRP subcommittee to the ESOHC.
Building/Facility Mangers	Facility Managers are responsible for: • Serving as recycling POCs for their facility. • Assisting unit personnel with proper reuse and diversion procedures. • Implementing the QRP within their building/facility by establishing recycling collection points throughout the building/facility. • Monitoring recycling containers and central collection areas. • Performing periodic walk-through compliance inspections within the building/facility.
Unit Environmental Coordinators (UECs)	UECs are responsible for: • Assisting the Building/Facility Manager with reuse, recycling and diversion procedures. • Serving as a member of the QRP subcommittee to the ESOHC.
Contracting Officer	N/A. See Contracting Officer Representative.
Contracting Officer Representative	The Contracting Officer Representative (COR) is responsible for: • Ensuring clauses for government-owned, contractor- operated contracts are included that direct the contractor to participate in the JBLE QRP. • Ensuring all project and services contracts include clauses for management, diversion, and minimization of project- related recyclables. • Coordinating, reviewing, and managing contracts pertaining to the QRP. • Ensuring contracts include clauses to report recycled weights and sales proceeds amounts to the QRP Manager monthly. • Working directly with the QRP Manager to ensure the QRP operates in manner that maximizes diversion in a cost- effective manner.
Budget Analyst Supporting the QRP	N/A. Financial Managers support this role.
Landfill Operator	N/A. There are no active landfills on either Base.
Transportation Contractor	The Transportation Contractor is responsible for: • Transporting Base refuse to the off-site landfill. • Transporting recycling materials to the Recycling Contractor warehouse.
Staff Judge Advocate/Legal Officer	Ensure all contracts meet legal requirements.
Public Affairs	Support the QRP Managers in advertising outreach/recycling program.
Defense Logistics Agency (DLA) Disposition Services	DLA Disposition Services (DS) is responsible for: • Providing assistance and disposal service to DoD components and other authorized customers. • Promoting and ensuring maximum conservation of strategic and critical materials and precious metals.

	• Providing screening of property to promote the maximum reuse, transfer, or donation of excess, surplus, and foreign excess personal property. • Processing authorized reuse, transfer or donation requests. • Inspecting and determining disposal condition codes. • Training generating activities on turn-in procedures for scrap metal. • Providing in-place contracts for large volume commodities
Defense Commissary Agency (DeCA)	DeCA is permitted to sell recyclables generated by their organization but must provide data on SW generation and diversion to the QRP Manager.
Army Air Force Exchange Service (AAFES)	AAFES is permitted to sell recyclables generated by their organization but must provide data on SW generation and diversion to the QRP Manager.
Tenant Organizations	Tenants must participate in the QRP IAW AF policy. Non-appropriated funds (NAF) activities are permitted to sell recyclables generated by their organization, but they must provide data on SW generation and diversion to the QRP Manager.

5 TRAINING

SW diversion awareness training is provided to satisfy installation needs. Training records are maintained IAW the Recordkeeping and Reporting section of this plan.

Training Plan

Training Course	Installation Plan (Describe training content, frequency, attendees and delivery method)
Newcomers Environmental Training	*JBLE-Langley* The installation conducts environmental training at Newcomers Orientation. Newly appointed Unit Environmental Coordinators, Facility Managers and Environmental Management System (EMS) Cross-Functional team members are identified and trained through the Air Force Institute of Technology (AFIT) UEC course, Facility Manager Course, eDASH, and TEACH. *JBLE-Eustis* AF and Army Newcomers Briefings occur biweekly for all personnel assigned to JBLE-Eustis. The Environmental portion covers the requirement for all Military, Civilian, and contractors assigned to JBLE-Eustis to complete Environmental Management Awareness and Competency (EMAC)Training through TEACH within 30 days of assignment and annually thereafter.

General Environmental Awareness Training	*JBLE-Langley* Environmental Management System Awareness training is required for all JBLE-Langley personnel within the first 30 days of assignment and annually thereafter. *JBLE-Eustis* Environmental Management System Awareness training is required for all JBLE-Eustis personnel within the first 30 days of assignment and annually thereafter. This training is incorporated in the EMAC training and Advanced Environmental Management (AEM) Training located on TEACH.
UEC Training	*JBLE-Langley* All UECs are required to take the Air Force Institute of Technology UEC course or the JBLE-Langley specific training in TEACH. UECs coordinate with Facility Managers if they observe issues related to solid waste/recycling. Facility Managers are responsible for the Solid Waste/Recycling program in their facilities at JBLE-Langley. A Facility Manager's course is taught every quarter in which solid waste/recycling responsibilities are taught. All Facility Managers also have access to installation-specific SW and recycling information. They are directed to a training module on eDASH, as well as given a training booklet every 60 days. *JBLE-Eustis* All units on JBLE-Eustis are required to have an Activity Environmental Coordinator (AEC) and may also appoint a Hazardous Waste Coordinator (HWC) if a unit involves activities beyond administrative duties, such as vehicle maintenance. AEM offers an 8-hour class twice a year (March and October) for AEC, HWC and UEC training. The AEM course covers 11 environmental topics, including recycling and HW management, which includes recycling and hazardous spill response. The class certifies each student to be an AEC, UEC (AF) or HWC (Army).
Enterprise Environmental, Safety, and Occupational Health-Management Information System (EESOH-MIS) Data Call Training	Training is offered twice each fiscal year prior to the due date for the Non- Hazardous Solid Waste EESOH-MIS Data Call.
QRP Manager Training	The QRP Managers train in the AFIT QRP – ENV 160 for 40 hours. A training refresher is required every 3-4 years.

6 RECORDKEEPING AND REPORTING

The installation maintains operating records IAW Air Force Manual 33-363, Management of Records, and disposes of records IAW the Air Force Records Management System (AFRIMS) records disposition schedule (RDS). The following tables summarize key recordkeeping and reporting requirements. For additional information, please refer to the latest addition of the "USAF Non-Hazardous Solid Waste Reporting Guide" available on the eDASH ISW page.

Recordkeeping

Recordkeeping Requirement	Installation Plan (Describe how requirement is met)
Collect and maintain records and documents to support non-hazardous solid waste diversion and disposal data	Contractors and customers send records and documents to the QRP Manager and/or COR, and the QRP Manager consolidates the information, which is stored on the Civil Engineer (CE) server. Data is uploaded by the data entry person to EESOH-MIS for AFCEC access.
Collect and maintain records and documents to support construction and demolition debris diversion and disposal data	Contractors send diversion and disposal documents to the COR and the corresponding Project Engineer. The COR and the Project Manager send the documents to the QRP Manager. Records are kept by the COR and the QRP Manager.
Collect and maintain copies of weight certificates, shipping receipts, financial statements, and related documentation from contractors that generate nonhazardous solid waste and construction and demolition debris	Contractors and customers send weight certificates, shipping receipts, financial statements, and related documents to the QRP Manager and/or COR, who sends receipts to the Budget Analyst, who stores the records.
Retain records of operating and overhead costs, including purchase of equipment, maintenance costs, program operations and expansion, labor costs, training, publicity, and overhead for processing recyclable materials	The COR handles and records all contractual pieces and stores them on the CE server.

Reporting

Reporting Requirement	Installation Plan (Describe how requirement is met)
Track and report comprehensive non-hazardous solid waste diversion and disposal data to AFCEC using EESOH-MIS reporting system within established deadlines	JBLE-Eustis reports data to JBLE-Langley for consolidation and is submitted in EESOH- MIS as a single submission.

Track and report comprehensive construction and demolition debris diversion and disposal data to AFCEC using EESOH-MIS reporting system within deadlines established.	JBLE-Eustis reports data to JBLE-Langley for consolidation and is submitted in EESOH- MIS as a single submission.
Execute procedures to obtain construction and demolition debris diversion and disposal data from installation projects for data reporting within deadlines established.	Procedures exist to obtain and record construction and demolition debris diversion and disposal data for every project on each base.
In order to comply with Congressional reporting requirements, Construction and Demolition Contractors must submit construction and demolition debris diverted and disposed summaries quarterly through the contracting officer throughout the project duration regardless of the amounts being disposed and/or diverted. This summary shall include, but is not limited to: 1. cost to dispose and tonnage disposed; 2. cost to recycle and tonnage recycled; 3. cost to mulch and the tonnage mulched; 4. cost to incinerate and the tonnage incinerated; 5. cost to divert via waste-to-energy incineration and the tonnage diverted; 6. explanation when there is a shortfall of current diversion rate.	Requirements are included in JBLE-Langley Environmental Special Conditions that is provided to all Project Managers and is located on the JBLE-Langley Environmental webpage.

7 PROCEDURES

7.1 Solid Waste Generation and Diversion Goals

- The ISW Manager maintains a Solid Waste Characterization Study/Waste Stream Analysis to identify installation waste streams and amounts generated.
- With the Solid Waste Characterization Study/Waste Stream Analysis, the ISW manager conducts a commodity market and economic feasibility analysis at least annually to determine the viability of diverting specific materials and to ensure optimum pricing is obtained for QRP-eligible commodities. The CMA is referenced in Appendix B of the ISWM Plan but is maintained in the QRP Business Plans, Appendix D. The Commodity Market Analysis template is available on the AF ISWM eDASH site.

Date of Latest Analysis	2019
Responsible Personnel	*JBLE-Langley*: Sherry Johnson *JBLE-Eustis*: Donna Haynes
Results of Analysis	JBLE-Langley will continue to use a solid waste/recycling contractor and sell a limited scope of commodities. JBLE-Eustis will continue to operate a recycling center that has the ability to sell commodities. Both bases will continue to have an active contract with a solid waste/recycling contractor for collection.

- The ISW/QRP Manager(s) maintains a Solid Waste Diversion table to track current and projected progress towards solid waste diversion goals.
- The Solid Waste Diversion tables are available on eDASH or at the link in the installation supplement below.

Installation Supplement – Solid Waste Generation and Diversion Goals

Joint Base Langley-Eustis has established SW diversion goals that are in line with DoD memorandum *Air Force Policy on Achieving Efficiencies through Pollution Prevention and Waste Elimination* and EO 13990. These SW diversion goals are as follows:

- Goal 1 – Diversion rate of at least 40% every year through 2025 for non-hazardous SW. Annual waste generation reduction of 2% each year through 2025.

- Goal 2 – Diversion rate of at least 60% every year through 2025 for C&D SW. Annual waste generation reduction of 2% each year through 2025.

JBLE-Langley - Actual and Projected Diversion Rates (excluding C&D)									
	Actual	**Actual**	**Actual**	**Actual**	**Actual**	**Actual**	**Actual**	**Projected**	**Projected**
Description	**FY15**	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**
Disposal Quantity (tons)	2173.66	2252.50	2320.07	2389.67	2461.36	2535.20	2611.25	2689.58	2770.26
Diversion Quantity (tons)	1197.50	1351.00	1391.53	3183.00	2656.00	2735.68	2817.75	2902.28	2989.34
Diversion Rate - Actual	35.52%	37.49%	37.49%	57.11%	51.90%	48.09%	51.90%	51.90%	51.90%
Diversion Rate - Goal	50%	50%	50%	50%	50%	40%	40%	40%	40%
		AF Goal	AF Goal	AF Goal	AF Goal	AF Goal	AF Goal	AF Goal	AF Goal

JBLE-Langley - Actual and Projected Diversion Rates (C&D Debris)									
	Actual	**Actual**	**Actual**	**Actual**	**Actual**	**Actual**	**Actual**	**Projected**	**Projected**
Description	**FY15**	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**
Disposal Quantity (tons)	361.55	99.00	83.4	32.15	48.47	50.00	50.00	50.00	50.00
Diversion Quantity (tons)	3838.03	25009.00	489.09	710.52	427.58	500.00	500.00	500.00	500.00
Diversion Rate - Actual	91.39%	99.61%	85.43%	95.67%	89.81%	90.9%	90.9%	90.9%	90.9%
Diversion Rate - Goal	60%	60%	60%	60%	60%	60%	60%	60%	60%

	AF Goal	AF Goal	AF Goal	AF Goal	AF Goal	AF Goal	AF Goal	AF Goal

JBLE-Eustis - Actual and Projected Diversion Rates (excluding C&D Debris)									
	Actual	**Actual**	**Actual**	**Actual**	**Actual**	**Actual**	**Actual**	**Projected**	**Projected**
Description	**FY15**	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**
Disposal Quantity (tons)	1966.64	2516.71	2750.04	2841.88	2974.38	1078.45	987.62	987.62	987.62
Diversion Quantity (tons)	2567.00	3960.16	3422.63	3123.49	3501.76	7612.08	1556.93	1556.93	1556.93
Diversion Rate - Actual	56.62%	61.14%	55.44%	52.36%	54.07%	89.10%	75.18%	75.18%	75.18%
Diversion Rate - Goal	50%	50%	50%	50%	50%	40%	40%	40%	40%
		AF Goal	AF Goal	AF Goal	AF Goal	AF Goal	AF Goal	AF Goal	AF Goal

JBLE-Eustis - Actual and Projected Diversion Rates (C&D Debris)									
	Actual	**Actual**	**Actual**	**Actual**	**Actual**	**Actual**	**Actual**	**Projected**	**Projected**
Description	**FY15**	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21**	**FY22**	**FY23**
Disposal Quantity (tons)	0.00	0.00	37.01	62.78	0.00	0.00	3.00	68.58	70.63
Diversion Quantity (tons)	118.47	939.62	750.24	1271.82	1401.33	84.20	331.62	1531.25	1577.18
Diversion Rate - Actual	100%	100%	95.29%	95.23%	100%	100.00%	99.10%	95.71%	95.71%
Diversion Rate - Goal	60%	60%	60%	60%	60%	60%	60%	60%	60%
		AF Goal	AF Goal	AF Goal	AF Goal	AF Goal	AF Goal	AF Goal	AF Goal

7.2 Source Reduction

The installation employs the following source reduction strategies to minimize SW generation.

Source Reduction Strategies

Applicability (select all that apply)	**Source Reduction Strategy**	**Installation Plan** (Describe how and where strategy is implemented)
☐	Change processes to reduce or eliminate the production of wastes	N/A
☐	Reduce the volume of material purchased or produced	N/A
☐	Reduce the toxicity of products used	N/A
☑	Increase the useful lifetime of products used	Vehicle maintenance centers are encouraged to use re-tread tires and reuse non-hazardous rags. Wood pallets are reused when in good condition.
☐	Decrease the amount of product use	N/A
☑	Purchase environmentally preferable products and services	All GPC holders are required to search for environmentally preferable products and services. The Ability 1 store on JBLE-Eustis puts red or green dots on the price tags. Green tags means it is more environmentally friendly, and GPC holders are trained to buy green.
☑	Eliminate off-installation waste coming onto the installation	Discouraged through education and outreach.
☑	2% Reduction of Total Waste Generated (based on previous fiscal year)	Newly implemented in FY20. Goal will be analyzed each fiscal year after FY20.

7.3 Disposal and Diversion Options

The installation considers local diversion options for all waste streams. The "USAF Installation Non-Hazardous Solid Waste Disposition" table, provided in the "USAF Non-Hazardous Solid Waste Reporting Guide" available on the eDASH ISW page, is consulted when evaluating local disposal and diversion options.

Installation Disposal and Diversion Plan

Applicability (select all that apply)	**Disposal/ Diversion**	**Installation Plan** (Describe how disposal/diversion is implemented)
☐	Composting	N/A
☑	Mulching	JBLE-Langley has a mulching operation at the Eaglewood Golf Course for brush and tree limbs to be used in landscaping.
☑	Reuse	Under the Sustainable Procurement Program (SPP), vehicle maintenance centers are encouraged to use retread tires and re-

Applicability (select all that apply)	**Disposal/ Diversion**	**Installation Plan** (Describe how disposal/diversion is implemented)
		refined oil when possible. Pallets that are in decent condition are reused until recyclable.
☑	Donation	DeCA at both JBLE-Langley and JBLE-Eustis participate in donating food to local food banks. The food banks provide transportation, and the tonnage is recorded by DeCA.
☑	Recycling	Many commodities are recycled at JBLE, including but not limited to paper, furniture, cooking grease, plastics, glass, wood, metals, cardboard, tires, toner cartridges, used oil, lead acid batteries, and fire extinguishers. Each commodity eventually gets transported to an off-site recycling contractor or vendor instead of going to a landfill.
☑	Waste-to-Energy Incineration	Refuse is initially transported to the City of Hampton's Refuse-Fired Steam-Generating Facility (RFSGF). This highly efficient burning process reduces the volume of waste generated by approximately 90%, resulting in a small volume of ash. Incineration in the facility produces steam energy for use at JBLE- Langley and the NASA Langley Research Center. In the event the RFSGF is full to capacity, waste is sent to the Big Bethel Sanitary Landfill in Hampton, Virginia.
☐	Incineration	N/A
☑	Disposal – Offsite Landfill	In the event the RFSGF is full to capacity, waste is sent to the Big Bethel Sanitary Landfill in Hampton, Virginia.
☐	Disposal – On-site Landfill	N/A
☑	Overseas refuse management	*JBLE-Langley* JBLE-Langley Transient Alert is responsible for the immediate collection and temporary storage of trash and other items received from overseas and designated as such by agricultural inspectors. Trash is disposed by an approved regulated garbage management company. *JBLE-Eustis* Vessels inbound or arriving at Third Port from outside the continental United States, to include Hawaii and United States territories in the Caribbean, are responsible for clearing US Customs and agricultural inspections at the first US port they make landfall at prior to entry to Third Port. Vessels must coordinate with the JBLE-Eustis Harbormaster's Office and provide proof that trash/regulated garbage was properly disposed of, vessel inspected, etc. prior to arrival.

☑	Disposal – Construction and Demolition Debris	Amounts of C&D disposed at the landfill must be minimized. Contractors are required to list the category of C&D waste to verify the waste did not fit into a recyclable category.
☑	Diverted – Construction and Demolition Debris	All C&D debris should be diverted to the maximum extent possible. Contractors are provided a list of near-by recycling facilities to divert recyclable C&D debris.

7.4 Waste Streams - Management Methods and Opportunities

Non-hazardous Solid Waste
Waste Generation Sources
Municipal solid waste (MSW) is collected at all commercial and industrial areas of the main installations. This includes all active duty and civilian operations, as well as tenant organizations such as DeCA, AAFES, and the Army Corps of Engineers. However, this ISWM Plan is not applicable to privatized businesses (e.g., private restaurants), privatized housing, and the NASA facilities located on JBLE.
Reduction Methods
The reduction method is to implement and promote the recycling program.
Management Methods
MSW is collected base-wide in dumpsters with lids, which are owned by the SW and Recycling Contractor.
Transport and Disposal Methods
Waste is picked up once per week by the SW and Recycling Contractor and transported to the City of Hampton's RFSGF. This highly efficient burning process reduces the volume of waste generated by approximately 90%, resulting in a small volume of ash. Incineration in the facility produces steam energy for use at JBLE-Langley and the NASA Langley Research Center. In the event the RFSGF is full to capacity, waste is sent to the Big Bethel Sanitary Landfill in Hampton, Virginia.
Opportunity Assessment Results
N/A

Construction and Demolition (C&D) Debris
Waste Generation Sources
C&D debris includes all non-hazardous building materials and SW resulting from construction, remodeling, alterations, repair, and demolition operations.
Reduction Methods
JBLE ensures C&D recycling language is included in construction and renovation contracts.
Management Methods
C&D debris is managed and removed by the base contractors who perform these activities. Contractors send diversion tonnage numbers to the respective Base QRP Managers.
Transport and Disposal Methods
C&D debris is recycled by the demolition/construction contractors when practicable, and the remaining C&D debris is disposed of at the Bethel Sanitary Landfill in Hampton, Virginia.
Opportunity Assessment Results
N/A

Paper and Cardboard

Waste Generation Sources

Paper and cardboard is collected at all commercial and industrial areas of the main installations except privatized businesses (e.g., private restaurants), privatized housing, and the NASA facilities located on JBLE. The tenant organizations, DeCA and AAFES, sell recyclable commodities under a separate contract but report weights to the QRP Managers.

Reduction Methods

The reduction method is to implement and promote the QRP.

Management Methods

JBLE-Langley

High-quality paper and paper products are collected at all facilities on base. Office paper is collected in a separate recycling container rather than the "commingled container" at the facilities, unless the facility does not produce a large quantity of white office paper, in which case the paper is placed in the commingled recycling container. Newspaper, colored paper, magazines, telephone books, plastics, glass, and other items are commingled and placed in 90-gallon containers separate from those with white office paper. The SW and Recycling Contractor collect these items on a weekly basis except for small quantity generators who notify the QRP Manager and/or 633 CES Service Contracts when they need to request a pickup. On a monthly basis, the SW contractor provides the QRP Manager with recycling weight data and submits all proceeds generated from the sale of high-quality paper to the QRP Manager.

Corrugated cardboard is collected throughout JBLE-Langley in beige, designated exterior dumpsters, which are owned by the SW and Recycling Contractor. On a monthly basis, the contractor provides the QRP Manager with cardboard recycling weight data. Proceeds generated from the sale of the cardboard are submitted to the QRP Manager. Cardboard generated by DeCA and AAFES is baled at the respective facilities and sold under separate contracts. The recycling weight data is provided to the QRP Manager and proceeds are retained by the tenant.

JBLE-Eustis

Office paper is collected at each building in commingled containers (owned by the SW and Recycling Contractor). Shredded white paper is separately collected. On a monthly basis, the contractor provides the QRP Manager with recycling weight data and submits all proceeds generated from the sale of high-quality paper to the QRP Manager.

Corrugated cardboard is collected throughout JBLE-Eustis in designated exterior dumpsters, which are owned by the SW and Recycling Contractor. On a monthly basis, the contractor provides the QRP Manager with cardboard recycling weight data. Proceeds generated from the sale of the cardboard are submitted to the QRP Manager. Cardboard generated by DeCA and AAFES is baled at the respective facilities and sold under separate contracts. The recycling weight data is provided to the QRP.

Transport and Disposal Methods

JBLE-Langley

Office paper is collected at each building by the SW and Recycling Contractor on a weekly basis or as needed and transported off-site to the TFC Recycling Center.

Cardboard is deposited by the generators into the cardboard dumpsters. It is collected by the SW and Recycling Contractor weekly or as needed and taken off-site to the TFC Recycling Center.

JBLE-Eustis

Office paper is collected in commingled containers (owned by the SW and Recycling Contractor) at each building on a weekly basis or as needed and transported by the contractor to the SWRC. When time and labor allow, minimal sorting may occur by placing manuals, white paper, colored paper, and

mixed paper into large cardboard containers on pallets. Whether it is sorted or not, all paper products are eventually placed in roll-offs (owned by the SW and Recycling Contractor) at the center. When full, the SW and Recycling Contractor transports the materials to the TFC Recycling Center.

Cardboard is deposited by the generators into the cardboard dumpsters and transported by the contractor to the SWRC. Cardboard can be baled at the SWRC or transported un-baled as determined by the SW and Recycling Contractor. When a full load is collected, the contractor transports cardboard to the TFC Recycling Center.

Opportunity Assessment Results

JBLE-Eustis does not currently separate all recyclables on-site, and it costs the contractors more time and money to separate commodities. If on-site separation becomes necessary, the cost to operate at the SWRC will go up, and the contract will need to be modified to reflect these changes.

Plastics

Waste Generation Sources

Plastics are collected at all commercial and industrial areas of the main installations except privatized businesses (e.g., private restaurants), privatized housing, and the NASA facilities located on JBLE. The tenant organizations DeCA and AAFES sell recyclable commodities under a separate contract but report weights to the QRP Managers.

Reduction Methods

The reduction method is to implement and promote the QRP.

Management Methods

Plastics #1 and #2 are collected at all facilities on base in commingled containers owned by the SW and Recycling Contractor. On a monthly basis, the contractor provides the QRP Manager with recycling weight data and submits all proceeds generated from the sale of plastics to the respective QRP Manager.

Transport and Disposal Methods

JBLE-Langley
Plastics are collected at each building by the SW and Recycling Contractor on a weekly basis or as needed and transported off-site to the TFC Recycling Center in a single stream load.

JBLE-Eustis
Plastics are collected in commingled containers (owned by the SW and Recycling Contractor) at each building on a weekly basis or as needed and transported by the contractor to the SWRC. When time and labor allow, minimal sorting may occur. Whether plastics are sorted or not, they are placed into roll-offs. When full, the SW and Recycling Contractor transports the materials to the TFC Recycling.

Opportunity Assessment Results

N/A

Wood

Waste Generation Sources

Wood waste is collected at all commercial and industrial areas of the main installations. This includes all active duty and civilian operations, as well as tenant organizations such as DeCA, AAFES, and the Army Corps of Engineers. However, this ISWM Plan is not applicable to privatized businesses (e.g., private restaurants), privatized housing, and the NASA facilities located on JBLE.

Reduction Methods

The reduction method is to implement and promote the QRP.

Management Methods
JBLE-Langley Scrap wood can be dropped off by the generator at the Scrap Metal Yard, where a designated Contractor-owned roll-off is stored. *JBLE-Eustis* Scrap wood can be dropped off by the generator at the SWRC and placed in contractor roll-offs.
Transport and Disposal Methods
The SW and Recycling Contractor collects the scrap wood and transports it to an off-site recycling facility, landfill, or incinerator as economically practical. On a monthly basis, the contractor provides the QRP Managers with scrap wood recycling weight data and submits any proceeds.
Opportunity Assessment Results
N/A

Metals
Waste Generation Sources
Metals are collected at all commercial and industrial areas of the main installations. This includes all active duty and civilian operations, as well as tenant organizations such as DeCA, AAFES, and the Army Corps of Engineers. However, this ISWM Plan is not applicable to privatized businesses (e.g., private restaurants), privatized housing, and the NASA facilities located on JBLE.
Reduction Methods
The reduction method is to implement and promote the QRP.
Management Methods
Scrap metal is managed by the SW and Recycling Contractor at the JBLE-Langley Scrap Metal Yard and JBLE-Eustis SWRC, where it is separated by type and collected in roll-offs. On a monthly basis, Old Dominion provides scrap metal recycling weight data and submits proceeds to the QRP Managers.
Transport and Disposal Methods
Generators deliver QRP-eligible scrap metal to either the JBLE-Langley Scrap Metal Yard or the JBLE-Eustis SWRC. It is separated into contractor-owned dumpsters and delivered to Old Dominion for recycling when roll-offs are full.
Opportunity Assessment Results
N/A

Compostable Wastes
Waste Generation Sources
JBLE-Langley compostable/mulching waste originates from the Eaglewood Golf Course.
Reduction Methods
The reduction method is to implement and promote the QRP.
Management Methods
JBLE-Langley JBLE-Langley has a mulching program at Eaglewood Golf Course. The brush and woody debris collected at Eaglewood Golf Course is mulched and used for landscaping. *JBLE-Eustis* JBLE-Eustis used to have a robust composting program. Budget cuts and a poor market lead to a situation where composting was no longer feasible. Space still exists at the SWRC for these wastes, and composting has been discussed during ESOHC meetings, but JBLE-Eustis does not currently participate in a composting operation.

Transport and Disposal Methods
Compostable wastes are sent to the Bethel Landfill.
Opportunity Assessment Results
N/A

Non-Hazardous Liquids (Oil, Grease, Fuel, Antifreeze, etc.)
Waste Generation Sources
Various tenants at JBLE produce liquids.
Reduction Methods
The reduction method is to implement and promote the QRP.
Management Methods
Cooking Grease is collected from tenants on both bases. It is stored in drums and grease collection units at each tenant facility until it is ready to be transported by the cooking grease contractor. *JBLE-Langley* Used oil is collected in used oil tanks and bowsers and are transported for recycling through the used oil recycling contractor. *JBLE-Eustis* Antifreeze and used oil are stored in 55-gallon drums. It is estimated that approximately 10 55-gallon drums of antifreeze are produced each year. Both commodities are transported by the contractor, Noble.
Transport and Disposal Methods
Grease, antifreeze, and used oil are collected and transported for recycling by the respective contractor.
Opportunity Assessment Results
N/A

Overseas Refuse (Waste from Aircraft or Vessels Originating Overseas) Applicable to US Installations Only
Waste Generation Sources
Waste is generated from aircraft and/or boats from overseas that arrive at JBLE-Langley and JBLE-Eustis.
Reduction Methods
There is no reduction method in place since there are regulations that require the proper disposal of this waste stream.
Management Methods
JBLE-Langley Transient Alert is responsible for the immediate collection and disposal of trash and other items received from overseas and designated as such by agricultural inspectors. Transient Alert is aware of all inbound aircraft from outside the continental United States to include Hawaii and United States territories in the Caribbean. The aircrews bag all SW from military international flights. Transient Alert takes possession of the materials from US Customs, and the waste is taken to a containment bin located at Building 351 and placed inside the red containers inside the containment bin. *JBLE-Eustis* Vessels inbound or arriving at Third Port from outside the continental United States, to include Hawaii and United States territories in the Caribbean, are responsible for clearing US Customs and agricultural inspections at the first US port they make landfall at prior to entry to Third Port. Vessels must

coordinate with the JBLE-Eustis Harbormaster's Office and provide proof that trash/regulated garbage was properly disposed of, vessel inspected, etc. prior to arrival.
Transport and Disposal Methods
JBLE-Langley Transient Alert notifies 633 CES Service Contracts for pickup, and the waste is removed from the installation within 72 hours. If the amount of trash that comes off of the aircraft is more than the container at Building 351 can hold, Transient Alert can request to take it to the Infectious Waste Storage area at the hospital, and the contractor can pick it up there. The Infectious Waste Storage is under the direct control of the hospital facility management personnel. The overseas waste is incinerated by a contractor that picks up the waste from the base. Jet Services, a contractor for commercial airlines, collects trash from commercial contract carriers. The same procedures for waste storage for military aircraft are followed. For large amounts, the regulated trash removal contractor will take the trash directly from Jet Services. *JBLE-Eustis* Transportation and disposal of regulated trash does not take place on JBLE-Eustis. Vessels returning from foreign ports must coordinate disposal of regulated garbage with US Customs and agricultural inspectors at a US port authorized to accept such trash and provide proof of disposal records to the Harbormaster's Office for verification before port entry is authorized.
Opportunity Assessment Results
N/A

Expended Small Arms Cartridge Casings
Waste Generation Sources
Expended Small Arms Cartridge Casings (ESACC) are generated at JBLE ranges.
Reduction Methods
The reduction method is to ensure all QRP-eligible ESACC on base are recycled through the scrap metal yard and to ensure non-QRP-eligible ESACC are recycled using partnerships with other DoD facilities.
Management Methods
JBLE-Langley JBLE-Langley spent brass is collected by Security Forces at the range. The spent brass is stored on site until it is ready to be transported for the deformation process and sale. *JBLE-Eustis* JBLE-Eustis has more ranges than JBLE-Langley due to the nature of the training on base. The Logistics Readiness Center (LRC) collects spent brass generated from JBLE-Eustis range operations and stores it at the Ammunition Supply Point (ASP) until it is ready to be transported for the deformation process and sale. Shipment will be certified safe and transported by the LRC, JBLE-Eustis to the LRC, Fort Lee for acceptance and processing by the Fort Lee ASP (contracted operation).
Transport and Disposal Methods
JBLE-Langley Security Forces certifies and verifies all ESACC is inert before deformation and sales are conducted. LRS transports the ESACC to be deformed at the ASP at Ft Lee and the QRP Manager at Ft Lee conducts the sale of the commodity. The profits of the sale are split evenly between JBLE-Langley and Ft Lee. *JBLE-Eustis* LRC certifies shipment is safe for transport, then transports the ESACC to Ft Lee for the same deformation and sale process as above.
Opportunity Assessment Results

JBLE is reestablishing the deforming process as an operation to be conducted by the 406th LRC at Ft Lee and their ASP contractors. Both JBLE-Langley and JBLE-Eustis have a current memorandum of agreement with the Ft Lee QRP to then sell the ESACC to a vendor to collect proceeds for each individual QRP. This benefits all parties involved.

Fire Extinguishers
Waste Generation Sources
Fire extinguishers are generated base-wide at JBLE, with the exception of privatized housing/ businesses.
Reduction Methods
The reduction method is to implement and promote the QRP.
Management Methods
Expired fire extinguishers are dropped off at Ability One (Base supply store). Ability One exchanges (one- for-one) an old fire extinguisher for a new one with the Virginia Institute for the Blind (VIB).
Transport and Disposal Methods
The old fire extinguishers are collected at Ability One until there are enough to exchange in bulk with VIB. VIB brings new fire extinguishers and takes the old ones with them.
Opportunity Assessment Results
N/A.

Mattresses
Waste Generation Sources
There is no notable mattress waste generation at JBLE-Langley. Due to Barracks upgrades at JBLE-Eustis, old mattresses have become a waste generator source and commodity.
Reduction Methods
The reduction method is to implement and promote the QRP.
Management Methods
The vendors Sleepy's and Mattress King will recycle old mattress materials for $2/mattress. JBLE-Eustis conducts a direct sale when there are a large amount of mattresses to recycle.
Transport and Disposal Methods
The vendor/contractor arranges pickup for recycling.
Opportunity Assessment Results
N/A.

Used Tires and Rubber
Waste Generation Sources
Used tires and rubber are generated at JBLE vehicle maintenance centers and tire stores.
Reduction Methods
The reduction method is to implement and promote the QRP.
Management Methods
Tire generators are encouraged to retread tires, if possible, before recycling. Airplane tires are sent to DLA, whereas QRP-eligible tires, such as car and machine tires, are directly sold to a vendor, TFC Recycling.
Transport and Disposal Methods
JBLE-Langley Tenant activities that collect used tires, such as the Auto Hobby Shop and the car care center that supports AAFES, collect tires at their facilities until they are picked up and recycled by a tire recycling service contractor. *JBLE-Eustis* Throughout the year, tires are loaded onto a covered semi-trailer in the SWRC yard, managed by the SW and Recycling Contractor. The contractor is called to transport the trailer off-site when the trailer is full.

Opportunity Assessment Results
N/A

7.5 Materials Prohibited from Waste Streams

The installation implements procedures and controls to ensure that prohibited wastes are prevented from entering the Municipal Solid Waste (MSW), industrial waste, C&D debris, recycling, and composting waste streams. The following table lists materials that are prohibited from disposal in MSW dumpsters or roll-off containers and identifies control measures taken.

Wastes Prohibited from Non-Hazardous Solid Waste Disposal Containers

Prohibited Waste Stream	Installation Control Measures (Describe control measure)
Hazardous wastes (including household hazardous waste)	HWs are turned into the Hazardous Waste Facility at each site.
Ozone depleting substances	No Class 1 ozone depleting substances (ODS) are used on base.
Universal wastes	*JBLE-Langley* Universal wastes deemed hazardous are collected by the Fence-to-Fence Hazardous Waste Contractor. Universal wastes suitable for recycling, such as punctured aerosol cans and used oil filters, are delivered to the Scrap Metal Yard. Maintenance shops recycle lead acid batteries by performing one-for-one exchanges with battery vendors when new batteries are delivered. On a monthly basis, these organizations provide the weight of batteries exchanged to the QRP Manager. *JBLE-Eustis* Batteries and pre-punctured aerosol cans are delivered by tenant activities to the SWRC. Empty aerosol cans are recycled as scrap metal. Lead acid batteries are given to the SWRC, where they are loaded on pallets until they have enough to transport to a direct sale vendor. Other universal wastes are turned into the HW building.
Hazardous incinerator ash	N/A.
Radioactive waste	N/A.
Precious metal bearing scrap	*JBLE-Langley* Items are collected by LRS and sent to DLA. *JBLE-Eustis* Items are processed through DLA.
Sanitary sewage	N/A.
Treatment plant wastewater	Water is treated at an off-site plant under non-DoD control.

Installation Restoration Program (IRP) site wastes	N/A.
Military Munition Response Program (MMRP) site wastes	N/A.
Infectious medical wastes	Infectious medical wastes are handled by the hospital through a medical waste contractor.
Electrical components and other e-waste	*JBLE-Langley* Classified electrical components are disposed of through DLA. Electrical wastes (e-wastes) are disposed of through DLA. If there are no precious metals and the scrap is damaged, it may be disposed of as QRP-eligible scrap metal. *JBLE-Eustis* Hard drives are taken out of the computers, punctured, and demagnetized at the SWRC. They are then stored on-site in a large cardboard box on a pallet until sent off-site as scrap metal. Precious metals and other e-waste are disposed of through DLA.
Unopened containers of solvents, paints, or oil	These items are disposed of through the Fence-to-Fence Hazardous Waste Contractor and/or Hazardous Waste Facility. Punctured aerosol cans are sent to the respective recycle yards as metal scrap. The HW contractor collects HW from around the base, respectively.
Items that must be demilitarized at any time during its life cycle	Items that must be demilitarized are disposed of through DLA.
Transient Alert (for inbound overseas aircraft) – Other materials as specified in country-specific FGS or, where no FGS exist, the Overseas Environmental Baseline Governing Document (OEBGD)	*JBLE-Langley* Transient Alert is responsible for the immediate collection and temporary storage of trash and other items received from overseas and designated as such by agricultural inspectors. 633d CES is responsible for coordinating proper disposal. Transient Alert is aware of all inbound aircraft from outside the continental United States to include Hawaii and United States territories in the Caribbean. The aircrews bag all SWs from military international flights. Transient Alert takes possession of the materials from US Customs, and the waste is taken to a containment bin located at Building 351 and placed inside the red containers inside the containment bin. *JBLE-Eustis* Vessels inbound or arriving at Third Port from outside the continental United States, to include Hawaii and United States territories in the Caribbean, are responsible for clearing US Customs and agricultural inspections at the first US port they make landfall at prior to entry to

	Third Port. Vessels must coordinate with the JBLE-Eustis Harbormaster's Office and provide proof that trash/regulated garbage was properly disposed of, vessel inspected, etc. prior to arrival

7.6 Landfill Management

This section is applicable to installations that operate an on-site landfill. The ISWM Plan is incomplete unless State-approved Landfill Plans are included as an Appendix.

Landfill Overview and Management

Landfill Overview	N/A
Landfill Permit	N/A
Daily Plan	N/A
Long Term Plan	N/A

7.7 Public Awareness, Education and Outreach

The installation utilizes the following public awareness, education, and outreach methods to promote solid waste minimization, waste diversion, recycling, and proper waste disposal.

Public Awareness, Education, and Outreach Methods

Applicability (select all that apply)	**Communication Method**	**Installation Plan** (Describe how communication method is implemented)
☐	Publicizing annual non-hazardous SW diversion goals and achievements	N/A
☐	Installation-wide newsletters	N/A
☑	Electronic notifications including installation-wide email, signs, etc.	*JBLE-Langley* A monthly flyer, 1 Thing You Can Recycle, is sent out basewide and the recycling brochure is included on the JBLE webpage. *JBLE-Eustis* The JBLE ISWM Plan is included on the JBLE website.
☑	Publication and distribution of brochures	JBLE-Langley training booklets are given out at Facility Manager Trainings.
☑	Community events, (e.g., Annual Earth Day, Annual America Recycles Day)	Annual Earth Week, America Recycles Day, Earth Day, National Arbor Day, and Clean the Bay Day
☑	Presentations to local schools and community groups	Annual Earth Week
☑	Briefings	All Facility Managers are briefed on information about the QRP.
☐	Use of the AF education and awareness outreach toolkit	N/A

7.8 Programming and Budgeting

Installation Programming and Budgeting POC	The QRP Manager is responsible for the overall programming and budgeting of the QRP. Funding for the day-to-day recycling operations at each Base must be covered with QRP proceeds.
AFCEC Programming and Budgeting POC	N/A
ISWM Contracts	The SW and Recycling contract for JBLE is managed by 633 CES. Annual contract costs are expected to be approximately $ 571,348 for JBLE-Langley and $ 754,075 for JBLE-Eustis. Funding is provided by the QRP. If QRP revenue is less than the cost to operate the recycling contract, all revenues must be used to cover processing costs first before any other purpose.

7.9 Program Assessment

Installation will conduct annual ISWM program assessment utilizing the "USAF Solid Waste Management Assessment Checklist" to assure program compliance. For additional information, please refer to the latest edition of the available "USAF Solid Waste Management Assessment Checklist" on the eDASH ISW page.

Applicability (select all that apply)	**USAF Solid Waste Management Assessment Checklist**	**Installation Plan** (Describe how and where strategy is implemented)
☑	Annually review ISWM program for compliance	Reviewed annually at ESOHC meeting.

7.10 Opportunity Assessments

Solid Waste Opportunity Assessments are performed periodically throughout the installation, as described in the table below, to identify opportunities for improvement and to reduce solid waste generation.

Solid Waste Opportunity Assessments	Assessments are conducted every two years in conjunction with ISWMP reviews. Assessments will be maintained in Appendix D-1 - JBLE-Langley QRP Business Plan and Appendix D-2 – JBLE-Eustis QRP Business Plan.

8 REFERENCES

Standard References *(Applicable to all AF Installations)*

- AFI 32-7001, *Environmental Management* (Includes UEC Role)
- AFMAN 32-7002, *Environmental Compliance and Pollution Prevention*
- AFI 90-201, *The Air Force Inspection System*
- eDASH Integrated Solid Waste Home Page
- Integrated Solid Waste Management Playbook

9 ACRONYMS

Standard Acronyms *(Applicable to all AF Installations)*

- eDASH Acronym Library
- Integrated Solid Waste Management Playbook – Acronym Section
- U.S. EPA Terms & Acronyms

Installation Acronyms

- *633 CES/CEIE* 633d Civil Engineer Squadron/Environmental Element (JBLE-Langley)
- *733 CES/CEIE* 733d Civil Engineer Squadron/Environmental Element (JBLE-Eustis)
- *AAFES* Army and Air Force Exchange Service
- AEC Activity Environmental Coordinator
- AEM Activity Environmental Management
- AFCEC Air Force Civil Engineer Center
- AF Air Force
- AFIs Air Force Instructions
- AFIT Air Force Institute of Technology
- AFMAN Air Force Manual
- C&D Construction & Demolition
- CEIAR CE Installation Management Flight Resources Section
- CEOES CE Operations
- CFR Code of Federal Regulations
- CFT Cross Functional Team
- COR Contract Officer Representative
- DoD/DD Department of Defense
- DoDI Department of Defense Instruction
- DeCA Defense Commissary Agency
- DLA Defense Logistics Agency
- DS Disposition Services
- DTID Disposal Turn-In Document
- EM Environmental Management
- EMAC Environmental Management Awareness and Competency
- EMP Environmental Management Plan
- EMS Environmental Management System
- ESACC Expended Small Arms Brass Cartridge Casings
- ESOHC Environmental Safety and Occupational Health Council
- EESOH-MIS Environmental, Environmental, Safety, and Occupational Health Management Information System
- FGS Final Governing Standards Fiscal Year
- GPC Government Purchase Card
- HW Hazardous Waste
- HWC Hazardous Waste Coordinator
- IAW In Accordance With
- ISWM Integrated Solid Waste Management

- JBLE — Joint Base Langley-Eustis
- MC — Major Command
- OCC — Old Corrugated Containers (cardboard)
- ODS — Ozone Depleting Substances
- P2 — Pollution Prevention
- POC — Point Of Contact
- QRP — Qualified Recycling Program
- SW — Solid Waste
- SWRC — Solid Waste and Recycling Center
- TEACH — The Environmental Awareness Course Hub
- UEC — Unit Environmental Coordinator
- USC — United States Code

10 DEFINITIONS

Standard Definitions *(Applicable to all AF Installations)*

- Integrated Solid Waste Management Playbook – Definitions Section

Installation Definitions

- N/A

11 INSTALLATION-SPECIFIC CONTENT

N/A

APPENDICES

Appendix A – Installation Solid Waste Characterization Study
Appendix B – Commodity Market Analysis
Appendix C – Construction and Demolition Waste Management Plan
Appendix D-1 – JBLE-Langley Qualified Recycling Program Business Plan
Appendix D-2 - JBLE-Eustis Qualified Recycling Program Business Plan
Appendix E – State-Approved Landfill Plan
Appendix F – Distribution List

Appendix A - Installation Solid Waste Characterization Study/Waste Stream Analysis

JBLE does not have a Solid Waste Characterization Study/Waste Analysis available.

Appendix B - Commodity Market Analysis

The Commodity Market Analysis is included in Appendix D-1 and D-2 in the respective QRP Business Plans.

APPENDIX C - Construction and Demolition Waste Management Plan

JBLE does not have a separate Construction and Demolition (C&D) Waste Management Plan. C&D guidance is maintained on eDASH and the respective JBLE Environmental webpages.

Appendix D-1 - JBLE-Langley Qualified Recycling Program Business Plan

Appendix D-2 - JBLE-Eustis Qualified Recycling Program Business Plan

Appendix E - State-Approved Landfill Plan

N/A. There are no active landfills at JBLE.

Appendix F - Distribution

This Integrated Solid Waste Management Plan and the Qualified Recycling Program Business Plan appendices will be available on the 633 ABW/JBIO SharePoint site:
https://langley.eim.acc.hedc.af.mil/org/633abw/plans/default.aspx