

**HEADQUARTERS
633D AIR BASE WING
JOINT BASE
LANGLEY-EUSTIS VA**



**JBLE INTEGRATED SOLID WASTE
MANAGEMENT PLAN 32-70
14 March 2018**

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); AF Playbooks; federal, state, local and Final Governing Standards (FGS); and permit requirements, as applicable, 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 Installation Support Teams (ISTs) and/or installation personnel.

This document is optimized to be accessed and viewed electronically. The eDASH website at <https://cs1.eis.af.mil/sites/edash/> is the primary communication tool for AF EMPs.

TABLE OF CONTENTS

DOCUMENT CONTROL..... 4

1.0 OVERVIEW AND SCOPE 5

2.0 INSTALLATION PROFILE 6

3.0 ENVIRONMENTAL MANAGEMENT SYSTEM..... 7

4.0 GENERAL ROLES AND RESPONSIBILITIES 7

5.0 TRAINING 12

6.0 RECORDKEEPING AND REPORTING 13

7.0 PROCEDURES 14

7.1 Solid Waste Generation and Diversion Goals 14

7.2 Source Reduction 16

7.3 Disposal and Diversion Options..... 16

7.4 Waste Streams – Management Methods and Opportunities 17

7.5 Materials Prohibited From Waste Streams..... 26

7.6 Landfill Management 28

7.7 Public Awareness, Education and Outreach 28

7.8 Programming and Budgeting..... 29

8.0 REFERENCES..... 29

9.0 ACRONYMS 29

10.0 DEFINITIONS 31

11.0 INSTALLATION-SPECIFIC CONTENT 31

APPENDICES 31

Appendix A – Installation Solid Waste Characterization Study 32

Appendix B – Commodity Market Analysis..... 33

Appendix C-1 – JBLE-Langley Qualified Recycling Program Business Plan 34

Appendix C-2 – JBLE-Eustis Qualified Recycling Program Business Plan..... 35

Appendix D – State-Approved Landfill Plan 36

Appendix E -Distribution.....37

Appendix F- JBLE ISWMP Approval Letter.....38

DOCUMENT CONTROL

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:

Record of Annual Review – In accordance with (IAW) AFI 32-7042, *Waste Management*, 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)

1.0 OVERVIEW AND SCOPE

This ISWM Plan contains procedures for the management of SW. In lieu of federal, state or FGS requirements, AFI 32-7042, *Waste Management*, 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 CFR 261.2, and includes but is not limited to: wastes from aircraft originating from overseas, military munition identified as a SW in 40 CFR 266.202, 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, composting, 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 as Appendix C-1 for JBLE-Langley and C-2 for JBLE-Eustis.

Purpose of ISWMP

The purpose of this ISWMP 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/composting, 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 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 construction and demolition (C&D) debris to divert as much as possible from landfills.

2.0 INSTALLATION PROFILE

<p>Scope of Plan</p>	<p>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.</p>
<p>Office of Primary Responsibility (OPR)</p>	<p>The 733d Civil Engineer Division/Environmental Element (733 CED/CEIE) has responsibility over SW management program at JBLE-Eustis. The 633d Civil Engineer Squadron Environmental Element (633 CES/CEIE) has responsibility for the SW management program at JBLE-Langley. The 633 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. NOTE: The 633 CES/CEIE is the OPR for the ISWMP.</p>
<p>ISW Program Manager</p>	<p><i>JBLE-Langley</i> Name: Ronald Best Office Symbol: 633 CES/CEIE Phone: (757) 764-1130 Email: ronald.best.1@us.af.mil</p> <p><i>JBLE-Eustis</i> Name: Donald Johnson Office Symbol: 733 Civil Engineer Division (CED)/CEIE Phone: (757) 878-7364 Email: donald.l.johnson1.civ@mail.mil</p>
<p>QRP Manager</p>	<p><i>JBLE-Langley</i> Name: Ronald Best Office Symbol: 633 CES/CEIE Phone: (757) 764-1130 Email: ronald.best.1@us.af.mil</p> <p><i>JBLE-Eustis</i> Name: Donald Johnson Office Symbol: 733 CED/CEIE Phone: (757) 878-7364 Email: donald.l.johnson1.civ@mail.mil</p>
<p>ISWM Contracting Officer Representative (COR)</p>	<p><i>JBLE-Langley</i> Name: Robert Keller Phone: (757) 764-1419 Email: robert.keller.2@us.af.mil</p>

	<p><i>JBLE-Eustis</i> Name: Thomas L. Gunther Phone: (757) 878-1387 Email: thomas.l.gunther.civ@mail.mil</p>
State and local regulatory agencies	Virginia Department of Environmental Quality
Approved SW handling contractors	Dorado Services – SW and Recycling Contractor
CMA Status	Does installation maintain a current Commodity Market Analysis (CMA)? Yes If yes, include current CMA as Appendix
QRP Business Plan Status	Does installation operate a federally recognized Qualified Recycling Program (QRP)? Yes If yes, include current QRP Business Plan as Appendix. If no, describe recycling strategies: Note: Due to separate QRP account numbers, each installation maintains individual QRP Business Plans (see Appendices C-1 and C-2).

3.0 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) 13693, *Planning for Federal Sustainability in the Next Decade*, U.S. Department of Defense Instruction (DoDI) 4715.17, *Environmental Management Systems*, AFI 32-7001, *Environmental Management*, and international standard, ISO 14001:2004, 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 managing associated risks, and installing a culture of continuous improvement. The ISWM Plan serves as an administrative operational control that defines compliance-related activities and processes.

4.0 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, <i>Disposal of Recyclable Materials</i> ; DoDI 4715.23, <i>Integrated Recycling and Solid Waste Management</i> ; and AFI 32-7042. 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:

Office/Organization/Job Title	Installation Role/Responsibility Description
	<ul style="list-style-type: none"> • 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 Air 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.
<p>ESOH Council</p>	<p>IAW AFI 90-801, <i>Environmental, Safety, and Occupational Health Councils</i>, each installation establishes an ESOHC.</p> <p>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.</p> <p>The ESOHC is responsible for:</p> <ul style="list-style-type: none"> • Overseeing ESOH Management Systems (ESOHMS) implementation and ESOH performance to ensure continual improvement consistent with AF ESOH goals and objectives. • Providing senior leadership support and guidance to sustain the ESOHMS 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.
<p>Comptroller</p>	<p>The Comptroller is responsible for:</p> <ul style="list-style-type: none"> • 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 F3875 Budget Clearing Account (suspense) utilizing Department of Defense Form (DD Form) DD 1131, <i>Cash Collection Voucher</i>.

Office/Organization/Job Title	Installation Role/Responsibility Description
	<ul style="list-style-type: none"> • Providing copies of all completed DD Forms 1131 to the QRP Manager. • Disbursing funds in the F3875 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.
<p>EMS Cross Functional Team (CFT)/Pollution Prevention (P2) Subcommittee</p>	<p>The EMS-CFT is responsible for:</p> <ul style="list-style-type: none"> • 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.
<p>ISW Manager</p>	<p>The ISW Manager is responsible for:</p> <ul style="list-style-type: none"> • 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 Code of Federal Regulations (CFR). • Maintaining updated records and spreadsheets for QRP expenditures, sales proceeds, disbursements, and commodity tonnage diverted and landfilled.

Office/Organization/Job Title	Installation Role/Responsibility Description
	<ul style="list-style-type: none"> • 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	<p>The ISW Manager Alternate is responsible for:</p> <ul style="list-style-type: none"> • 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.
Recycling Center Manager/Staff	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 Monitors	<p>Recycling Monitors are responsible for:</p> <ul style="list-style-type: none"> • 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.
Unit Environmental Coordinators (UECs)	<p>UECs, Facility Managers, and Hazardous Waste Coordinators (HWCs) are responsible for:</p> <ul style="list-style-type: none"> • Serving as recycling POCs for their units. • Assisting unit personnel with proper reuse and diversion procedures.

Office/Organization/Job Title	Installation Role/Responsibility Description
	<ul style="list-style-type: none"> • Assisting the Building/Facility Manager with reuse and diversion procedures. • Serving as a member of the QRP subcommittee to the ESOHC. • Implementing the QRP within their building/facility by establishing recycling collection points throughout the building/facility. • Assisting building/facility staff with proper reuse and diversion procedures. • Monitoring recycling containers and central collection areas. • Performing periodic walk-through compliance inspections within the building/facility.
Contracting Officer Representative	<p>The Contracting Officer Representative (COR) is responsible for:</p> <ul style="list-style-type: none"> • 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.
Landfill Operator	N/A. There are no active landfills on either Base.
Transportation Contractor	<p>The Transportation Contractor is responsible for:</p> <ul style="list-style-type: none"> • Transporting Base refuse to the off-site landfill. • Transporting recycling materials to the Recycling Contractor warehouse.
Defense Logistics Agency (DLA) Disposition Services	<p>DLA Disposition Services (DS) is responsible for:</p> <ul style="list-style-type: none"> • 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. • Maintaining and providing records of quantities and types of materials sold to the QRP. • Inspecting and determining disposal condition codes.

Office/Organization/Job Title	Installation Role/Responsibility Description
	<ul style="list-style-type: none"> • Training generating activities on turn-in procedures for scrap metal. • Providing quarterly metrics on QRP-eligible commodities diverted through DLA. • Providing, in a timely manner to the QRP Manager, copies of DD Form 1348-1, <i>Issue Release/Receipt Document</i>, that contain all QRP-eligible commodities. • Ensuring QRP-eligible commodities sales proceeds are transferred to the F375 account in a timely manner. • Providing in-place contracts for large volume commodities.
Tenant Organizations	Tenants must participate in the QRP IAW AF policy. Non-appropriated funds (NAF) activities, AAFES, and DeCA are permitted to sell recyclables generated by their organization, but they must provide data on SW generation and diversion to the QRP Manager.
Add installation-specific roles, as necessary.	N/A

5.0 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	<p><i>JBLE-Langley</i> The installation does not have a Newcomers Environmental Training. Newly appointed Unit Environmental Coordinators, Facility Managers and Environmental Management System (EMS) Cross-Functional team members are identified and trained through the AFIT UEC course, Facility Manager Course and EESOH-TN.</p> <p><i>JBLE-Eustis</i> The Newcomer’s Brief occurs every other Tuesday for all assigned to JBLE-Eustis. Individuals are briefed on the mandatory training (Basic Environmental Management Awareness [BEMA]/ Leadership Environmental Management Awareness and Competency [LEMAC]) required for environmental awareness while assigned to JBLE-Eustis.</p>
General Environmental Awareness Training	<p><i>JBLE-Langley</i> Environmental Management System Awareness training is required for all JBLE-Langley personnel on an annual basis.</p> <p><i>JBLE-Eustis</i> General Awareness training includes LEMAC for E-5 and above (civilian/contractor in a supervisory role), and BEMA for E-4 and below (civilian/contractor in a non-supervisory role). This is an annual requirement and is offered on-line at the user’s pace. A certificate is issued after completion of the training.</p>

<p>UEC Training</p>	<p><i>JBLE-Langley</i> All UECs are required to take the Air Force Institute of Technology UEC course. UECs coordinate with Facility Managers if they observe issues related to solid waste/recycling. Facility Managers are responsible for the program. 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. Facility Managers are responsible for the Solid Waste/Recycling program in their facilities at JBLE-Langley.</p> <p><i>JBLE-Eustis</i> All units on JBLE-Eustis are required to have an Activity Environmental Coordinator (AEC) and may also appoint a UEC/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). The overall goal of these classes is to minimize the “I didn’t know” response and remove doubt. Training records are managed by the AEM Training Manager and stored on the Environmental, Safety, and Occupational Health Training Network.</p>
<p>Air Force Institute of Technology (AFIT): = Env 160 - QRP</p>	<p>The QRP Managers train in the AFIT QRP for 40 hours. A training refresher is required every 3-4 years.</p>

6.0 RECORDKEEPING AND REPORTING

The installation maintains operating records IAW Air Force Manual 33-363, *Management of Records*, and dispose of records IAW the Air Force Records Management System (AFRIMS) records disposition schedule (RDS). The following tables summarize key recordkeeping and reporting requirements.

Recordkeeping

<p>Recordkeeping Requirement</p>	<p>Installation Plan (Describe how requirement is met and where records are maintained)</p>
<p>Collect and maintain records and documents to support SW diversion and disposal data</p>	<p>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.</p>
<p>Collect and maintain copies of weight certificates, shipping receipts, financial statements, and related documentation from contractors that generate SW</p>	<p>Contractors and customers send weight certificates, shipping receipts, financial statements, and related documents to the QRP Manager and/or COR, who send receipts to the Budget Analyst, who stores the records.</p>

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.
Add installation-specific recordkeeping requirements, as necessary.	N/A

Reporting

Reporting Requirement	Installation Plan (Describe how requirement is met)
Report SW diversion and disposal data to AFCEC using EESOH-MIS reporting system	The QRP Managers enter data into the EESOH-MIS reporting system.
Add installation-specific recordkeeping requirements, as necessary.	N/A

7.0 PROCEDURES

7.1 Solid Waste Generation and Diversion Goals

- The ISW/QRP Manager(s) maintains a Waste Stream Analysis to identify waste streams generated and track waste diversion and disposal
- The ISW/QRP Manager(s) maintains a Solid Waste Diversion table to track current and projected progress towards solid waste diversion goals
- The Waste Stream Analysis and Solid Waste Diversion tables are available on eDASH or by clicking on the following icon:



Installation Supplement – Solid Waste Generation and Diversion Goals

JBLE-Langley - Actual and Projected Diversion Rates (excluding C&D Debris)									
	Actual	Actual	Actual	Actual	Actual	Projected	Projected	Projected	Projected
Description	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Disposal Quantity (tons)	0.00	2318.58	2216.64	2173.66	2252.50	2320.07	2389.67	2461.36	2535.20
Diversion Quantity (tons)	0.00	1606.90	1268.81	1197.50	1351	1391.53	1433.27	1476.27	1520.56
Diversion Rate - Actual	0%	41%	36.40%	35.52%	37.49%	37.49%	37.49%	37.49%	37.49%
Diversion Rate - Goal	44%	46%	48%	50%	50%	50%	50%	50%	50%
					AF Goal	AF Goal	AF Goal	AF Goal	AF Goal

INTEGRATED SOLID WASTE MANAGEMENT PLAN

JBLE-Langley - Actual and Projected Diversion Rates (C&D Debris)									
	Actual	Actual	Actual	Actual	Actual	Projected	Projected	Projected	Projected
Description	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Disposal Quantity (tons)	0.00	231.94	288.25	361.55	99.00	104.94	108.08	111.33	118.01
Diversion Quantity (tons)	0.00	739.17	1378.64	3838.03	25009.00	25759.27	26532.04	27328.00	28147.84
Diversion Rate - Actual	0%	76%	83%	91.39%	99.61%	99.59%	99.59%	99.59%	99.58%
Diversion Rate - Goal	54%	56%	58%	60%	60%	60%	60%	60%	60%
					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	Projected	Projected	Projected	Projected
Description	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Disposal Quantity (tons)	0.00	3723.20	3346.53	1966.64	2516.71	2592.21	2669.97	2750.07	2832.57
Diversion Quantity (tons)	0.00	1719.77	1702.48	2567.00	3960.16	4078.95	4201.32	4327.36	4457.18
Diversion Rate - Actual	0%	32%	33.72%	56.62%	61.14%	61.14%	61.14%	61.14%	61.14%
Diversion Rate - Goal	44%	46%	48%	50%	50%	50%	50%	50%	50%
					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	Projected	Projected	Projected	Projected
Description	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Disposal Quantity (tons)	0.00	59.87	78.45	0.00	0.00	28.18	29.02	28.89	30.79
Diversion Quantity (tons)	0.00	850.96	296.97	118.47	939.62	995.99	1025.87	1056.65	1088.35
Diversion Rate - Actual	0%	93%	79%	100%	100%	97.25%	97.25%	97.34%	97.25%
Diversion Rate - Goal	54%	56%	58%	60%	60%	60%	60%	60%	60%
					AF Goal	AF Goal	AF Goal	AF Goal	AF Goal

*No C&D Disposal recorded in 2015 and 2016.

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)
<input type="checkbox"/>	Change processes to reduce or eliminate the production of wastes	N/A
<input type="checkbox"/>	Reduce the volume of material purchased or produced	N/A
<input type="checkbox"/>	Reduce the toxicity of products used	N/A
<input checked="" type="checkbox"/>	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.
<input type="checkbox"/>	Decrease the amount of product use	N/A
<input checked="" type="checkbox"/>	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 know to buy green.
	Add installation-specific strategies, as necessary.	N/A

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 as a link in the References Section, 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)
<input checked="" type="checkbox"/>	Composting	JBLE-Langley has a composting operation. Records of diverted tonnage are entered into EESOH-MIS.
<input type="checkbox"/>	Mulching	N/A
<input checked="" type="checkbox"/>	Reuse	Under the Green Procurement Program (GPP), vehicle maintenance centers are encouraged to use retread tires and re-refined oil when possible. Pallets that are in decent condition are reused until recyclable.

Applicability (select all that apply)	Disposal/ Diversion	Installation Plan (Describe how disposal/diversion is implemented)
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	Incineration (Waste-to-Energy)	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.
<input type="checkbox"/>	Incineration	N/A
<input checked="" type="checkbox"/>	Disposal – Offsite Landfill	In the event the RFSGF is full to capacity, waste is sent to the Big Bethel Sanitary Landfill in Hampton, Virginia.
<input type="checkbox"/>	Disposal – On-site Landfill	N/A
<input checked="" type="checkbox"/>	Overseas refuse management	<p><i>JBLE-Langley</i> 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.</p> <p><i>JBLE-Eustis</i> JBLE-Eustis Harbor Master Office is responsible for alerting appropriate Base offices of vessels inbound or arriving at 3rd Port from outside the continental United States to include Hawaii and United States territories in the Caribbean.</p>

7.4 Waste Streams – Management Methods and Opportunities

<u>Municipal Solid Waste</u>
<p>Waste Generation Sources</p> <p>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.</p>

Reduction Methods
The reduction method is to implement and promote the recycling program.
Diversion Goals and Options
As stated in DoD EO 13693 Section 3(j) (ii): Divert at least 50% (by weight) of non-hazardous SW from the landfill by 2020, excluding C&D debris, and pursue opportunities for net-zero waste or additional diversion opportunities.
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 a 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

<u>Construction and Demolition (C&D) Debris</u>
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.
Diversion Goals and Options
As stated in DoD EO 13693 Section 3(j) (iii): Divert at least 60% (by weight) of non-hazardous C&D materials from the landfill by 2020.
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

<u>Paper and Cardboard</u>
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.
Diversion Goals and Options

As stated in DoD EO 13693 Section 3(j) (ii): Divert at least 50% (by weight) of non-hazardous SW from the landfill by 2020, excluding C&D debris, and pursue opportunities for net-zero waste or additional diversion opportunities.

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 collects 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). 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 Manager, and proceeds are retained by the tenant.

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.

<u>Plastics</u>
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.
Diversion Goals and Options
As stated in DoD EO 13693 Section 3(j) (ii): Divert at least 50% (by weight) of non-hazardous SW from the landfill by 2020, excluding C&D debris, and pursue opportunities for net-zero waste or additional diversion opportunities.
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
<i>JBLE-Langley</i> 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.
<i>JBLE-Eustis</i> 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 Center.
Opportunity Assessment Results

<u>Wood</u>
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.
Diversion Goals and Options
As stated in DoD EO 13693 Section 3(j) (ii): Divert at least 50% (by weight) of non-hazardous SW from the landfill by 2020, excluding C&D debris, and pursue opportunities for net-zero waste or additional diversion opportunities.
Management Methods
<i>JBLE-Langley</i> Scrap wood can be dropped off by the generator at the Scrap Metal Yard, where a designated Contractor-owned roll-off is stored.
<i>JBLE-Eustis</i> 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 recycle 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

<u>Metals</u>
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.
Diversion Goals and Options
As stated in DoD EO 13693 Section 3(j) (ii): Divert at least 50% (by weight) of non-hazardous SW from the landfill by 2020, excluding C&D debris, and pursue opportunities for net-zero waste or additional diversion opportunities.
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

<u>Compostable Wastes</u>
Waste Generation Sources
JBLE-Langley compostable waste originates from the Eaglewood Golf Course.
Reduction Methods

The reduction methods are to implement and promote the QRP.
Diversion Goals and Options
As stated in DoD EO 13693 Section 3(j) (ii): Divert at least 50% (by weight) of non-hazardous SW from the landfill by 2020, excluding C&D debris, and pursue opportunities for net-zero waste or additional diversion opportunities.
Management Methods
<i>JBLE-Langley</i> Maintenance of JBLE-Langley’s Eaglewood Golf Course is performed by FSS, which collects and deposits yard wastes in the Bethel Landfill Composting Facility.
<i>JBLE-Eustis</i> 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
Determine potential opportunities to compost at JBLE-Eustis.

<u>Liquids (Oil, Grease, Fuel, Antifreeze, etc.)</u>
Waste Generation Sources
Various tenants at JBLE produce liquids.
Reduction Methods
The reduction methods are to implement and promote the QRP.
Diversion Goals and Options
As stated in DoD EO 13693 Section 3(j) (ii): Divert at least 50% (by weight) of non-hazardous SW from the landfill by 2020, excluding C&D debris, and pursue opportunities for net-zero waste or additional diversion opportunities.
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.
<i>JBLE-Langley</i> - Used oil is collected in used oil tanks and bowsers and are transported for recycling through the used oil recycling contractor.
<i>JBLE-Eustis</i> – 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

<u>Overseas Refuse (Waste From Aircraft Originating Overseas)</u> Applicable to US Bases 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.
Diversion Goals and Options
There is no reduction method in place since there are regulations that require the proper disposal of this waste stream.
Management Methods
<p><i>JBLE-Langley</i> 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.</p> <p>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.</p> <p><i>JBLE-Eustis</i> JBLE-Eustis Harbor Master Office is responsible for alerting appropriate Base offices of vessels inbound or arriving at 3rd Port from outside the continental United States to include Hawaii and United States territories in the Caribbean.</p>
Transport and Disposal Methods
<p><i>JBLE-Langley</i> 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.</p> <p><i>JBLE-Eustis</i> The Harbor Master will take possession of any SWs until inspected and cleared or collected by an appropriate contractor IAW JBLE-1 32-101. Waste must be removed from the installation within 72 hours and incinerated.</p>
Opportunity Assessment Results
N/A

<u>Expended Small Arms Cartridge Casings</u>
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 through DLA.
Diversion Goals and Options
As stated in DoD EO 13693 Section 3(j) (ii): Divert at least 50% (by weight) of non-hazardous SW from the landfill by 2020, excluding C&D debris, and pursue opportunities for net-zero waste or additional diversion opportunities.
Management Methods
<i>JBLE-Langley</i> JBLE-Langley currently sends its ESACC to DLA, where funding proceeds eventually return to the QRP.
<i>JBLE-Eustis</i> JBLE-Eustis has more ranges than JBLE-Langley due to the nature of the training on Base. During FY16, the Logistics Readiness Center (LRC) deformed the brass and stored it on-site in 55-gallon drums. Ammunition Supply (ASP) is the contractor who manages the ranges, and LRC is the contractor who transports the ESACC to the DLA in Portsmouth, Virginia.
Transport and Disposal Methods
<i>JBLE-Langley</i> Security Forces transports ESACC to DLA in Norfolk, Virginia to be recycled.
<i>JBLE-Eustis</i> LRC transports the ESACC to the DLA in Portsmouth, Virginia to be recycled.
Opportunity Assessment Results
During a site visit meeting (March 2017), the LRC (JBLE-Eustis tenant) offered to deform all of the brass from the JBLE-Eustis ranges and give the ESACC to the JBLE-Eustis SWRC to collect proceeds. This update would increase the QRP scrap metal profit, and it remains an opportunistic goal for JBLE-Eustis.

<u>Fire Extinguishers</u>
Waste Generation Sources
Fire extinguishers are generated Base wide at JBLE-Eustis only, with the exception of privatized housing/businesses.
Reduction Methods
The reduction method is to implement and promote the QRP.
Diversion Goals and Options
As stated in DoD EO 13693 Section 3(j) (ii): Divert at least 50% (by weight) of non-hazardous SW from the landfill by 2020, excluding C&D debris, and pursue opportunities for net-zero waste or additional diversion opportunities.
Management Methods
Expired fire extinguishers are dropped off at Ability 1 (Base supply store). Ability 1 exchanges (one-for-one) an old fire extinguisher for a new one, at no cost, with the Virginia Institute for the Blind (VIB). VIB refurbishes the old ones.
Transport and Disposal Methods
The old fire extinguishers are collected at Ability 1 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

--

<u>Mattresses</u>
Waste Generation Sources
Mattresses are a waste generation source at JBLE-Eustis. Old mattresses have been a large commodity due to the upgrade of barracks at JBLE-Eustis.
Reduction Methods
The reduction method is to implement and promote the QRP.
Diversion Goals and Options
As stated in DoD EO 13693 Section 3(j) (ii): Divert at least 50% (by weight) of non-hazardous SW from the landfill by 2020, excluding C&D debris, and pursue opportunities for net-zero waste or additional diversion opportunities.
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

<u>Used Tires and Rubber</u>
Waste Generation Sources
Used tires and rubber are generated at JBLE vehicle maintenance centers and tire stores.
Reduction Methods
The reduction methods are to implement and promote the QRP.
Diversion Goals and Options
As stated in DoD EO 13693 Section 3(j) (ii): Divert at least 50% (by weight) of non-hazardous SW from the landfill by 2020, excluding C&D debris, and pursue opportunities for net-zero waste or additional diversion opportunities.
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. The contractor TFC Recycling awards \$1,200 per truckload, which happens about one to two times per year at JBLE-Eustis.
Transport and Disposal Methods
<i>JBLE-Langley</i> 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.

<p><i>JBLE-Eustis</i> 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.</p>
<p>Opportunity Assessment Results</p>

7.5 Materials Prohibited From Waste Streams

The installation implements procedures and controls to ensure that prohibited wastes are prevented from entering the 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 Municipal Solid Waste Disposal Containers

Prohibited Waste Stream	Installation Control Measures (Describe control measure)
Hazardous wastes (including household hazardous waste)	HWs are turned in to the Hazardous Facility at each site.
Ozone depleting substances	No Class 1 ozone depleting substances (ODS) are used on Base.
Universal wastes	<p><i>JBLE-Langley</i> Universal wastes suitable for recycling, such as punctured aerosol cans and used oil filters, are delivered to the Scrap Metal Yard. Tenants deliver universal wastes deemed hazardous to the Hazardous Facility, or they are collected by the Fence-to-Fence Hazardous Waste Contractor. 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.</p> <p><i>JBLE-Eustis</i> 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.</p>
Hazardous incinerator ash	N/A
Radioactive waste	N/A
Precious metal bearing scrap	<p><i>JBLE-Langley</i> Items are collected by LRS and sent to DLA.</p> <p><i>JBLE-Eustis</i> Items are processed through DLA.</p>

INTEGRATED SOLID WASTE MANAGEMENT PLAN

Sanitary sewage	N/A
Treatment plant wastewater	N/A. Water is treated at an off-site plant.
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	<p><i>JBLE-Langley</i> 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.</p> <p><i>JBLE-Eustis</i> 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.</p>
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.
Overseas installations only – Other materials as specified in country-specific FGS or, where no FGS exist, the Overseas Environmental Baseline Governing Document (OEBGD)	<p><i>JBLE-Langley</i> 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. 633 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.</p> <p>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.</p> <p><i>JBLE-Eustis</i> The JBLE-Eustis Harbor Master Office is responsible for alerting appropriate Base offices</p>

	of vessels inbound or arriving at 3rd Port from outside the continental United States to include Hawaii and United States territories in the Caribbean.
Incorporate installation-specific waste streams. Consider state and local requirements that prohibit materials from disposal.	N/A

7.6 Landfill Management

This section is applicable to installations that operate an on-site landfill. 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)
<input type="checkbox"/>	Publicizing annual non-hazardous SW diversion goals and achievements	N/A
<input type="checkbox"/>	Base-wide newsletters	N/A
<input checked="" type="checkbox"/>	Electronic notifications including base-wide email, signs, etc.	The JBLE-Eustis QRP Manager includes three Education websites. The JBLE QRP logo and slogan are designed for advertising and educating.
<input checked="" type="checkbox"/>	Publication and distribution of brochures	JBLE-Langley training booklets are given out at Facility Manager Trainings.
<input checked="" type="checkbox"/>	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
<input checked="" type="checkbox"/>	Presentations to local schools and community groups	Annual Earth Week
<input checked="" type="checkbox"/>	Briefings	All Facility Managers are briefed on information about the QRP.
<input type="checkbox"/>	Use of the AF education and awareness outreach toolkit	N/A

<input type="checkbox"/>	Incorporate installation-specific communication methods.	N/A
--------------------------	--	-----

7.8 Programming and Budgeting

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.
ISWM Contracts	<p>The SW and Recycling contract for JBLE is managed by 633 CES. Annual contract costs are expected to be approximately \$134,652 for JBLE-Langley and \$139,440 for JBLE-Eustis. Funding is provided by the QRP.</p> <p>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.</p>
QRP Fiscal Year Budget	The QRP Manager is the POC for the FY budget at each Base, and 633 CES manages the contract. The EMS-CFT and ESOHC are responsible for reviewing and approving the QRP budget prior to each FY.
QRP Sales Revenue Management	Once all QRP costs are paid, the QRP Manager will report excess JBLE QRP proceeds to the QRP and make recommendation on proceeds' distribution. No more than 50% of the QRP proceeds balance may be used at JBLE for projects for pollution abatement, energy conservation, and occupational safety and health activities. No more than 50% of the amount established by law may be used as the maximum amount of a minor construction project. The remaining QRP proceed balance may be transferred to the non-appropriated morale and welfare account of JBLE to be used for any morale or welfare activity.

8.0 REFERENCES

Standard References (Applicable to all AF Installations)

- [AFI 32-7001, Environmental Management](#) (Includes UEC Role)
- [AFI 32-7042, Waste Management](#)
- [AFI 90-201, The Air Force Inspection System](#)
- [eDASH Integrated Solid Waste Home Page](#)
- [Integrated Solid Waste Management Playbook](#)

Installation References

- N/A

9.0 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 CED/CEIE 733d Civil Engineer Division/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
- BEMA Basic Environmental Management Awareness
- C&D Construction & Demolition
- CED Civil Engineer Division
- 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
- EMP Environmental Management Plan
- EMS Environmental Management System
- ESACC Expended Small Arms Brass Cartridge Casings
- ESOHC Environmental Safety and Occupational Health Council
- ESOHMS Environmental, Safety and Occupational Health Management System
- EESOH-MIS Enterprise Environmental, Safety, and Occupational Health Management Information System
- FGS Final Governing Standards
- FY Fiscal Year
- GPC Government Purchase Card
- HW Hazardous Waste
- HWC Hazardous Waste Coordinator
- IAW In Accordance With
- ISWMP Integrated Solid Waste Management Plan
- JBLE Joint Base Langley-Eustis
- LEMAC Leadership Environmental Management Awareness and Competency
- MAJCOM Major Command
- OCC Old Corrugated Containers (cardboard)
- ODS Ozone Depleting Substances

INTEGRATED SOLID WASTE MANAGEMENT PLAN

- P2 Pollution Prevention
- POC Point Of Contact
- QRP Qualified Recycling Program
- SW Solid Waste
- SWRC Solid Waste and Recycling Center
- UEC Unit Environmental Coordinator
- USC United States Code

10.0 DEFINITIONS

Standard Definitions (Applicable to all AF Installations)

- [Integrated Solid Waste Management Playbook – Definitions Section](#)

Installation Definitions

- N/A

11.0 INSTALLATION-SPECIFIC CONTENT

N/A

APPENDICES

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

Appendix A – Installation Solid Waste Characterization Study

JBLE does not have a Solid Waste Characterization Study available.

Appendix B – Commodity Market Analysis

The Commodity Market Analysis is available on [eDASH](#).

Appendix C-1 – JBLE-Langley Qualified Recycling Program Business Plan

Appendix C-2 – JBLE-Eustis Qualified Recycling Program Business Plan

Appendix D – State-Approved Landfill Plan

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

Appendix E – Distribution List

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>



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

OFFICE OF THE COMMANDER
125 Mabry Avenue
Joint Base Langley-Eustis VA 23665-2522

MEMORANDUM FOR SEE DISTRIBUTION (Appendix F)

SUBJECT: 633d Air Base Wing (ABW) Integrated Solid Waste Management Plan (ISWMP)
32-70

1. Attached is the 633 ABW ISWMP. This plan describes how Joint Base Langley-Eustis (JBLE) manages solid waste collection and disposal and how it integrates recycling programs into that process. This plan fulfills the requirements of AFI 32-7042, Waste Management, for a solid waste management plan and a Qualified Recycling Program (QRP) Business Plan. Implementation of this plan will be as directed by the Commander, 633 ABW or his designated representative.
2. The plan is effective upon receipt and supersedes JBLE SWMP, 10 Jun 16 and the JBLE QRP Business Plan dated 1 Nov 16 and is distributed to all JBLE agencies as shown in Appendix E of this plan. This plan is also available electronically via the 633 ABW/JBIO Sharepoint site: <https://langley.eim.acc.hedc.af.mil/org/633abw/plans/default.aspx>.
3. This plan will be reviewed annually and updated as appropriate. The Office of Primary Responsibility for this document is 633d Civil Engineer Squadron Environmental Element.
4. The entire plan is unclassified. It will be safeguarded and disposed of IAW current directives.

JOLIAT.HERBERT.A
LEXANDER.102380
0590
HERBERT A. JOLIAT, Colonel, USA
Vice Commander
ESOHC Chair

Digitally signed by
JOLIAT.HERBERT.ALEXANDER.1
023800590
Date: 2018.03.14 09:04:41
-04'00'