

Department of the Air Force
Integrated Solid Waste Management Plan

USAF Academy

Installation Supplement



June 2025

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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://usaf.dps.mil/teams/edashpo/temp/module/Home.aspx> is the primary communication tool for AF EMPs.

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 2023 and supersedes the 2020 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 adopt the most recent version of this template available.

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 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.

Installation Supplement

Record of Updates

Change No.	Nature of Change	Date of Change	Approved By	Approved Date
#1	Removed QRP Language	April 2024	EMS CFT	4 June 2024
#2	Updated AFI 32-7042 reference to AFMAN 32-7002, contact info, added FY 23 and 24 diversion rates, training info, utilized reduction and diversion practices, disposal contract to Liberty Disposal Incorporated (LDI), Program Manager contact info, and specified that commodity market analysis is not completed annually due to QRP removal.	April 2025		

Record of ESOHC Annual Review

Review Date	Review Participants	Notes/Remarks	Result in Plan Update? (Yes or No)
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22 July 2024	Barry Schatz, Mike Pompliano	Removed QRP Language	Yes
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ISWMP APPROVAL (SIGNATURE PAGE)

Installation Supplement

Documentation of plan approval is on CFT and ESOHC minutes

[SIGNATURE]



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE ACADEMY

21 August 2024

MEMORANDUM FOR DISTRIBUTION A

FROM: HQ USAFA/SE

SUBJECT: Environmental, Safety, and Occupational Health Council (ESOHC) Minutes

1. On 22 Jul 24 at 1300, USAFA convened Meeting #1 of the ESOHC meeting for CY2024. The council was Chaired by Col Daniel C. Werner, 10 ABW/CD. The ESOHC reviews policies and programs, establishes goals, monitors progress and advises leadership on the status of the installation's Environmental, Safety and Occupational Health (ESOH), and Fire and Emergency Services programs.

2. Attendance:

Attendees		Briefers	
Col Daniel C. Werner (Co-Chair)	10 ABW/CD	Lt Col Jeremiah Guild	306 FTG/SE
Mr. Russell Meyer	CWT	MSgt Leah Young	10 OMRS /SGXB
Lt Col Steven Vick	DFS	SSgt Abigail Pennington	10 OMRS/SGXM
Col Joyce Storm	USAFA/IG	Barry Schatz	10 CES/CEIE
Mr. Eric Rollman	AD	Amy Balek	10 CES/CEIE
Not present	PS	Ryan Bouton	10 CES/CENPP
Mr. Carlos Cruz- Gonzalez	A4	Asst Chief Steven Gonzales	10 CES/CEFP
Col Cheo Stallworth	10 MSG/CC	SSgt Brandon Barhydt	10 SFS/S5A
Not present	10 MDG	Mr. Timothy A. Lujan	USAFA/SED
Lt Col Byungsuk Choi	10 CES/CC	Mr. Mark Schmidt	USAFA/SEW
Maj Travis Hough	10 FSS/DD		
Ms. Alana Kraft	10 CES/CEI		
TSgt Leah Yonker	10 SFS/S5R		
Capt Brett Grazetti	306 FTG/SE		
Ms. Christine Lowenberg	10 CES/CENMP		
SrA Chinamae Wise	10 OMRS/SGXM		
Ms. Brianna Holland	USDA		
Mr. Trevonne Robinson	USDA		
Ms. Lisa Stevens	10 CES/CEIEC		
Mr. Donald Gray	10 CES/CEIEC		
Mr. Scott Rodesky	USAFA/SEO		

3. Opening: Mr. Timothy A. Lujan, USAFA/SED opened the meeting and welcomed the council members.

4. Standard Agenda: The following briefers presented information as contained in their portion of the briefing slides. Discussions as follows:

a. Bioenvironmental Engineering (BEE): MSgt Leah Young, 10 OMRS/SGXB

- (1) BE Program Management Review (PMR). USAFA's Occupational and Environmental Health (OEH) program status during October 2022 through September 2023. OEH Program is healthy/No High-Risk processes. In 2023, all mandated health risk assessments were completed for the Medical Group. There are currently no concerns with work centers that are being monitored on USAFA. Next year's focus will be the Mission Support Group.
- (2) The Fifth Unregulated Contaminant Monitoring Rule (UCMR5) was completed in December 2023. This project is to analyze PFAS and 30 chemical containments in the drinking water. All results have been non-detect.
- (3) USAFA Radon sampling began in February – July 2024. The base has been sectioned into 8 zones with 12 facilities selected to ensure adequate representation and data quality across the installation. The AF goal is the annual average concentration of radon gas in occupied buildings to be maintained at or below 0.8 Working Level Month in a year (WLM/yr). Final report will be made available and posted in all building occupants to view (goal is Fall 2024).
- (4) Notice of Violation – Admin violation for the Drinking Water program. Given to USAFA due to late reporting in the 2nd Quarter Disinfectant by Product sampling in 2023. This was due to the SGS Lab staff not loading results in the required timeframe to the Colorado State Public Health website and BEE not verifying uploaded results within required timeframe. COA's have been implemented and BEE has developed a step-by-step training in the Environmental Program Standard Operating Procedures that demonstrates how to verify sample results were uploaded.

b. Public Health/Occupational Health: SSgt Abigail Pennington, 10 OMRS/SGXM

- (1) USAFA Occupational Health Program Compliance rate still low at 73% due to addition of SFS and completing requirements in line with birth dates per last OEHWG Chair.
- (2) PH inputting deployment exemptions that are causing negative effects on compliance rates.

c. Environmental Management: Mr. Barry Schatz and Ms. Amy Balek, 10 CES/CEIE

- (1) (Training) Ms. Balek provided Senior Leadership EMS training.
- (2) (For Approval) Ms. Balek presented FY 24 Environmental Management Review. Two categories had a performance grade of caution: Evaluation of Compliance had program level inspections which needed to be entered and Corrective and Preventive Action required a Public Notice to be submitted for drinking water to address an NOV and is planned for November. The remaining categories were conformant. (Approved)
- (3) (For Approval) Mr. Schatz presented the revised Environmental Commitment Statement. Monument Creek stabilization added to the statement to address local concerns. Col Daniel Werner suggested that next year they would like to see something about off base engagement concerning stormwater. Mr. Schatz confirmed this is currently part of the stormwater EAP. (Approved)
- (4) (For Approval) Mr. Schatz covered the Environmental Risk Inventory Assessment. Drinking Water was requested to be reassigned from an assessment of “high” down to “low” since previous reporting issues had been corrected and there are no problems with water quality. (Approved with Drinking Water risk assessment updated from “high” to “low”)
 - a. Low chlorine level results in drinking water were discussed. It was explained that dead ends in the drinking water lines require to be regularly flushed to meet required chlorine levels. MSgt Leah Young added that despite low chlorine results there has not been a positive Bac-T result because the water is high quality.
 - b. Future sampling for PFAS in stormwater was discussed. EPA does not currently have a limit for PFAS in stormwater. The risk is being left as medium due to uncertainties around future regulations.
- (5) (For Approval) Mr. Schatz reviewed the status of the two active Environmental Action Plans (Partnering to Improve Stormwater Quality; Bio-Environmental Accurate Drinking Water Data Reporting) and their remaining tasks with the council. (Approved)
- (6) (For Approval) Ms. Balek explained the Evaluation of Compliance noting that most of the Environmental Inspection Process (EIP) information had not been entered yet but would be done by the end of the fiscal year. The EMS deficiencies would mostly be satisfied with the approvals that ESOHC had made at this meeting. (Approved)
- (7) (For Approval) Ms. Balek covered Corrective and Preventative Actions from a CDPHE Drinking Water Inspection noting the only remaining item was to complete a public notice by June 3, 2025. FY23 Management Review deficiencies were also being addressed by approvals from this meeting. (Approved)

(8) (Information Only) Mr. Schatz discussed the Qualified Recycling Program (QRP) and the lack of profit that caused it to be eliminated from the Integrated Solid Waste Management Plan (ISWMP).

(9) Environmental Assessments: Mr. Ryan Bouton, 10 CES/CENPP

a. Mr. Bouton presented the Environmental Assessment (EA) for North Monument Creek Interceptor (NMCI) Wastewater Pipeline: Currently in signature COORD through TMT for final approval by Mr. Carlos Cruz-Gonzales (A4). This will be signed early August 2024.

b. Mr. Bouton presented the EAs for District 20 Schools (Air Academy High School and Douglass Valley Elementary School): EAs in progress. Likely adverse impacts associated with the demo and construction of new schools. The contractor (ERO) is currently conducting the cultural assessment for both schools.

c. Mr. Bouton presented the upcoming EA or Environmental Impact Statement (EIS) for SPACE (Space, Physics, Astronautics, Center of Excellence) Building: Due to potential adverse impacts associated with either the building's siting/location or design, this may result in an Environmental Impact Statement. As a result, \$1.5 million is being budgeted for this undertaking. This action is programmed by AFCEC NEPA Center for FY25 due to project funding projected for FY27.

d. Mr. Bouton presented on the upcoming Husted, Edgerton, Northfield (HEN) District Plan Environmental Assessment: Currently waiting for USACE to award the contract for the EA. 10CES has already been coordinating with CW to identify training actions they desire to conduct in this district. The EA/EIS will be awarded by Q3 2024.

e. Mr. Bouton presented on the recently completed EA for the El Paso County/Struthers/North Gate Permanent Water Quality Pond. Good news, the Final EA/FONSI/FONPA was signed in mid-June by Mr. Cruz-Gonzales (A4).

f. Finally, Mr. Bouton presented on the recently completed EA for Combat Survival Training (CST). Good news, the Final EA/FONSI/FONPA was signed in mid-June by Mr. Cruz-Gonzales (A4).

d. Fire and Emergency Services: Assistant Chief Steven Gonzales, 10 CES/CEFP

- (1) Ongoing common FSD's; emergency lights, exit lights, partial sprinkler coverage not 100%, fire doors propped open, calling 911 and self-help projects.
- (2) Added Falcon Club to a 4437 deliberate risk assessment worksheet for the self-cleaning system not working as intended. System should be replaced or repaired to have a proper working system.

e. Traffic Statistics: SSgt Brandon Barhydt, 10 SFS/S3O

- (1) (Information Only) Provided changes to vehicle accident definitions and specified duty to report accidents within 24 hours of the accident.
- (2) (Information Only) Provided trends by if they were major or minor. Specifying 236 accidents by both location and month, ranging from December 2023 to May 2024.

f. Flight Safety: Lt Col Jeremiah Guild, 306 FTG/SE

- (1) Introductions - 100% shop turnover, introduced Chief of Safety, Chief of Aviation Safety, and United States Department of Agriculture (USDA) personnel
- (2) Trends – slides and stats will change in the next ESOHC to better establish AETC trends relating how the small data set and short time frame of previous discussions contributes to an ineffective picture of trends
 - a. Mishap rate was equivalent to FY23
 - b. FY24 – 1x Class C, 3x Class Ds, and 2x Class E Mishaps were discussed with most related to injury during jump operations
- (3) Bird/Wildlife Strike Hazards
 - a. USAF Academy Auxiliary Field “Bullseye” CO90
 - i. Most strikes are perching birds on T-53A during landing
 - ii. High frangible fencing complete at “Bullseye” deterring large mammalian species
 - b. USAF Academy Field / “Davis Field” KAFF
 - i. In May, tow aircraft takeoff clearance cancelled due to white tail deer running in front of and across all active runways – High Interest Area published via Flight Crew Information File to remind crews to remain vigilant
 - ii. Davis Field lack of Airfield Fencing is non-compliant (T-2) with DAFI 91-212 para 3.2.1.5 and increases risk of strike with deer / coyote
 - iii. Conducting risk analysis for lack of fencing with associated wildlife hazard and conducting study on potential impact of new fencing to jump operations - waiver to 19 AF/CC; Estimated Completion Date: 15 Oct 24

c. BASH Program Manager appointed: Capt Brett Grazetti

d. New USDA person hired and will begin conducting Wildlife Hazard Assessment at Davis Field/Bullseye August 2024

(4) Top 2 events / mishaps

a. Parachute injuries - reaching out to contracting to discuss softening drop zone earth

b. Near Mid Air Collisions – primarily off station in non-towered pattern, researching with Federal Aviation Administration (FAA) 1x event and re-initiating Mid-Air Collision Avoidance (MACA) program

(5) Other safety topics

a. MACA Working Group - Planning to meet with local FAA, airfield managers, Peterson SFB, etc. mid-August

b. T-53A routing changed to increase safety and better de-conflict from City of Colorado Springs Municipal airport

c. Controlled Movement Area Violations uptick at summer program start, investigating root cause and modified procedures to reduce recurrence

d. Runway 34L/C infield regrading project awaiting funding (Unified Facilities Criteria requirement is max 2% grade, current grade exceeds 10%)

g. Occupational, Weapons, Space Safety: Mr. Timothy A. Lujan, Mr. Mark Schmidt, USAFA/SE

(1) Confined Space (CS) Program. USAFA/IG conducted a Special Emphasis Item (SEI) Evaluation on the USAFA CS Program on 26-29 Mar 24. Installation CS listings and training – Satisfactory. Findings: 10 CES/CEF did not ensure AF Form 1024 were completed before entry. 10 OMRS/Bio did not regularly attend CSPT meetings.

(2) Five Year Mishap Trend. Downward steady trend from 2021-2024. Credit good risk management culture across the units. Sports and Rec continues to lead in mishap category. Obstacle courses in Combat Support.

(3) 2024 Unit Inspections & Trends. Six units pending safety inspections for Jul-Nov. Housekeeping, unauthorized use of small cooking/heating appliances in cadet dorms and overdue motorcycle rider training makes up trends.

(4) Master Hazard Abatement Program. Five open MHAP items. RAC-3 (new) – Runway underrun of 35L and 35C is out of specs per UFC.

(5) Weapons/Explosives Safety. Numerous violations from units utilizing JV. Working with CWT to correct violations i.e., detailed maps, added signage.

(6) Space Safety. 2023 AFSEC Evaluation. Observations are closed: investigative support for space mishaps. Space Debris Assessment Report and End of Life Plans are being sent to USAFA/SE.

5. **Old Business.** ESOHC and CFT senior leadership Environmental Management System (EMS) training and program review requirements. **CLOSED.** OPR: 10 CES/CEIE

6. **New Business.** None

7. **Closing Comments.** Col Werner thanked all briefers and members for their continuous support. Expressed the importance of timely and adequate risk management practices across the ME.

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DANIEL C. WERNER, Colonel, USAF
Deputy Commander, 10 ABW



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 10TH MISSION SUPPORT GROUP
USAF ACADEMY COLORADO

17 June 2025

MEMORANDUM FOR DISTRIBUTION

FROM: 10 MSG/CC

SUBJECT: United States Air Force Academy (USAFA) Environmental Management System
(EMS) Cross- Functional Team (CFT) Meeting Minutes – 4 June 2025

1. The routine FY2025 3rd quarter USAFA EMS CFT, chaired by Col Cheo Stallworth, 10 MSG/CC, met at 1000 on 4 June 2025.

PRESENT

Col Cheo Stallworth, 10 MSG/CC
Lt Col Byung-Suk Choi, 10 CES/CC
Ms. Nicole Hunyadi, 10 CONS/CL
Ms. Erin Manning, 10 CES/CD
Ms. Alana Kraft, 10 CES/CEI
Ms. Amy Balek, 10 CES/CEIE
Mr. Barry Schatz, 10 CES/CEIE
Mr. Sean Houseworth, AFCEE/CZOM
Col Timothy Coker, 10 OMRS
Maj Newton Ooi, 10 OMRS/SGXB
Mr. Lance Potter, 10 MDSS/SGSM
Capt Kristin Motley, USAFA/JA
MSgt Brandon Mills, 306 OSS/OSAA
Ms. Carrie Mindieta, USAFA/A5/8
Ms. Amy Kelley, 10 ABW/CVX
Ms. Nicole Stevenson, 10 SFS/S5
Ms. Sonia James, 10 FSS/FSO
Ms. Lauri Ballon, 10 FSS/FSWB
Mr. Luciano Moya, 10 FSS/FSVD
Mr. Dwayne Clewell, 10 LRS/DD
Ms. Katherine Burnham-Kelly, 10 LRS/LGRM
Mr. Harold Moyers, 10 LRS/LGRVM
Mr. Bradley Beaudry, DF/DFS
Mr. Christopher Chessmore, AD/ADV
Ms. Luina Tuiava, AAFES
Mr. Patrick Kraft, 10 CES/CEF
Ms. Terri Adams, 10 CES/CEXM
Mr. Brian Mihlbachler, 10 CES/CEIEA
Mr. Richardo Rodriguez, 10 CES/CEOHP

PRESENT (CONTINUED)

Mr. Joey Struck, 10 CES/CEOHP
Ms. Jennifer McCorkle, 10 CES/CENPP
Mr. Ryan Bouton, 10 CES/CENPP
Mr. Donald Gray, 10 CES/CEIEC
Ms. Priscilla Nyamekye, 10 CES/CEIEC
Ms. Lalita Martin, 10 CES/CEIEC
Ms. Lisa Stevens, 10 CES/CEIEC
Mr. Bryan Kurth, 10 CES/CEIEC

ABSENT

USAFA/CWT
USAFA/PS
USAFA/A4
DeCA

2. **(Information)** Commanders Dashboard: Ms. Stevens of 10 CES/CEIEC started the meeting with a review of the agenda and the status of the Commander's Dashboard. One item on the dashboard had a cautionary status, the Integrated Solid Waste Management Plan. Its review is due 21 July 2025.

3. **(For Approval)** Status of FY 2025 EMS Management Review: Two Environmental Management System (EMS) items were flagged as cautionary:

a. The Environmental Commitment Statement annual review was approved by the CFT and will be sent to the Environmental, Safety and Occupational Health Council (ESOHC) for final approval.

b. Changing Legal Circumstances: The new Municipal Separate Storm Sewer System (MS4) permit requires an update to the Stormwater Management Plan (SWMP). These are expected to be finalized by the end of the calendar year. This was also a finding from the March external environmental inspection (EEI).

c. All other items were in good standing. CFT members voted to approve the status of the management review and provide it to the ESOHC for final approval. **(Approved)**

4. **(For Approval)** Annual Review of Environmental Commitment Statement: As part of the required annual review, updates were made to include USAFA's new mission statement, changing environmental regulations, the importance of Monument Creek restoration, and continual improvement of pollution prevention. The updated Environmental Commitment Statement received CFT approval. **(Approved)**

5. **(Information)** Changing Refrigerant Leak Detection and Repair Requirements: Beginning January 2026, new EPA regulations will require tracking for systems with 15 or more pounds of hydrofluorocarbon (HFC) refrigerants. Requirements include new leak detection protocols and documentation. The 10 CES HVAC shop is creating an inventory of refrigerant-containing units at the 15-pound threshold to prepare for this new requirement.

a. Mr. Lance Potter asked about Medical Group refrigerant equipment tracking and how they should prepare. Ms. Stevens responded that the Air Program Manager planned to reach out to the Medical Group and other non-CES supported units to ensure all qualifying systems were being tracked.

b. A question was asked on whether the refrigerant tracking requirement applied to vehicles. Mr. Don Gray confirmed that this would not be applicable to vehicle air conditioning systems since the regulations were specifically for stationary sources.

6. **(Information)** Environmental Action Plan – Stormwater Quality: USAFA's Environmental Action Plan (EAP) is on track to meet all estimated completion dates. An update was provided on the four tasks within the plan that had progressed that quarter.

a. El Paso County Detention Pond: The pond is designed to collect stormwater runoff from a nearby development and detain it before release to Smith Creek. El Paso County is expecting to have an invitation to bid for construction at the start of June. They are working to get final signatures on the maintenance agreement for the pond with the City of Colorado Springs. The County is targeting for construction to start in the summer of 2025. Construction is expected to last 6 months.

b. Work with off base groups: USAFA is working to schedule a meeting with El Paso County and Fountain Creek Watershed District to explore grant funding opportunities for stormwater projects in the Jackson Creek drainage area. A meeting with the City Stormwater Enterprise and USAFA occurred on 8 May as part of their Memorandum of Understanding (MOU). During the meeting the City highlighted increased use of green infrastructure by developers, which positively impacts the quality of stormwater coming onto USAFA. They also announced they were working on minor updates to the Drainage Criteria Manual to continue stormwater improvements.

c. Outreach and Awareness: 10 CONS approved the redlines the City provided for the Intergovernmental Support Agreement for watershed restoration services and are waiting on the Mayor's signature for final approval.

d. Black Squirrel Creek Restoration: The project's construction was completed in May. The revegetation of the creek is ongoing and will be the final step to complete the project.

7. **(For Approval)** March External Environmental Inspection (EEI) Findings: The corrective actions for the four findings from the March inspection were reviewed by the CFT chair. Two of the findings have been completed: 1) creation of a written procedure for assessing risks and 2) modification of the fire department standard operating procedure (SOP) to notify Environmental of all spills. The remaining two findings will be completed by December 2025: 1) updating the Stormwater Management Plan and 2) completion of site assistance visits (SAVs) and base wide training for hazardous material procurement. All corrective actions were approved by the CFT. **(Approved)**

8. **(For Approval)** Environmental Self-Inspection Findings: The status of corrective actions for open findings from self-inspections were reviewed. There were two open EMS findings, nine for tanks, two for hazardous materials, and one for water quality. There was discussion that the delay in getting tank custodian appointment letters had been caused by turnover in personnel. All corrective actions were approved. **(Approved)**

9. **(Information)** Tank Inspections: It was noted that transitioning of all tank inspections from 10 CES/CEIEC to tank custodians was on track for June. Approximately half of the tank owners have already been trained and completed their inspection during May. Appointment letter completion and training was being scheduled for the remaining tank owners.

10. **(Information)** Tank Findings: The status of the five tanks that needed repair was reviewed. It was reiterated that tank owners are responsible for completing repairs and the cost associated with it. 10 CES/CEIEC will provide repair recommendations and contacts for contractors. A

SOP is being finalized to describe the process and help organizations understand what communication is necessary. Lt Col Choi requested a status update from each of the tank owners at the next EMS CFT meeting.

11. **(Information)** Hazardous Material Findings: A new shop level SAV list is being created to ensure all shops receive the required training and inspections.

12. **(Information)** Farish Drinking Water Sanitary Survey Corrective Actions: Design updates were approved, and the Record of Approved Waterworks was received on 22 May 2025. 10 CES/CEIEC is moving forward with implementing changes needed for the system. A request was submitted to CDPHE to extend the existing deadline from 15 June 2025 to 15 August 2025.

13. **(Review)** Integrated Solid Waste Management Plan (ISWMP): Changes made to the ISWMP were discussed. Members were asked if they had any further input or questions on the plans. No comments were provided. Updates to the plan will be finalized as proposed.

14. **(Information)** Environmental Assessment (EA) Status, briefed by Mr. Ryan Bouton: The ongoing assessments include the Cadet Field Training in the USAFA HEN District and the demo and rebuild of District 20 Douglass Valley Elementary School.

a. The briefing on Cadet Training included an overview of the Cadet Training Wing's (CWT) overall program objectives and a discussion on the new training elements proposed by CWT and their potential associated environmental impacts. This EA is scheduled to be concluded in Spring 2026. The Cadet Field Training Brief concluded with a discussion on Plan of Action and Milestones (POAM) needed for the Fall 2025 CULEX. This will only be necessary if the proposed training will take place outside Jacks Valley.

b. The second Environmental Assessment briefed focused on Douglass Valley Elementary School. This project is to demolish the current K-5 elementary school and construct a new PK-8 Elementary/Middle School. D20 is coordinating with OLDCC to get approval for soil borings at the site of the new school. The Method of Agreement (MOA) has been received from the EA contractor and is under review by USAFA/JA and AFCEC. This MOA will be signed by D20 and SHPO, not USAFA. The final design plans for this school will incorporate all elements stated in this MOA. Lastly, the agency letters for this EA have been completed by the contractor and are in COORD for 10 CES review. This EA is projected to be completed in December 2025.

15. **(Information)** Upcoming Environmental Assessments, briefed by Mr. Ryan Bouton: Upcoming assessments focused on the proposed demo and rebuilding of District 20 Air Academy High School. District 20 is working to get their grant proposal submitted to OLDCC/PSMI. Additionally, the district is soliciting conceptual designs for the school from A&E firms, and this EA is projected to begin Fall/Winter 2025.

16. Meeting closeout: Ms. Stevens stated that the next EMS CFT meeting will be scheduled in September. Closing questions and comments were taken.

- a. Lt Col Choi asked when the next ESOHC meeting would be and what items would be presented. Ms. Stevens confirmed that the next ESOHC was scheduled for July. The Environmental Commitment Statement and Management Review will be presented for approval and the annual Senior Leadership Training will also be conducted.
- b. Col Stallworth announced he will be retiring 3 July, and this meeting was his last as Chair.
- c. The meeting adjourned at 1053 hrs.

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CHEO F. STALLWORTH, Colonel, USAF
Commander

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

The 10th Civil Engineer Squadron (CES), Installation Management, Environmental Element (10 CES/CEIE) developed this Integrated Solid Waste Management (ISWM) Plan to define an approach for managing solid waste (SW) at the United States Air Force Academy (Academy), Colorado Springs, Colorado. ISWM is designed to minimize the initial generation of municipal SW through source reduction and then reusing and recycling to further reduce the volume of materials being sent to landfills or incineration. ISWM could apply to compost materials, construction and demolition (C&D) debris, and industrial SW. The Academy manages SW through an integrated approach that complies with regulatory requirements and AF and DoD diversion goals. This ISWM Plan has been prepared in general accordance with the *Integrated Solid Waste Management Playbook*, Consolidated PDF, 24 July 2014, available on the Air Force Civil Engineer Center (AFCEC) eDASH site. This ISWM Plan addresses residential, commercial, and industrial non-HW and special waste stream recycling and disposal at the Academy.

The purpose of the ISWM Plan is to provide guidance for SW management and pollution prevention (P2) that meets waste management requirements specified by AF, DoD, Executive Orders (EO), United States Environmental Protection Agency (USEPA) and Colorado Department of Public Health and Environment (CDPHE). For the purpose of this Plan, the Academy includes tenants that generate waste on the installation. This ISWM Plan will guide decision-makers in developing a long-term, sustainable, SW program. Current SW management decisions are stated in this document along with issues that need to be discussed and implemented. This plan does not address Qualified Recycling Plan (QRP) and QRP Business Plans. Hazardous waste is managed through the Academy's Hazardous Waste Management Program and is covered in a separate management plan.

This plan meets the requirements of AFMAN 32-7002, which requires each installation to prepare an ISWM Plan to provide guidance for managing municipal solid waste (MSW), compostable materials, C&D debris, and industrial SW. The Academy does not operate its own landfill; therefore, the evaluation of on-base landfill requirements is not applicable.

2 INSTALLATION PROFILE

Installation Supplement

Scope of Plan	USAFA
OPR	10 CES
ISW Program Manager	Name: Amy Balek Office Symbol: 10 CES/CEIE Phone: (719)-333-2937 Email: amy.balek@us.af.mil
Recycling Program Manager	Name: Amy Balek Office Symbol: 10 CES/CEIE Phone: (719)-333-2937 Email: amy.balek@us.af.mil
QRP Manager	Name: Not applicable
Contracting Officer Representative (COR) for ISWM Contracts	Name: Darryl Collier Phone: (312) 333-8638 Email : darryl.collier@us.af.mil
State and local regulatory agencies	Colorado Department of Public health and Environment (CDPHE)
Approved SW handling contractors	Liberty Disposal (LDI)
Commodity Market & Economic Feasibility Analysis (Appendix B)	Commodity Market Analysis was last performed in 2023.

QRP Business Plan	Does installation operate a Qualified Recycling Program (QRP)? No, we recycle cardboard, paper, plastic, glass and aluminum. Recycling at USAFA is not profitable, therefore we do not have a QRP.
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3 ENVIRONMENTAL MANAGEMENT SYSTEM

The DAF environmental program adheres to the Environmental Management System (EMS) framework and its "Plan, Do, Check, Act" cycle for ensuring mission success. Executive Order (EO) 14057, *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability*; DoDI 4715.17, *Environmental Management Systems*; DAFI 32-7001, *Environmental Management*; and International Organization for Standardization (ISO) 14001 standard, *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.

Installation Supplement

Roles and Responsibilities

Office/Organization/Job Title	Installation Role/Responsibility Description
Wing/Installation Commander	<ul style="list-style-type: none"> • Maintains responsibility for compliance with federal, state, local, and AF laws and regulations for SW management. • Oversees implementation of the ISWM Plan and ensures SW management issues receive appropriate Command attention and support. • Ensures the policies and goals for SW management are implemented and attained. • Ensures appropriate SW management practices are emphasized to all installation personnel through education and training. • Provides command support for SW, recycling, and waste minimization programs and activities.
ESOHC	<ul style="list-style-type: none"> • Coordinates SW quality reviews and resource management program corrective actions that require cross-functional review, deliberation, and approval. • Conducts management reviews to ensure waste management goals are met, implementation and operation procedures are followed, and assessment findings are tracked and completed. • Ensures program goals are appropriate and produce actions to provide necessary mission capability and capacity. • Reviews major revisions of the ISWM Plan.
Comptroller	<ul style="list-style-type: none"> • 10 CES financial management office, the Resources Element, (CEIA) processes and oversees receipts from any direct sales of recyclable materials in conjunction with USAFA/FMA.
EMS Cross Functional Team (CFT)/Pollution Prevention (P2) Subcommittee	<ul style="list-style-type: none"> • Provides input, when requested, on matters related to SW management and recycling. • Provides a line of communication for receiving relevant information from their organizational units and transmitting information to their units regarding SW management and recycling. • Annually reviews and approves the ISWM Plan.

ISW Manager	<p>10 CES/CEIE along with the Integrated SW (ISW) Manager:</p> <ul style="list-style-type: none"> • Manages the SW program to ensure compliance with federal, state, local, DoD, and AF environmental directives. • Acts as the primary contact for federal, state, and local regulatory agencies in matters related to SW accumulation and disposal. • Manages the SW program to reduce impacts to off-base communities. • Develops, prepares, maintains, and implements this ISWM Plan. • Provides SW program oversight and guidance. • Identifies facilities, equipment, manpower, and other resources required for SW program implementation. • Reports to the ESOHC on a regular basis on issues related to SW management and recycling. • Prepares and submits required reports on ISWM activities to the major command. • Maintains ongoing liaison with Headquarters (HQ) Air Education and Training Command, USEPA, and state regulatory agencies about SW inspections, rule interpretation, and problem resolution. • Maintains all necessary reports and records pertaining to SW management at the Academy. • Provides technical and environmental guidance to installation units regarding the disposition of materials identified as SW. • Programs and budgets for SW management projects associated with a legal/permit driver. • Reviews work orders, plans, and projects to ensure that they include provisions to meet all federal, Colorado, local, and AF SW directives and that all waste management issues are addressed regarding the use of recycled materials, sustainable development, and affirmative procurement. • Recommends changes in policies or procedures to improve program management when necessary. • Maintains liaison with and requests support from the major command on SW related issues. • Implements education and outreach programs to promote source reduction and recycling programs.
ISW Manager Alternate	Fulfills responsibilities of the ISW Manager, if required.
Recycling Center Manager	<ul style="list-style-type: none"> • USAFA does not have manned recycling center with a manager and staff. • An unmanned 24-hour drop-off Recycling Area, managed by the recycling contractor is located at the Community Center. • The recycling contractor is responsible for providing custodial and general clean-up services and ensuring that the area is free of litter and debris. • Even though there is no manned recycling center and 24-hour drop-off Recycling Area, other organizations such as AAFES and DECA, Natural Resources, Hunt housing, the Auto Skills Center, the Cadet Dorms, and Mitchell Hall all have recycling activities that are accomplished within their respective spheres of influence.
Recycling Monitors	Duties are folded into the UEC duties including reporting issues and recommending improvements related to implementation of the recycling program.
Unit Environmental Coordinators (UECs)	Implement environmental goals at the unit level and review progress toward those goals. Also serve as focal points for any recycling efforts in unit.
Contracting Officer	<ul style="list-style-type: none"> • Obtains SW data from the SW contractor and provides to the ISW Manager who responds to data calls on SW diversion. • Inspects SW contractor's work (i.e., materials are being picked up and property is being maintained) or requires inspections to be performed by qualified individuals. • Monitors performance of activities by the SW contractors
Landfill Operator	Not applicable. USAFA has no active landfills.

Transportation Contractor	<ul style="list-style-type: none"> • Establishes vehicle routes for collecting refuse and transporting the waste streams to the disposal/recycling sites for processing. • Provides unscheduled collections, disposals, and relocation of containers for special events or other occasions. • Empties containers and returns them to their original location in an upright position with lids closed. • Immediately cleans up any spills, debris, etc. that occur during servicing. • Examines refuse collection containers for evidence of illegal dumping. Separates prohibited materials for proper disposal. • Maintains necessary reports and records pertaining to SW generation and diversion. • Maintains aesthetic appearance of dumpsters and collection containers.
Staff Judge Advocate/Legal Officer	
Defense Logistics Agency (DLA) Disposition Services	<ul style="list-style-type: none"> • Accepts materials, including scrap metal, expended casings from small arms range, and government-purchased items such as appliances and electronics, for recycling or other disposal. • Advises generating activities on the required turn-in procedures including packaging, labeling, and transporting of materials to facilitate sales and recycling. • Assumes accountability for materials properly turned in for disposal, resale, or recycling.
Tenant Organizations	<ul style="list-style-type: none"> • Coordinate with the installation Environmental Department on all matters involving SW management, recycling, reuse, and green procurement. • Ensure safe and effective SW management through the proper storage of SW and recyclables. • Support the recycling program by identifying, collecting, separating, and removing contaminants from all potential recyclable materials. • Reduce the amount of SW generated by procuring products with less or reusable packaging, buying only the amounts needed, investigating new recycling/reuse opportunities, and altering operations to reduce wastes (e.g., using double-sided copies). • Support recycling by buying items with recycled materials content. • If they contract for waste collection from their facilities, report monthly data on the weight and/or volume to 10 CES/CEIE.
Contracting (10 CONS/LGC)	<ul style="list-style-type: none"> • Ensures all contracts for projects generating SW incorporate provisions for management, diversion, and minimization of project-generated SW • Ensures that all new contracts awarded include applicable green procurement requirements. • Ensures that all personnel involved in the procurement process are aware of current green procurement policies and the laws that require affirmative procurement. • Ensures compliance with the USEPA's comprehensive procurement guidelines. • Ensures all new contracts, particularly construction and demolition contracts, include recycling clauses when feasible and cost advantageous to the Government. • Ensures all contracts for services include provisions requiring the process owner to comply with and report in accordance with the requirements of this ISWM Plan.
Public Affairs Office (PA)	<ul style="list-style-type: none"> • Supports the commander in the release of timely and accurate SW information to the general public. • Coordinates with 10 CES/CEIEC prior to the release of information related to SW management and/or projects. • Assists with SW incentive programs through the release of news articles and features.

Staff Judge Advocate	<ul style="list-style-type: none"> • Provides legal opinions and guidance on federal, state, local, and AF rules and regulations applicable to SW management. • Monitors and ensures the ISWM Plan satisfies the applicable federal, state, local, and AF rules and regulations.
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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.

Installation Supplement

Training Plan

Training Course	Installation Plan (Describe training content, frequency, attendees and delivery method)
Newcomers Environmental Training	Newcomers Environmental Training is a subset of the facility-wide Newcomers Training provided monthly that provides information on handling solid waste and recycling to new employees and contractors.
General Environmental Awareness Training	General environmental awareness training slide presentations are developed and distributed by 10 CES/CEIEC to KIRA employees. Training is delivered annually each January.
UEC Training	UEC personnel are trained at the awareness level for EMS, P2 Hazmat, Recycling, and Water Quality issues.
Facility Manager Training	Facility Managers receive training on the solid waste program, what items are recyclable, where the recycle center is, and who to call for recycling bins.
Enterprise Environmental, Safety, and Occupational Health-Management Information System (EESOH-MIS) Data Call Training	Personnel completing the Data Call take online training as needed.

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 edition of the "USAF Non-Hazardous Solid Waste Reporting Guide" available on the eDASH ISW page.

Installation Supplement

Recordkeeping

Recordkeeping Requirement	Installation Plan (Describe how requirement is met and where records are maintained)
Collect and maintain records and documents to support non-hazardous solid waste diversion and disposal data	10 CES/CEIE retains the following records: <ul style="list-style-type: none"> • All MSW, recycling, and composting records (these are also reported semiannually to AFCEC). • Disposal data obtained from Contractor (includes monthly logs showing total volumes collected from base operations and roll-off containers)
Collect and maintain records and documents to support construction and demolition debris diversion and disposal data	

<p>Collect and maintain copies of weight certificates, shipping receipts, financial statements, and related documentation from contractors that generate non-hazardous solid waste and construction and demolition debris</p>	<p>USAFA/FMA, 10 CES/CEIE, 10 CES/CEO, 10 CONS, or 10 CES/CEIAR retain the following records:</p> <ul style="list-style-type: none"> • Disposal data obtained from Contractor (includes monthly logs showing total volumes collected from base operations and roll-off containers) • Recycling data obtained from Contractor, including recycling volumes, sales vouchers, and paid proceeds • Weight certificates and shipment receipts, • Meeting minutes related to the SW program, changes to SW management, etc. <p>10 CES Contracting Officer Representative (COR) retains recycling data from Army and Air Force Exchange Service (AAFES) and the Commissary.</p>
<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</p>	<p>Depending on the effort, either 10 CES/CEIE and/or 10 CES/CEO retain the following records:</p> <ul style="list-style-type: none"> • Equipment purchase/maintenance costs. • Contract costs for operation of the recycling contract and SW collection and disposal contract. • Fees to vendors for recycling waste, if applicable. • Training costs. • Production of informational brochures. <p>Records from the refuse contract, a CEO service contract, one of the Big 3, Refuse, Custodial, and Grounds, are provided by the contractor's COR to 10 CES/CEIEC each month reflecting recycling program operational changes.</p>

Reporting

Reporting Requirement	Installation Plan (Describe how requirement is met)
<p>Track and report comprehensive non-hazardous solid waste diversion and disposal data to AFCEC using EESOH-MIS (Enterprise, Environmental, Safety, Occupational Health, Management Information System) within established deadlines</p>	<ul style="list-style-type: none"> • SW reduction figures are submitted to AFCEC through EESOH-MIS during semi-annual data calls.
<p>Track and report comprehensive construction and demolition debris diversion and disposal data to AFCEC using EESOH-MIS reporting system within deadlines established</p>	<ul style="list-style-type: none"> • SW reduction figures are submitted to AFCEC through EESOH-MIS during semi-annual data calls.
<p>Execute procedures to obtain construction and demolition debris diversion and disposal data from installation projects for data reporting within deadlines established</p>	<ul style="list-style-type: none"> • SW reduction figures are submitted to AFCEC through EESOH-MIS during semi-annual data calls.

<p>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:</p> <ol style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> • SW reduction figures are submitted to AFCEC through EESOH-MIS during semi-annual data calls.
<p>ESOHC meetings</p>	<ul style="list-style-type: none"> • SW reduction is briefed in ESOHC meetings as required.

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 maintained in Appendix B of the ISWM Plan. The Commodity Market Analysis template is available on the ISWM eDASH site.
- 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 at the link in the installation supplement below.

Installation Supplement

Date of Latest Analysis	<i>April 2025</i>
Responsible Personnel	10 CES CEIE
Results of Analysis	2024 Diversion Rate was approximately 14%.

Executive Order 13693 establishes agency goals for non-hazardous SW diversion of 50 percent annually (including food and compostable material) and 60 percent for C&D Academy personnel developed the following SW diversion goals and objectives to focus waste management efforts and meet the intent of EO 13693:

- Minimize the amount of waste discarded in landfills by:
 - Diverting a minimum of 50 percent of SW from the landfill excluding C&D debris each year.
 - Diverting 60 percent of C&D debris from the landfill each year.
 - Increasing diversion of compostable and organic material.
 - Increasing the percentage of waste that is recycled.
- Separate recyclables (high-grade paper, used newspaper, and corrugated cardboard) at the source of generation, collect separately, and sell for the purpose of recycle.
- See Appendix A—Installation Solid Waste Characterization Study

The overall goal of the Academy’s SW Management Program is to reduce waste through customer-responsive, cost-effective waste prevention and recycling programs that minimize dependence on landfill disposal, conserve natural resources, and improve the quality of life for everyone at the Academy.

The Proposed SW Management Strategy Figure below is a flowchart of the proposed overall SW management strategy. The flow chart selects an appropriate diversion/disposal method based on the SW material properties and costs for its diversion/disposal.

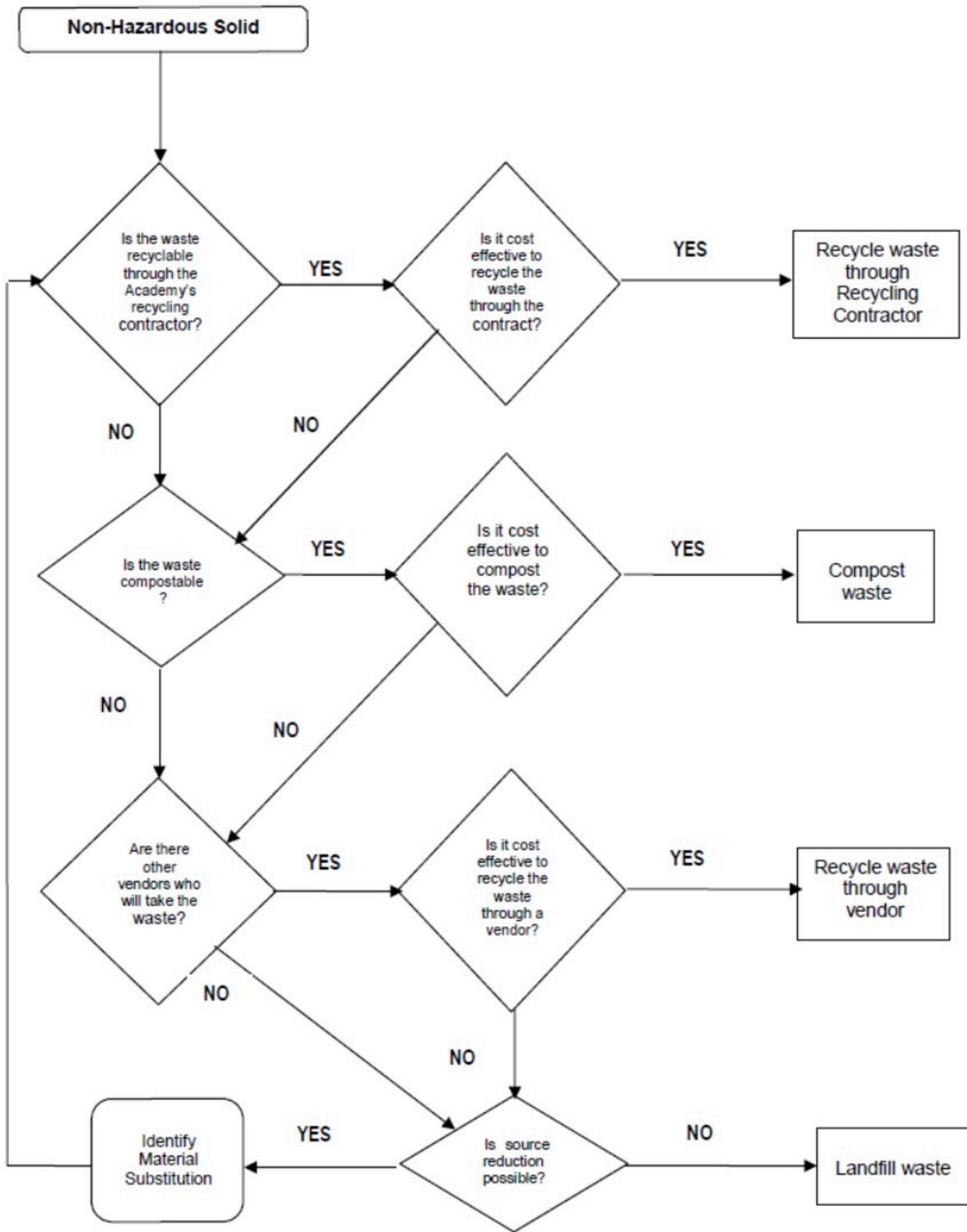
Strategies available at the Academy for SW diversion include:

- Recycling through the Academy recycling contractor: cardboard, newspaper, aluminum, glass, and paper

- Recycling through LRS: munitions casings, brass range residue, and small arms cartridge cases
- Recycling through Colorado Industrial Recycling: CE scrap metal
- Recycling or Disposal through DLA/DS: oil filters, non-PCB fluorescent light ballasts, electronics, universal waste lamps and batteries, furniture, lead-acid batteries, circuit boards, paint, used oil and antifreeze
- Recycling through an outside vendor: wastewater treatment plant sludge, tires, used cooking grease/oil, oil/water separator wastewater
- Material substitution (i.e., source reduction)
- Reuse of materials (i.e., wood pallets), whenever possible
- Natural Resources (tree waste made available for fire wood and mulch)

Appendix A of this ISWM Plan includes the installation SW stream analysis and SW diversion goals.

Proposed SW Management Strategy



7.2 Source Reduction

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

Installation Supplement

Source Reduction Strategies

Applicability (Place an X in the brackets that apply)	Source Reduction Strategy	Installation Plan (Describe how and where strategy is implemented)
[X]	Change processes to reduce or eliminate the production of wastes	<p>10 CES/CEIE continually explores and implements opportunities for source reduction, reuse, and recycling. Examples include:</p> <ul style="list-style-type: none"> • Contracting Officers include the provision at Federal Acquisition Regulation (FAR) 52.223.10, "Waste Reduction Program," in all solicitations and contracts for contractor operation of Government- owned or leased facilities and in all solicitations and contracts for support services at Government-owned or operated facilities. • Vehicle maintenance facilities acquire and use engine coolant recycling equipment. • Avoiding the use of plastic products because it is not cost-effective to recycle. • Implementing the paperless office policy, including facsimile, email, and electronic document review to avoid the use of non-recyclable paper. • Requiring the use of reusable dishware in food service activities, including Services and AAFES activities, to replace a certain percentage of disposable dishware items with reusable plates, cups, and utensils.
[X]	Reduce the volume of material purchased or produced	<ul style="list-style-type: none"> • Solicitations and contracts include the provision at FAR 52.204-4, "Printed or Copied Double-Sided on Recycled Paper," requiring documents to be printed double-sided on recycled paper containing 30 percent post-consumer fiber. • Obtain on-line subscriptions to newspapers and other periodicals. • Minimize C&D waste through planning between CEIEC and Contract Services (CEOS). • Implement volume-based trash disposal rates by charging residents progressively based on the volume of waste generated.
[X]	Reduce the toxicity of products used	<ul style="list-style-type: none"> • The installation uses the Hazardous Materials Management Process (HMMP) and EESOH-MIS approval to identify and provide less harmful product substitutes, where possible, using the following procedure: <ul style="list-style-type: none"> ◦ Determine whether there is a product substitute that is less harmful than the one currently used, evaluate the potential for the product to work in the shop's operation, and begin use of less harmful product
[X]	Increase the useful lifetime of products used	<ul style="list-style-type: none"> • Vehicle maintenance facilities utilize a regional used oil recycling/re-refined lubricating oil supply contract. • Installation personnel process excess government property for reuse through Defense Logistics Agency-Disposition Services (DLA-DS). • Reusable, unbroken pallets are repurposed on base as the needs arise.
[X]	Decrease the amount of product use	The installation uses the HMMP and EESOH-MIS to control the purchase and reduce disposal of unneeded hazardous materials and to provide less harmful product substitutes, where possible.
[X]	Purchase environmentally preferable products and services	<ul style="list-style-type: none"> • Green Procurement principals are followed as outlined in this plan.

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 (Place an X in the brackets for all that apply)	Disposal/ Diversion	Installation Plan (Describe how disposal/diversion is implemented)
[X]	Composting	Composting is not done on USAFA because it attracts wildlife. Wastewater treatment sludge may be composted off property by a contracted vendor.
[X]	Mulching	<ul style="list-style-type: none"> Forestry chipping allows the chips to remain on the forest floor no deeper than 3 inches and replenishes nutrients for the forest soil.
[X]	Reuse	<ul style="list-style-type: none"> Use of reusable dishware in food service activities, including Services and AAFES activities, to replace a certain percentage of disposable dishware items with reusable plates, cups, and utensils. Organizations reuse unbroken, serviceable wooden pallets. Excess Government-Owned Equipment: DLA-DS at Fort Carson in Colorado Springs, Colorado, collects, tracks, evaluates, and ships excess government property. DLA-DS follows specific requirements for the disposition of this excess government property. Items that are collected are evaluated for reuse based on the condition of the item. Items that can still be used for their intended purpose are offered first to other DOD activities, then other federal agencies, followed by state agencies and recognized non-profit organizations, and finally sold to outside parties.
[]	Donation	Not applicable.
[X]	Recycling	<ul style="list-style-type: none"> The Community Center Recycling Area is located in the Base Exchange/Commissary parking lot. The center has eight 6 cubic yard (cy) cardboard containers and three 30 cy containers to accommodate glass, plastic, metal and newspaper collection. Refer to Appendix A, Waste Stream Analysis and SW Diversion tables for a description of materials recycled at the Academy.
[]	Waste-to-Energy Incineration	Not applicable.
[]	Incineration	Not applicable.
[X]	Disposal – Offsite Landfill	<ul style="list-style-type: none"> Refuse collection and disposal from all facilities at the Academy is performed by contract. Currently, the contract is with Liberty Disposal Incorporated. Contract pricing includes collection and disposal service and is based on container size and collection frequency. Container size and collection frequency are determined by the 10 CES/CEOS. Other areas of the Academy are provided with roll-off containers or dumpsters, which are utilized by building janitorial staff or contractors.
[]	Disposal – On-site Landfill	Not applicable.
[]	Overseas refuse management	Not applicable.
[X]	Disposal – Construction and Demolition Debris	Contractors dispose of construction and demolition debris as applicable.

[X]	Diverted – Construction and Demolition Debris	Contractors recycle construction and demolition debris as applicable.
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7.4 Management Methods and Opportunities

Installation Supplement

<u>Non-hazardous Solid Waste</u>
Waste Generation Sources
<ul style="list-style-type: none"> • Institutional Activities (academic instruction activities [Fairchild Hall], academic campus activities [Mitchell Hall, Arnold Hall, Polaris Hall, Cadet Dorms], prep school, hospital/cadet clinic, post office) • Administrative Functions (office areas, administrative activities [excluding those included in Institutional Activities]) • Maintenance Operations/Industrial SW (base maintenance [CES shops], water treatment facilities, logistics/supply activities, airfield operations, other maintenance and industrial shops) • Commercial Activities (Commissary – AAFES and Services Establishments [Base Exchange, Service Station/Shopette, Officers Club, NCO Club, Bowling Alley, Burger King, etc.]
Reduction Methods
<p>Recycle commodities include the following (see Appendix A, Waste Stream Analysis and SW Diversion Tables for a complete list of commodities recycled):</p> <ul style="list-style-type: none"> • Aluminum cans; • Plastic; • Mixed paper – office paper, newspaper, magazines, junk mail; • Cardboard – all types; • Expended Small Arms Cartridge Cases (through DLA-DS); • Scrap metal (through DLA-DS); • Lead-Acid Batteries and dry cell batteries currently recycled along with dry cell batteries on a no-cost basis; and • Used oil, toner cartridges, and inks that are part of prepaid factory return programs from HP, antifreeze, cooking oil, and grease. <p>Reuse materials and items that can be reused as described in Section 7.3. Also refer to reduction methods in other sections of this table.</p>
Management Methods
<p><i>SW Disposal</i></p> <p>Refuse collection and disposal from all facilities at the Academy is performed by contract. Currently, the contract is with Liberty Disposal. Contract pricing includes collection and disposal service and is based on container size and collection frequency. All MSW is disposed at an off-site permitted SW landfill.</p> <p>Container size and collection frequency are determined by the Civil Engineer Contract Services (10 CES/CEOS). Other areas of the Academy are provided with roll-off containers or dumpsters, which building janitorial staff or contractors use.</p>
Transport and Disposal Methods
<p>The recycling contractor picks up recycling from the Community Center. Contract janitorial staff bring recycling from the Cadet area to the Community Center.</p> <p>The SW refuse contractor hauls SW to an off-site permitted landfill.</p>
Opportunity Assessment Results
<p>No formal assessments have been performed. Currently there is no coordinated Opportunity Assessment Plan for the installation; however, avenues are being explored with AFCEC for funding and direction. Individual organizations are responsible for identifying opportunities for waste reduction within their organizations.</p>

<u>Construction and Demolition (C&D) Debris</u>
Waste Generation Sources
Maintenance operations, construction, renovation, demolition activities, and related equipment and/or fixtures
Reduction Methods
Recover usable materials such as metals for scrap metal recovery and concrete.
Management Methods

For C&D projects, C&D debris recycling is encouraged, but not required. Personnel involved with construction activities should identify potential diversion and recycling opportunities for construction projects and include these opportunities in Statements of Work and Contract requirements where feasible. Waste disposal and diversion activities must be documented and the information provided to 10 CES/CEIE for reporting purposes. Construction contracts should include provisions for contractors to provide the weight of waste disposed of in landfills, weight of C&D debris that is diverted from landfills, and associated costs and/or proceeds. While diversion opportunities vary with each construction activity, project managers should ensure reuse and recycling language is in Statements of Work and contracts. 10 CES project managers and the Contracting Office must work together to ensure proper disposition of waste generated on the installation and maintenance of accurate disposition records for each project. This requires contractors to submit disposition receipts. These receipts should be provided to 10 CES/CEIE for inclusion in required waste management reports.

Transport and Disposal Methods

The contractor performing the work determines the transport and disposal methods to be used that are consistent with regulatory requirements and the scopes of work.

Opportunity Assessment Results

No formal assessments have been performed. Currently there is no coordinated Opportunity Assessment Plan for the installation; however, avenues are being explored with AFCEC for funding and direction. Individual organizations are responsible for identifying opportunities for waste reduction within their organizations. However, the potential for C&D debris diversion for individual projects is considered in requesting proposals and defining scopes of work to be performed.

Paper and Cardboard

Waste Generation Sources

Institutional activities, administrative functions, maintenance/industrial operations, and commercial activities

Reduction Methods

On-site collection, transportation, and off-site recycling of paper and cardboard

Management Methods

The Academy's Recycling Program recovers materials from generating sources through scheduled collections and using drop-off points. In cadet dorms and office buildings, janitorial contracts are used to collect office paper from desk-side bins and from centrally located recycling containers. Janitorial personnel deposit the materials collected into consolidation containers placed outside each building. When full, the consolidation bins are transported by the SW contractor for off-site recycling. Drop-off locations are a significant source of recyclable materials. The drop-off point at the Community Center Recycling Area can be accessed 24-hours/day. Collection container locations for use by janitorial and Academy staff are found in the SW Contract. USAFA also works with a paper shredding contractor who comes to office areas and collects, shreds, and picks up recyclable paper on site. AFA Military Communities and the housing privatization owner manages their own curb side recycling program accomplished through their refuse contractor.

Transport and Disposal Methods

The recycling and disposal contractor transports the waste off-site in company-owned or contracted vehicles.

Opportunity Assessment Results

No formal assessments have been performed. Currently, there is no coordinated Opportunity Assessment Plan for the installation; however, avenues are being explored with AFCEC for funding and direction. Individual organizations are responsible for identifying opportunities for waste reduction within their organizations.

Plastics

Waste Generation Sources

Institutional activities, administrative functions, maintenance/industrial operations, and commercial activities

Reduction Methods

On-site collection, transportation, and off-site recycling of plastic bottles and containers

Management Methods

The Academy's Recycling Program recovers materials from generating sources through scheduled collections and using drop-off points. In cadet dorms and office buildings, janitorial contracts are used to collect recyclables from centrally located recycling containers. Janitorial personnel deposit the materials collected into consolidation containers placed outside each building. When full, the consolidation bins are transported by the SW contractor for off-site recycling. Drop-off locations are a significant source of recyclable materials. The drop-off point at the Community Center Recycling Area can be accessed 24 hours per day. Collection container locations for use by janitorial and Academy staff are found in the SW Contract.

Transport and Disposal Methods

The recycling or disposal contractor transports the waste off-site in their company or contracted vehicles.

Opportunity Assessment Results

No formal assessments have been performed. Currently, there is no coordinated Opportunity Assessment Plan for the installation; however, avenues are being explored with AFCEC for funding and direction. Individual organizations are responsible for identifying opportunities for waste reduction within their organizations.

Wood

Waste Generation Sources

Any organization on-site that receives materials on a pallet (e.g., maintenance shops, services, Supply, administrative areas, AAFES, etc.) uses and potentially discards wood pallets. Natural Resources felled trees.

Reduction Methods

Most organizations reuse their pallets for their operations. Natural Resources re-purposes tree debris into useable wood.

Management Methods

Pallets are generally reused at their point of origin. Unserviceable, unusable pallets are managed as municipal solid wastes. Natural Resources sells felled trees as firewood.

Opportunity Assessment Results

No formal assessments have been performed. Currently there is no coordinated Opportunity Assessment Plan for the installation; however, avenues are being explored with AFCEC for funding and direction. Individual organizations are responsible for identifying opportunities for waste reduction within their organizations.

Metals

Waste Generation Sources

Discarded metals from support and industrial operations throughout the installation.

Reduction Methods

Scrap metal recycling.

Management Methods

Metals are segregated by generating shops. Scrap metal from CE is collected in a bin for Colorado Industrial Recycling to pick up.

Transport and Disposal Methods

Pick-up by Colorado Industrial Recycling.

Opportunity Assessment Results

No formal assessments have been performed. Currently there is no coordinated Opportunity Assessment Plan for the installation; however, avenues are being explored with AFCEC for funding and direction. Individual organizations are responsible for identifying opportunities for waste reduction within their organizations.

Compostable Wastes

Waste Generation Sources

Landscaping (grass clippings and forestry management wood cuttings) waste.

Reduction Methods

Grass clippings and landscape trimmings are mulched.

Management Methods

Grass clippings are mulched as part of lawn mowing activities. Landscape trimmings are mulched by the landscape contractor on an as-needed, seasonal basis.

Transport and Disposal Methods

Grass clippings are mulched in place, requiring no transportation or disposal. Landscape trimmings are mulched and reused at the installation.

Opportunity Assessment Results

No formal assessments have been performed. Currently there is no coordinated Opportunity Assessment Plan for the installation; however, avenues are being explored with AFCEC for funding and direction. Individual organizations are responsible for identifying opportunities for waste reduction within their organizations.

Non-Hazardous Liquids (Oil, Grease, Fuel, Antifreeze, etc.)

Waste Generation Sources

Used oil and antifreeze are generated at various locations at the Academy, including the Motor Pool, Self-Help Store (Hobby Shop), airfield, CE maintenance shops, golf maintenance shop, the athletic department, and maintenance shop. Cooking grease is generated by food services.

Reduction Methods

Used oil, cooking grease, and antifreeze recycling

Management Methods

All cooking oil and grease at the Academy is recycled. The used cooking oil is collected and recycled by a contracted off-site cooking oil recycler.

A service contractor pumps and recycles used oil from containers located at the facilities. Used antifreeze is recycled by an off-site contractor.

Transport and Disposal Methods

Used oil, antifreeze, and cooking oil contractors transport these liquids for off-site recycling.

Opportunity Assessment Results

There is an opportunity to reduce frequency of oil changes in generators (required by 40 CFR 60 subpart IIII) by utilizing an oil analysis program.

Overseas Refuse (Waste from Aircraft Originating Overseas)

Applicable to US Installations Only

Waste Generation Sources

The Academy does not receive waste from overseas.

Reduction Methods

Management Methods

Transport and Disposal Methods

Opportunity Assessment Results

Universal Waste

Waste Generation Sources

Vehicle, equipment, and facility maintenance; computer and communication equipment maintenance; lighting in all Academy facilities.

Reduction Methods

Use of energy-efficient lighting; recycling batteries and used lamps.

Management Methods

Universal wastes are routinely recycled (instead of disposed of) and are included in this plan because recycling is strongly associated with non-hazardous SW management. As HW, universal wastes must be managed and reported in accordance with Section 7.11 of the Academy HW Management Plan.

Facility Managers collect spent waste lamps, batteries, and other universal wastes and take the universal wastes to the Hazardous Waste Accumulation Site (HWAS). The universal wastes are processed for off-site disposal/recycling.

Transport and Disposal Methods

Waste contractors transport these wastes for off-site recycling.

Opportunity Assessment Results

No formal assessments have been performed. Currently there is no coordinated Opportunity Assessment Plan for the installation; however, avenues are being explored with AFCEC for funding and direction. Individual organizations are responsible for identifying opportunities for waste reduction within their organizations.

7.5 Materials Prohibited from Waste Streams

The installation implements procedures and controls to ensure that prohibited wastes are prevented from entering the non-hazardous solid waste (NHSW), 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.

Installation Supplement

Wastes Prohibited from Non-Hazardous Solid Waste Disposal Containers

Prohibited Waste Stream	Installation Control Measures (Describe control measure)
Hazardous wastes (including household hazardous waste)	To ensure that HW is prevented from entering the MSW, industrial waste, C&D debris, recycling, and composting waste streams, 10 CES/CEIE ensures all SW generated including medical and academic lab waste is properly characterized to determine if it is HW. All identified HW is segregated and managed in accordance with the procedures identified in Section 7.0 of the Hazardous Waste Management Plan (HWMP). HW from the installation is stored in the 180-day HWAS prior to off-site disposal. Household hazardous waste can be taken to El Paso County collection points.
Ozone depleting substances	Proper maintenance of cooling systems that contain ODC prevent losses. ODC central storage area has an alarm that detects leaks. Only certified HVAC technicians handle ODC's and recovery equipment. Empty ODC cylinders must be brought to atmospheric pressure before putting into a scrap metal bin.
Universal wastes	To ensure that UW is prevented from entering the MSW, industrial waste, C&D debris, recycling, and composting waste streams, UW are collected at initial accumulation points and brought to the HWAS and disposed off-site at a licensed recycling facility in accordance with procedures outlined in Section 7.11 of the HWMP.
Precious metal bearing scrap	When generated, precious metals from dental fillings are segregated from the SW stream and transported off-site to Peterson AFB Regional Dental Laboratory.
Sanitary sewage	Sanitary sewage sludge generated at the on-site licensed and permitted wastewater treatment plant is segregated from SW, accumulated onsite, and taken by a contractor for off-site land application.
Treatment plant wastewater	Wastewater effluent from the WWTP is mixed with groundwater and land applied for irrigation of landscaping.
Installation Restoration Program (IRP) site wastes	USAFA does not have any active IRP sites. The two closed landfills are monitored by AFCEC and do not generate site wastes.
Military Munition Response Program (MMRP) site wastes	Upon generation, MMRP site wastes are prevented from entering the MSW, industrial waste, C&D debris, recycling, and composting waste streams by being segregated and evaluated to determine proper disposal.

Infectious medical wastes	Infectious medical wastes including red bag wastes are prevented from entering the MSW, industrial waste, C&D debris, recycling, and composting waste streams by being segregated and managed by the 10 Medical Group in accordance with infection control procedures and the medical waste contract.
Electrical components and other e-waste	To ensure that electrical components and other e-waste is prevented from entering the MSW, industrial waste, C&D debris, recycling, and composting waste streams, e-waste is segregated, collected at initial accumulation points, and turned in to DLA-DS after collection and classification at the HWAS.
Unopened containers of solvents, paints, or oil	To ensure that unopened containers of solvents, paints, or oil are prevented from entering the MSW, industrial waste, C&D debris, recycling, and composting waste streams, expired or otherwise obsolete products such as solvents, paints, or oil are segregated, collected at initial accumulation points, and turned in to DLA-DS after collection and classification at the HWAS.
Items that must be demilitarized at any time during its life cycle	To ensure that demilitarized items are prevented from entering the MSW, industrial waste, C&D debris, recycling, and composting waste streams, such items are segregated and turned in to DLA-DS after collection and classification at the HWAS.
Overseas installations only – Other materials as specified in country-specific FGS or, where no FGS exist, the Overseas Environmental Baseline Governing Document (OEBGD)	

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.

Installation Supplement

Landfill Overview and Management

Landfill Overview	Not applicable, USAFA does not operate a landfill onsite
Landfill Permit	Not applicable, USAFA does not operate a landfill onsite
Daily Plan	Not applicable, USAFA does not operate a landfill onsite
Long Term Plan	Not applicable, USAFA does not operate a landfill onsite

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.

Installation Supplement

Public Awareness, Education, and Outreach Methods

Applicability (Place an X in the brackets for all that apply)	Communication Method	Installation Plan (Describe how communication method is implemented)
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[X]	Educate on recycling opportunities at USAFA	<ul style="list-style-type: none"> • Monthly Newcomer’s Briefings
[]	Installation-wide newsletters	N/A
[]	Electronic notifications including installation-wide email, signs, etc.	N/A
[]	Publication and distribution of brochures	N/A
[]	Community events, (e.g., Annual Earth Day, Annual America Recycles Day)	N/A
[X]	Briefings	<ul style="list-style-type: none"> • Academy Orientation Briefings (Monthly Newcomers Briefing) • Environmental Management System (EMS) Cross Functional Team (CFT)

7.8 Programming and Budgeting

Installation Supplement

Installation Programming and Budgeting POC	10 CES/CEIE
AFCEC/ AFIMSC Programming and Budgeting POC	Lana Hubbard
ISWM Contracts	Contact 10 CES/CEIE for current contracts

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 “USAF Solid Waste Management Assessment Checklist” available on the eDASH ISW page.

Installation Supplement

Applicability (Place an X in the brackets for all that apply)	USAF Solid Waste Management Assessment C hecklist	Installation Plan (Describe how and where strategy is implemented)
[X]	Annually review ISWM program for compliance	Plan is reviewed annually. New waste streams are added as required. A commodity market analysis is performed for new waste streams to determine the profitability of recyclables.

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.

Installation Supplement

Solid Waste Opportunity Assessments	Annually we review the solid waste disposal contract. A commodity markets analysis is done as necessary to determine the profitability of recycling efforts.
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8 REFERENCES

Standard References (Applicable to all AF Installations)

- [DAFI 32-7001, Environmental Management](#) (Includes UEC Role)
- [AFMAN 32-7002, Environmental Compliance and Pollution Prevention](#)
- [DAFI 90-302, The Inspection System of the Department of the Air Force](#)
- [eDASH Integrated Solid Waste Home Page](#)
- [Integrated Solid Waste Management Playbook](#)

Installation Supplement

- State of Colorado Code – 6 Colorado Code of Regulations (CCR) 1007-2
- Academy Pollution Prevention Plan (P2 Plan)
- Academy Green Procurement Plan (GP Plan)
- Academy Hazardous Waste Management Plan (HWMP)

9 ACRONYMS

Standard Acronyms (Applicable to all AF Installations)

- [eDASH Acronym Library](#)
- [Integrated Solid Waste Management Playbook – Acronym Section](#)
- [U.S. EPA Terms & Acronyms](#)

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10 CES/CEIA	10th Civil Engineer Squadron, Resources Element
10 CES/CEIE	10th Civil Engineer Squadron, Environmental Element
10 CES/CEIEC	10th Civil Engineer Squadron, Environmental Element Compliance
10 CES/CEO	10th Civil Engineer Squadron, Civil Engineer Operations
10 CES/CEOH	10th Civil Engineer Squadron, Base Maintenance Contract
10 CES/CEOS	10th Civil Engineer Squadron, Contract Services
COR	Contracting Officer Representative
10 CONS/PKC	10th Contracting Squadron, Contracting
ABW	Air Base Wing
Academy/USAFA	United States Air Force Academy
AFRIMS	Air Force Records Management System
C&D	Construction and Demolition
CCR	Colorado Code of Regulations
CDPHE	Colorado Department of Public Health and Environment
CMA	Commodity Market Analysis
CY	Cubic Yards
DLA-DS	Defense Logistics Agency - Disposition Services
EMS CFT	Environmental Management System Cross Functional Team
ESOHC	Environmental, Safety and Occupational Health Council
GP	Green Procurement
HWAS	Hazardous Waste Accumulation Site
MSW	Municipal Solid Waste
OCR	Office of Collateral Responsibility
SW	Solid Waste
USEPA	United States Environmental Protection Agency

10 DEFINITIONS

Standard Definitions (Applicable to all AF Installations)

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

Installation Supplement

Not applicable

11 INSTALLATION-SPECIFIC CONTENT

Installation Supplement

Contracting Implementation Status

The Contract and In-House Operations Table shows the current level of contractor-performed versus in-house recycling functions.

The Contract and In-House Operations

Recycling Program Functions	Contract Type (Status)	Contract Owner
Initial Collection		
Collection in Office Buildings	Contract	Base Janitorial
Collection in Cadet Dorms	Collected by Cadets	N/A
Transportation		
Container Hauling (Drop-Off Trailers & Consolidation Containers)	Contract	Refuse Collection
Accumulation/Processing		
Recycling Program Management	Contract	10 CES
Marketing & Public Education		
All Functions	Contract	10 CES

APPENDIX A INSTALLATION SOLID WASTE CHARACTERIZATION STUDY/WASTE STREAM ANALYSIS

Installation Supplement

The Solid Waste Diversion Table describes the amounts of Municipal Solid Waste (MSW) generated and their respective diversion rates.

Recent MSW diversion rates were estimated to be 18.08 percent in FY18, 18.64 percent in FY19, 16.00 percent in FY20, 14.00 percent in FY21, and 17.00 percent in FY22.

This data is tracked by DoD as part of the Semi-annual Data Call.

SOLID WASTE DIVERSION TABLE

Actual Diversion Rates (excluding C&D Debris)

	Actual						
Description	FY18	FY19	FY20	FY21	FY22	FY23	FY24
Generated Quantity (tons)	5272.24	4797.88	4277	5362.99	4501.36	4627.48	3753.65
Disposal Quantity (tons)	4319	3903.34	3597.6	4630.77	3742.78	3789.30	3213.65
Diversion Quantity (tons)	953.24	894.54	679.4	732.22	758.58	838.18	540.00
Diversion Rate - Actual	18.08%	18.64%	16.00%	14.00%	17.00%	18.11%	14.39%
Diversion Rate - Goal	50%	50%	50%	50%	50%	50%	50%
	AF Goal						

C&D Debris Diversion Rates

	Actual						
Description	FY18	FY19	FY20	FY21	FY22	FY23	FY24
Generated Quantity (tons)	2234.00	8438.42	146	1630.58	1518.31	391.61	162.64
Disposal Quantity (tons)	221	1845.00	95.2	219.07	145.28	366.11	4.15
Diversion Quantity (tons)	2013.00	6593.42	51.0	1411.51	13.03	25.50	158.49
Diversion Rate - Actual	90.11%	78.14%	34.88%	86.56%	0.86%	6.51%	97.45%
Diversion Rate - Goal	60%	60%	60%	60%	60%	60%	60%
	AF Goal						

APPENDIX B COMMODITY MARKET ANALYSIS

Installation Supplement

A Commodity Market Analysis (CMA) was conducted in 2023. The CMA was conducted for cardboard, aluminum, paper, glass, metal, and plastic. Actual profit/loss cost for 2023 recycling of these materials resulted in net loss of approximately \$1500. Recycling of these materials is not profitable. Commodity Market prices for these materials has continued to deteriorate during 2024. USAFA does not maintain a QRP or perform an annual Commodity Market Analysis for these materials. Unless there are significant changes to the recycling community market a QRP and detailed commodity market analyses are not beneficial.

APPENDIX C CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT PLAN

Installation Supplement

The volume of construction and demolition debris that is sent for recycling is tracked and reported in the Semi-annual Data Calls.

APPENDIX D QUALIFIED RECYCLING PROGRAM BUSINESS PLAN

Installation Supplement

USAFA recycles cardboard, paper and newspaper as required by DoD Regulations. In addition, we recycle glass, plastic and aluminum. However, USAFA does not generate a profit from its recycling efforts. Therefore, we do not have a Qualified Recycling Plan (QRP) and USAFA has removed the QRP language from this plan. A QRP is a financial tool designed to track profits from recycling. Diversion rates for recycling are reported on the semi-annual data call.

APPENDIX E STATE-APPROVED LANDFILL PLAN

Installation Supplement

USAFA uses Colorado approved Class "C" landfills for solid waste disposal.