New Jersey
Army National Guard

Environmental Compliance Desktop Guide

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Forward

Summary. This document prescribes the New Jersey Army National Guard (NJARNG) responsibilities, policies, and procedures to preserve, protect, restore, and enhance the quality of the environment.

Authorization. This document is required to implement NJARNG environmental programs in accordance with federal, state and local laws, Department of Defense (DoD) Directives, Executive Orders (EOs), Department of the Army Regulations (ARs), to include AR 200-1, and National Guard Bureau Regulations (NGBRs) and policy. This document has been approved by the NJARNG Environmental Quality Control Committee (EQCC).

Applicability. This guidance applies to all NJARNG commanders, supervisors, managers and employees at the facility, operational, and leadership levels.

Suggested Improvements. The proponent of this document is the Office of Environmental Compliance. Users are invited to send comments and suggested improvements directly to this office at 101 Eggert Crossing Road, Lawrenceville, NJ, 08648.

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Introduction

A. Purpose

This Environmental Compliance Desktop Guide establishes the New Jersey Army National Guard (NJARNG) environmental protection and compliance program. It consolidates all previously published New Jersey Department of Military and Veterans Affairs (DMAVA) environmental protection regulations, policies, and procedures into one document. It prescribes the objectives, responsibilities, policies, and procedures to protect and preserve the environment, while promoting human health and safety. Program requirements are based on applicable Department of Defense (DoD), Department of the Army (DA), National Guard Bureau (NGB), federal, state and local environmental laws, regulations, rules, policies and/or directives.

This document supersedes the previous version entitled *New Jersey Army National Guard Desktop Guidebook for Environmental Compliance*, dated June 2003.

B. References

References for specific program areas are located in each chapter. A complete list of NJARNG environmental program references are in Appendix A. References to federal, state of New Jersey, and military regulations for specific program areas are in Appendix B.

C. Definitions

Appendix C contains a list of acronyms and definitions.

D. Objectives

These are the objectives of this guide:

- Achieve compliance with all federal, military, NGB, state, and local environmental laws, rules, regulations, policies, and directives at all times.
- Establish and execute environmental compliance programs in accordance with (IAW) the responsibilities, policies, and procedures described herein.
- Meet all specific program objectives which are addressed in the individual chapters that follow as they pertain to the NJARNG.

E. Self-inspections, Reporting, and Training

Self-Inspections

Specific inspection procedures are described in each chapter. These inspections are summarized in Table I-1 below. Facility manages must ensure that these inspections are performed and documented.

Table I-1. Self-Inspection Requirements Summary

Protocol	Type of Inspection	Frequency
Air	Ozone Depleting Chemical (ODC) Compliance Checklist	As required
Air	Equipment Visual Monitoring	Monthly
Air	Boiler Compliance Checklist	Monthly
Air	Paint Booth Compliance Checklist	Monthly
Air	Generator Compliance Checklist	Monthly
Air	Gasoline Fueling Station Checklist	Monthly
Hazardous Materials	Hazardous Material Storage Unit Inspection Checklist	As directed
Hazardous Waste	Hazardous Waste Accumulation Areas	Weekly
Petroleum, Oil, and Lubricant (POL)	Aboveground Storage Tank (AST)/Underground Storage Tank (UST) Inspection Checklist	Weekly
POL	Secondary Containment Inspection Checklist	Weekly
POL	Rainwater Release Inspection Log	Before discharging rainwater from secondary containment
Storage Tanks	AST/UST Inspection Checklist	Weekly
Storage Tanks	Rainwater Discharge Inspection in Secondary Containers	Weekly or after any rain event
Storage Tanks	STI SP001 Monthly Inspection Checklist	Monthly; only for ASTs that are greater than 2,000 gallons
Storage Tanks	Monitors and Overfill Checklist	Monthly
Storage Tanks	High Level and Leak Monitor Checklist	Monthly
Storage Tanks	Spill and Overfill O&M Checklist	Monthly
Wastewater	Grease Trap Inspection	As needed
Wastewater	Oil/Water Separator Checklist	Every 30 days for major users [1] Every 60 days for moderate users [2] Every 90 days for minor users [3]

[1] Major users include Army Aviation Support Facilities (AASFs), Combined Support Maintenance Facilities (CSMSs), Unit Training and Equipment Site (UTES), and Organizational Maintenance Shops (OMSs) with 4 bays.
[2] Moderate users are those OMSs with 3 bays.
[3] Minor users are those OMSs with 2 bays or less.

Reporting

Specific reporting procedures are described in each chapter These procedures are summarized in Table I-2 below. Facility managers must ensure that these reports are submitted in a timely manner to the Office of Environmental Compliance (CFMO-EMB).

Table I-2. Reporting Requirements Summary

Protocol	Type of Reporting	Frequency
Air	Facility MVAC Compliance Statement	As needed
Air	Equipment Visual Monitoring Log	Monthly
Air	Boiler Compliance Checklist	Monthly
Air	Paint Booth Usage Log	As needed
Air	Paint Booth Filter Removal Log	As needed
Air	Equipment Usage Log	Monthly
Air	Visual and Olfactory Monitoring Log	Monthly
Air	Emergency Generator Usage Log	Monthly
Air	Dust Collector Monitoring Log	Monthly
Hazardous Materials	Chemical Inventory Form for Flammable Materials Cabinets	As needed
Hazardous Materials	Hazardous Material Inventory Forms	Upon Request by CFMO-EMB
Hazardous Waste	Hazardous Waste Inspection Log	Weekly
National Environmental Protection Act (NEPA)	Record of Environmental Consideration (REC) Form	When project is planned
Noise	Noise Complaint Form	Within 5 days of complaint
Pesticides	Applications Done by Commercial Applicators	After application
POL	Spill Incident Report Form	Within 24 hours of spill
Solid Waste	Recycling Report	Monthly, as needed, for FMS and CSMS Shops Only

Training

Specific training procedures are described in each chapter. These procedures are summarized in Tables I-3a-g below.

Table I-3a. Training Requirements Summary for CFMO-CMB

Training Name	Estimated Duration	Provided by	Training Frequency	IAW	Reference
General Environmental Awareness	4 hours	CFMO-EMB	Initial and Annually thereafter	AR 200-1, 40 CFR 82.161, AR 200-1, paragraph 15-3, Asbestos Management Plan, Integrated Pest Management Plan, ICRMP, AR 200-4, and Permits	Chapters 1, 2, 3, 4, 5, 6, 7, 9, 14, 15, 16 and 17 of the Desktop Guide

Table I-3b. Training Requirements Summary for CFMO-EMB

Training Name	Estimated Duration	Provided by	Training Frequency	IAW	Reference
Occupational Safety and Health Association Training	40-hours (Initial) 8-hours (Annually)	Certified agency	Initial and Annually thereafter	OSHA Standards	Chapter 11 of the Desktop Guide

Table I-3c. Training Requirements Summary for CFMO-PPB

Training Name	Estimated Duration	Provided by	Training Frequency	IAW	Reference
General Environmental Awareness	4 hours	CFMO-EMB	Initial and Annually thereafter	AR 200-1, 40 CFR 82.161, AR 200-1, paragraph 15-3, Asbestos Management Plan, Integrated Pest Management Plan, ICRMP, AR 200-4, and Permits	Chapters 1, 3, 5, 6, 7, 14, and 16 of the Desktop Guide

Table I-3d. Training Requirements Summary for CFMO-RPB

Training Name	Estimated Duration	Provided by	Training Frequency	IAW	Reference
General Environmental Awareness	4 hours	CFMO-EMB	Initial and Annually thereafter	AR 200-1, 40 CFR 82.161, AR 200-1, paragraph 15-3, Asbestos Management Plan, Integrated Pest Management Plan, ICRMP, AR 200-4, and Permits	Chapters 1, 3, 5, 6, 7, 14, and 16 of the Desktop Guide

Table I-3e. Training Requirements Summary for CFMO-FMB

Training Name	Estimated Duration	Provided by	Training Frequency	IAW	Reference
General Environmental Awareness	4 hours	CFMO-EMB	Initial and Annually thereafter	AR 200-1, 40 CFR 82.161, AR 200-1, paragraph 15-3, Asbestos Management Plan, Integrated Pest Management Plan, ICRMP, AR 200-4, and Permits	Chapters 1, 2, 3, 4, 5, 6, 7, 9, 14, 15 and 16 of the Desktop Guide

Table I-3f. Training Requirements Summary for Maintenance Shop/Armory/Unit Personnel

Training Name	Estimated Duration	Provided by	Training Frequency	IAW	Reference
General Environmental Awareness	4 hours	UECOs and CFMO-EMB	Initial and Annually thereafter	AR 200-1, 40 CFR 82.161, AR 200-1, paragraph 15-3, Asbestos Management Plan, Integrated Pest Management Plan, ICRMP, AR 200-4, and Permits	Chapters 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 13, 14 and 15 of the Desktop Guide
ODC Technical Certification	2 hours	State Certified Professional trainer	Initial and as-needed thereafter	40 CFR 82.161	Chapter 1 of the Desktop Guide
Hazardous Waste Operations, Communication, Spill Response	4 hours	UECOs	Within 6 months of employment and annually thereafter	40 CFR 265.16	Chapter 5 of the Desktop Guide
Spill Plan General Awareness and On-Scene Training	2 hours	UECOs/ CFMO-EMB	Annually	40 CFR 112.7(f)(1)	Chapter 10 and 14 of the Desktop Guide
Inspections, Hazards, and Remedial Action	*See Spill Training*	Command and UECOs	Annually	40 CFR 112.8(c)(6) & 112.12(c)(6)(i)	Chapter 14 of the Desktop Guide
Storm Water Pollution Prevention Plan (SWPPP) Training	*See General Awareness Training*	CFMO-EMB	Annually	Chapter 16 of the Desktop Guide	Chapter 16 of the Desktop Guide
Wastewater Field Training	4 hours	UECOs	Annually	AR 200-1, paragraph 4-2	Chapter 16 of the Desktop Guide

Table I-3g. Training Requirements Summary for Other Personnel Not Listed Above

Target Audience	Estimated Duration	Training Name	Provided by	Training Frequency	IAW	Reference
Personnel who do MVAC repairs	2 hours	MVAC Refrigerant Systems Certification	State Certified Professional Trainer	Initial and as-needed thereafter	40 CFR 82.161	Chapter 1 of the Desktop Guide
Asbestos Containing Material (ACM) Maintenance, Maintenance Supervisor, and CFMO-CMB staff.	2 hours	Operations and Maintenance (O&M)	State Certified Professional Trainer	Initial and annually thereafter	40 CFR 763.92	Chapter 2 of the Desktop Guide
Asbestos Program Manager	8 hours	Inspector/ Management Planner	State Certified Professional Trainer	Initial and annually thereafter	40 CFR 763.92	Chapter 2 of the Desktop Guide
Personnel handling hazardous materials & hazardous waste	4 hours	General Awareness and Familiarization Training	State Certified Professional Trainer	Initial and annually thereafter	40 CFR 265.16	Chapter 4 of the Desktop Guide
Personnel handling hazardous materials & hazardous waste	4 hours	Function-Specific Training & Safety Training	State Certified Professional Trainer	Initial and annually thereafter	40 CFR 265.16	Chapter 4 of the Desktop Guide
JBMDL personnel handling hazardous materials & hazardous waste	4 hours	JBMDL Specific Hazardous Waste Awareness Training	JBMDL	Initial and annually thereafter	40 CFR 265.16	Chapter 5 of the Desktop Guide
Field Personnel	1 hour	Natural Resources General Awareness	Plans, Operations, Training, Readiness, and Military Support Office (G3)	As needed	Integrated Natural Resources Management Plan	Chapter 6 of the Desktop Guide
Sea Girt NGTC Field Personnel	1 hour	Natural Resources General Awareness and Sea Girt INRMP	CFMO-EMB	Annually	Integrated Natural Resources Management Plan	Chapter 6 of the Desktop Guide
Pest Management Applicator	Based on applicator needs	Applicator Certification/ License	NJDEP or Rutgers	Initial and as-needed thereafter	Federal Insecticide, Fungicide and Rodenticide Act of 1972	Chapter 9 of the Desktop Guide
Storage Tank Manager	12 hours	A/B Certification	NJDEP or Rutgers	Within 6 months of employment	NJAC 7:14B	Chapter 14 of the Desktop Guide
Operator of Public Drinking Water Systems	Varies – Vendor is typically contracted	Necessary Training and Meet the Drinking Water Operator Certification Requirements of NJ	State Certified Professional Trainer	As needed	NJAC 7:10A-1.1 to 2.9	Chapter 17 of the Desktop Guide

F. CFMO-EMB Contact Information

Topic	Personnel Title	Contact Information
Air Emissions/Permits/Radon	Air Permits Manager	609-530-7136
Asbestos Management	Asbestos Program Manager	609-530-7136
Cultural and Historic Resources Management	Cultural Resources Manager	609-530-7134
Hazardous Materials Management	Hazardous Materials Manager	609-530-6917 or 609-530-7134
Hazardous Waste Management	Hazardous Waste Manager	609-530-6917 or 609-530-7134
Natural Resources Management	Natural Resources Manager	609-530-7136
National Environmental Policy Act	NEPA Program Manager	609-530-6917
Noise Management	Noise Program Manager	609-530-7134
Pesticide Management	Integrated Pest Management Program Manager	609-530-7134
Spill Planning/POL Management	Spill Plan and POL Program Manager	609-530-6884
Remediation	Remediation Program Manager	609-530-7135
GIS	GIS Specialist	609-530-6884
Solid Waste/Recycling Management	Solid Waste Program Manager	609-530-7134
Storage Tank Management	Storage Tank Manager	609-530-6917
Toxic Substance Management	Toxic Substance Manager	609-530-7136 or 609-530-6971
Wastewater Management	Wastewater Manager	609-530-6917
Water Quality Management	Water Quality Manager	609-530-6917
Environmental Justice	Environmental Justice Program Manager	609-530-7134

G. Compliance and Enforcement

Users of this guidebook need to know the following important information prior to reading and implementing this guidebook:

- Compliance Program
- Enforcement Issues
- ISO 14000 Principles

Compliance Program

Environmental Compliance Assessment System (ECAS)

The ECAS Program is a way that the NGB monitors environmental compliance of the all state Army National Guards (ARNGs). This program is required under AR 200-1. ECAS implementation procedures are described in Department of the Army Pamphlet (DA PAM) 200-1.

It is everyone's responsibility, from the Adjutant General (TAG) down, to ensure that each facility is prepared to undergo an ECAS assessment. Preparation for an ECAS assessment does not just mean fixing things and turning in excess materials weeks or even days before the assessment. ECAS preparation is an ongoing process. Facility managers should be constantly aware of activities that may lead to ECAS findings or non-compliance and seek solutions to these problems as early as possible. It is all facility employees' responsibilities to allow ECAS assessors access to all parts of the facility and make available any plans, standing operating procedures (SOPs), and/or records necessary to conduct the assessment.

CFMO-EMB Responsibilities

- Coordinates ECAS logistics with external and internal participants.
- Ensures deficiencies are identified and validated.
- Prepares corrective action reports.
- Ensures selected corrected actions are implemented.

NJARNG Responsibilities

- Assists ECAS team members as needed.
- Implements selected corrective actions in a timely manner.

Internal Compliance Assessment System (ICAS)

NJARNG will conduct internal assessments, using their own resources, and/or correctly complete and submit the Installation Status Report (ISR), Part II, Environment. ICAS is required under AR 200-1. Implementation guidance is described in DA PAM 200-1. All state ARNGs are required to conduct internal assessments. For installations required to file the ISR, Part II, Environment, the annual ISR will fulfill the internal assessment requirement unless otherwise notified by NGB. Environmental personnel conducting the internal assessments, at a minimum, shall:

- Review and follow-up on the corrective action and funding plan resulting from the last external and subsequent internal assessment.

- Review corrective actions relating to regulatory violations received since the last assessment (internal or external).
- Assess compliance with any new regulatory requirements and address any special emphasis areas specified by higher command. The duration of the internal assessment is not limited to a prescribed time period. The assessment may consist of site visits over a period of months or an entire year. Any new environmental requirements identified during the internal assessment shall be included in the installation Environmental Program requirements (EPR) Report.

Enforcement Issues

External Inspections by Federal or State Regulatory Agencies

Federal and state regulators must be allowed to enter the facility to conduct an environmental inspection. If the facility is out of compliance, the inspection may result in the issuance of a Notice of Violation (NOV). Under AR 200-1 and DA PAM 200-1, results of inspections by state or federal environmental agencies, NOVs or enforcement action (including noncompliance or administrative orders or compliance requests) received must be reported.

Facility personnel must immediately report this information to CFMO-EMB who will forward this information within 24 hours to Assistant Chief of Staff for Installation Management (ACSIM) and simultaneously to NGB and the Environmental Quality Report (EQR).

NOVs are very serious in that they may be associated with fines or even imprisonment. Fines may be as high as thousands of dollars per day until the facility comes back into compliance. Persons who knowingly violate environmental laws may even face jail time, especially if the intentional violation leads to an immanent and substantial threat to human health or the environment.

Compliance actions generally considered to be an Enforcement Action (ENF) or NOV

An ENF or NOV is a written notification of any violation of an environmental law or regulation by the U.S. Environmental Protection Agency (EPA), or another authorized federal, state, or local regulatory agency, requesting compliance with the alleged violated provision. For the purposes of the NHPA (National Historic Preservation Act), the SHPO (State Historic Preservation Office) and the ACHP (Advisory Council on Historic Preservation) are regulatory authorities. One written notification counts as one ENF/NOV, regardless of the number of individual findings, violations, or citations it contains. Do not include deficiencies noted during an internal or DOD environmental audit or review.

Compliance actions generally not considered to be an ENF/NOV

As an alternative to an ENF/NOV, regulators may issue a Warning Letter. Unlike an ENF/NOV, a warning letter does not inform the installation that it is out of compliance. Warning Letters do not constitute an ENF as defined in the EQR. Ultimately, CFMO-EMB makes the final determination of what constitutes an ENF.

General guidance on interpretation of what constitutes an ENF

All official notices from a regulating entity must be evaluated based upon ENF definitions outlined in NGB policy memos. If the NJARNG is uncertain about the appropriate classification of an official notice, they are encouraged to seek clarification or help from NGB. NGB may request assistance from the legal staff of U.S. Army Environmental Center (USAEC). However, it will always be the NJARNG's prerogative to make the final determination whether official notification constitutes an ENF. The NJARNG is required to report ENFs in accordance with AR200-1 and NGB policy.

International Organization for Standardization (ISO) 1400

The NJARNG is required to incorporate ISO 14000 (i.e., Series 14000 of the International Organization for Standardization) principles into a comprehensive Environmental Management System (EMS) program. This program involves environmental awareness training at all levels, and the implementation of EMS management principles throughout the organization. The main purpose of EMS is to institute an environmental stewardship culture within all Army organizations. An EMS will result in improving environmental compliance, reduction of ENFs, enhancing the protection of training lands, human health and the environment.

Where appropriate, this guide has adopted the basic EMS principles as described in ISO 14000. In addition, EO 13148 (*Greening the Government through Leadership in Environmental Management* dated 22 April 22 2000) requires that all federal agencies first implement EMSs through pilot projects at facilities and then implement an EMS at all appropriate facilities based on facility size, complexity, and the environmental aspects of facility operations. The facility EMS must include measurable environmental goals, objectives, and targets that are reviewed and updated annually.

H. Responsibilities

The Adjutant General of New Jersey (TAG)

- Ensures the implementation, coordination and management of the NJARNG environmental program IAW federal, military, state, and local rules, regulations, and laws.
- Ensures adherence to all directives listed in AR 200-1 and AR 200-2 as they pertain to the environmental programs in New Jersey.
- Annually appoints the members of the NJARNG Environmental Quality Control Committee and (EQCC) and the EQCC Chairperson.

NJARNG Environmental Quality Control Committee (EQCC)

In accordance with AR 200-1, paragraph 15-11, NJARNG has established an EQCC. As directed by AR 200-1, the NJARNG EQCC consists of members representing the operational, engineering, planning, resource management, legal, medical, and safety interests of the

NJARNG. At a minimum, the NJARNG EQCC is comprised of the supervisors or their representatives from the following directorates, divisions, offices and organizations:

- Chief of Staff (CofS)
- Construction and Facility Management Office (CFMO)
- Legal Advisor to The Adjutant General (TAG-JA)
- Occupational Health Office (SAAO-OH)
- 42nd Division Support Command (42DSC)
- 50th Brigade (50BDE)
- 57th Troop Command (57TC)
- Directorate of Logistics (G4)
- Surface Maintenance Office (DOL-SMO)
- State Army Aviation Office (SAAO)
- Public Affairs Office (PAO)
- Plans, Operations, Training, Readiness, and Military Support Office (G3)
- Human Resources Office (J1)
- Environmental Management Bureau (CFMO-EMB)
- Safety Management Office (SAAO-SM)
- United States Property and Fiscal Office (USP&FO)
- 254th Regiment
- Training and Training Technology Battle Lab (T3BL)

EQCC Chairperson

- Coordinates with other committee members as needed.
- Conducts committee meetings and coordinates actions by committee members.
- Schedules the NJARNG EQCC to meet at least on a quarterly basis.
- Prepares and distributes Committee minutes.

EQCC Members

Upon notification by the Chairperson, members attend all meetings for coordinating, implementing and managing the various environmental programs throughout the NJARNG. The NJARNG EQCC:

- Coordinates activities of the environmental programs covered under AR 200-1.
- Advises the command on environmental priorities, policies, strategies, and programs.
- Assists in the resolution of environmental policy and procedure conflicts and other areas of concern.
- Adheres to any other applicable directives in accordance with AR 420-47, paragraph 6-6.

Construction and Facilities Maintenance Office – Environmental Management Bureau (CFMO-EMB)

CFMO-EMB Is delegated by authority of the TAG to coordinate and manage the prescribed environmental programs for the NJARNG, to include, but are not limited to, the following:

- Air Quality Management
- Asbestos Management
- Cultural and Historical Resources Management
- Hazardous Materials Management

- Hazardous Waste Management
- Natural Resources Management
- NEPA
- Noise Management
- Pesticide Management
- Spill Planning and Response/POL
- Radon Management
- Solid Waste (Recycling) Management
- Storage Tank Management
- Toxic Substances Management
- Wastewater Management
- Water Quality Management
- Project Review
- Real Estate Transactions
- Environmental Audit/Compliance Program

CFMO-EMB responsibilities include, but are not limited to, the following:

- Compliance Evaluation
- Program Management
- Data Collection
- Field Sampling
- Project Planning
- Budget Programming
- Reporting
- Department Liaison

NJARNG Station Commanders/Supervisors

- Are responsible to become familiar with this guidebook and the described programs.
- Annually, reviews this guidebook with appropriate facility personnel.
- Follow all state and federal directives and guidance herein, where applicable.
- Responsible for the execution of the established environmental program to meet the objectives herein.
- Responsible for installation compliance with all applicable directives.

Unit Environmental Compliance Officer (UECO)

- Is the unit point of contact (POC) for all environmental issues and concerns.
- Must become familiar with the directives herein.
- Will ensure all published revisions to this guidebook are posted.
- Will implement and manage the applicable environmental programs.
- May appoint in writing individuals to manage specific environmental programs and areas at their facility.

Unit Commanders

- Must become familiar with the guidelines herein.
- Will ensure applicable environmental programs are implemented at home stations and all other training facilities.

I. Approach

This guidebook addresses all the environmental disciplines that comprise the overall NJARNG Environmental Program. Each chapter contains the following major components:

- Program Overview
- Compliance Thresholds
- Responsibilities
- Procedures
- Training
- Recordkeeping

Program Overview

Each chapter identifies program-specific training requirements.

Compliance Thresholds

Where applicable, each chapter identifies compliance thresholds for each program. A compliance threshold is a condition under which an operation is conducted that triggers a specific regulatory action. A compliance threshold may be qualitative (for example, an act not associated with a number) or quantitative (for example, a measured level or quantity of chemical, material, pollutant, or substance).

Responsibilities

In addition to the general responsibilities listed in this Introduction, each chapter lists specific responsibilities associated with the subject program.

Procedures

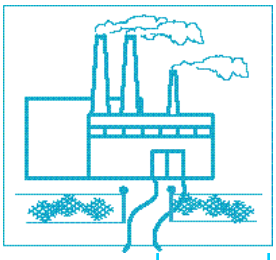
Each chapter identifies procedures that facility/operational-level personnel must follow to maintain compliance within the subject program. Where appropriate, compliance checklists are provided. It should also be noted that mold and lead are discussed in Chapter 15 and asbestos is discussed in Chapter 2.

Training

Each chapter describes the level of training required for various personnel positions within the NJARNG.

Recordkeeping

Each chapter identifies the types of documents required to be maintained in the facility environmental records.



Chapter 1
Air Emissions/Permits

This chapter discusses the New Jersey Army National Guard (NJARNG)'s policies/goals, procedures, and compliance tools used to support its Air Program. The chapter also provides information and actions that can be taken to control the amount of radon present at a NJARNG facility. For any correspondence with the personnel responsible for air emission and radon management, refer to page I-7 of the Introduction of the Desktop Guide.

A. Program Overview

Chapter 4 of Army Regulation (AR) 200-1 requires that all state Army National Guards (ARNGs) establish an air program that includes strategic planning for manage Ozone Depleting Chemicals (ODCs), requirements for complying with all federal, state, and local air regulations and test and manage radon in army facilities.[1] The NJARNG has established an air program in accordance with AR 200-1 designed to manage ODCs and for obtaining permits for the construction and/or operation of all potential sources of air pollutants. AR 200-1 also provides information regarding air emissions management.

In 1996 and 2000, the National Guard initiated a statewide Air Emissions Inventory and a statewide ODC survey, respectively. The Air Emissions Inventory was updated in 2006-2007 and 2017 (survey conducted in 2017, published in 2021). The ODC Survey was updated in 2017. Geographic Information Systems (GIS) data was developed for the 2017 Air Emissions and ODC surveys. The 1996 Air Pollution Statement for National Guard Training Center Sea Girt, New Jersey and the 1996 Subchapter 8 Analysis New Jersey Army National Guard provides additional information regarding air pollution compliance. Copies of these reports can be obtained through contacting Construction & Facilities Management Office Environmental Management Bureau (CFMO-EMB).

The Air Emission Inventory and ODC Survey are intended to serve as the foundation for permitting requirements at NJARNG installations. These surveys are updated at least once every ten years in accordance with National Guard Bureau guidance. The identification of accurate information about ODCs and air emissions sources are necessary to ensure compliance with various environmental laws and regulations.

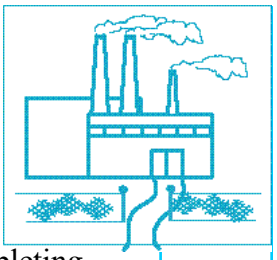
If your facility operates a stationary emergency generator, gasoline fueling facility, boiler, forced air heater, dust collector, paint booth and/or maintains automotive air conditioning systems and/or fire suppression systems on tactical vehicles or you maintain building Heating, Ventilation, and Air Conditioning (HVAC) or refrigeration equipment, you may be required to comply with various regulations regarding ODC management and air permits. Radon is another air emission that may impact NJARNG facilities. Radon is a naturally occurring radioactive gas, which has always been a part of our environment. It is a natural

[1] The Army's Air Program policies and goals are stated in AR 200-1, paragraph 4-1.

decay product of uranium and is found in soil everywhere in varying concentrations. The New Jersey Department of Environmental Protection (NJDEP) and the Environmental Protection Agency (EPA) have found that radon can accumulate in enclosed spaces. The only way to detect the presence of radon gas and measure the level is by a test. Radon gas can move easily through soil and tiny cracks in rock. When it reaches the surface of the soil, it disperses and becomes diluted to very low levels in the outdoor environment. However, when the gas moves upward through soil beneath a building, it may enter through cracks or other openings in the foundation and build up to unacceptable levels. Chronic exposure to radon has been linked to lung cancer. The NJDEP has published a radon risk map and it can be found at via NJ.gov's 2015 New Jersey Radon Potential Map. State specific information can also be found at NJRadon.Org.

References

- Air Pollution Control Act 1954 (NJSA 26:2C-1 to 25.2)
- Air Pollution Emergency Control Act 1967 (NJSA 26:2C-26 to 36)
- Radiation Protection Act (NJSA 26:2D-1 to -23.4)
- Radiologic Technologist Act (NJSA 26:2D-25 to -36)
- The Radiation Accident Response Act (NJSA 26:2D-37 to -58)
- Radon (NJSA 26:2D-59 to -80)
- NJARNG Ozone-Depleting Chemical Elimination Plan (2000)
- Air Emissions Inventory and Title IV Applicability (1996)
- Air Emissions Inventory, 2006-2007
- Air Emissions Inventory, 2017 (Survey conducted in 2017, published in 2021)
- Ozone Depleting Chemicals Survey, 2000
- Ozone Depleting Chemicals Survey, 2017
- National Radon Action Plan, 2021-2025
- U.S. Environmental Protection Agency Air Programs (40 CFR 50 through 87)
- Protection of Stratospheric Ozone (40 CFR 82)
- Radon Proficiency Programs (40 CFR 195)
- Protocol for Conducting an Air Pollution Emission Inventory at the Department of the Army Activities, 19 May 1993, USACHPPM
- Strategic Guidance and Planning for Deleting Ozone Depleting Chemicals from U.S. Army Application, first revision, Oct 95, U.S. Army Acquisition Pollution Prevention Support Office
- Strategic Guidance and Planning for Deleting Ozone Depleting Chemicals from U.S. Army Application, first revision, Oct 95
- Environmental Protection and Enhancement (AR 200-1)
- Environmental Analysis of Army Actions (AR 200-2)
- Army Facilities Management (AR 420-1)
- USACE Public Works, Appendix E, "Radon Control" (Technical Bulletin 200-1-144)
- Army National Guard Safety and Occupational Health Program (NGBR 385-10)



- Procurement Requirements and Policies for Federal Agencies for Ozone Depleting Substances (EO 12843)

B. Compliance Thresholds

This section discusses compliance thresholds for various air pollution sources. You may be subject to an inspection by a County Health Inspection Officer who is authorized to be there by the NJDEP to check installation air permits and compliance paperwork.

ODCs

Ozone occurs naturally in the stratosphere and protects us from exposure from the sun's ultraviolet radiation. Certain man-made chemicals destroy the ozone layer. The most common of these chemicals, called ODCs, are chlorofluorocarbons (CFCs) and halons. ODCs are used in coolants, foaming agents, fire extinguishers, solvents, and aerosol propellants. NJARNG facilities use CFCs and halons in building fire suppression systems and air conditioning and refrigeration equipment and in tactical vehicle fire suppression systems and motor vehicle air conditioners. Halon and CFC inventories have already been performed for your facility (see the Ozone-Depleting Chemical Elimination Plan (ODCEP) and the 2017 Air Emission Inventory, which is available at CFMO-EMB in Lawrenceville).

Only individuals that possess a Motor Vehicle Air Conditioners (MVAC) technician certification from the EPA by an accredited training provider can work on such systems. When servicing MVAC and tactical fire suppression systems, make sure that you:

- Use only approved certified recycling equipment in accordance with (IAW) 40 CFR Part 82, Appendices A through F of Subpart B.
- Are properly trained and certified IAW 40 CFR 82.40. Four Technician Certification Types are set forth in 40 CFR Part 82.161.
- Maintain all records of ODC transfers and personnel certification records for a period of 3 years IAW 40 CFR 82.42.
- Do not vent any ODCs into the atmosphere.
- Call CFMO-EMB before disposing of any device that contains refrigerants.

Never discard old ODC-containing equipment or products in the general refuse container. ODCs should not be saved for potential use at other installations. The Department of Defense maintains an ODC Reserve in Richmond, Virginia and all unused and recovered ODCs must be sent to that facility for use in other tactical vehicles. Contact CFMO-EMB for further guidance and facilitating shipment to the ODC Reserve.

Boilers and Forced-Air Heaters

Based on the current permitting requirements enforced by the NJDEP, the following requirements are applicable to your facility:

- Combustion equipment must be easily identifiable, with clear and conspicuous labeling.

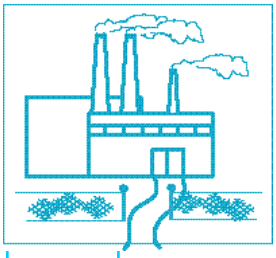
- A process flow diagram showing the location of all combustion units and fuel monitoring devices must be maintained for General Permit only.
- Equipment shall not be used in a manner, which will cause visible emissions other than visible condensed water vapor, except for a period no more than three minutes in any consecutive 30-minute period.
- Equipment shall not cause any air contaminant to be present in the outdoor atmosphere in such quantity and duration, which may be harmful to human, animal, plant life, or property.
- A copy of equipment manufacturer's specifications and instructions manual must be maintained on site for the life of each combustion unit and fuel-monitoring device present at the facility.
- Annual combustion adjustments are required on:
    - All oil-fired boilers and forced-air heaters over 1 million btu/hr heat input capacity.
    - Natural gas fired boilers and forced air heaters over 5 million btu/hr heating input capacity.
- All other records must be maintained on site for a period of 5 years, in either a permanently bound logbook or readily accessible computer memory. Support documentation includes, but is not limited to:
    - Fuel delivery records and invoices.
- Records of equipment repairs and corrective actions/preventative measures.
- Results of the annual combustion adjustment.
- Monthly Combustion Equipment Fuel Usage/Visual Monitoring Logs.
- All records relating to the General Permit must be made readily available for the NJDEP's inspection on the operating premises.

The NJDEP reserves the right to request specific boiler information at any time. These requirements can change from year to year.

Paint Booths

Activities associated with paint booths or painting in which the quantity of coating or cleaning material used by a source in any 1 hour is equal to or greater than 1 half gallon of liquid are subject to a construction and operational permit through the NJDEP.

Individual permits are issued by the NJDEP with specific guidelines for an individual facility. For example, a permit condition may be "in an hour period, no more than X gallons of paint may be applied." See Paint Booth Procedures in Section D of this chapter.



Emergency Generators

This General Permit allows for the construction, installation, reconstruction, modification and operation of the generator with a heat input capacity of 1 million btu/hr or greater. The permit allows the unit to operate no more than 100 hours in operation and maintenance mode provided that it is not run on an ozone action day and unlimited during a true emergency. See Emergency Generator Procedures in Section D of this chapter.

Emergency generators that have a heat input capacity of less than 1 million btu/hr but have an engine rating of 37 kilowatts/hour or greater do not require a permit but cannot be operated in operation and maintenance mode on an ozone action day.

Gasoline Fueling Stations

Gasoline fueling stations with bulk storage tanks over 2,000-gallons are required to have air permits. Diesel fuel facilities do not require an air permit. The permit allows a maximum throughput of 6 million gallons of gasoline per year provided the fueling station has a Stage 1 vapor recovery system on the bulk tank and it is tested annually. See Fueling Facility Checklists in Section D of this chapter for more specific guidance.

Parts Washers

A permit is required for solvent-based parts washers. It is preferable that a non-solvent-based parts washer are used to avoid obtaining a permit and complying with permit conditions. Typical permit conditions include keeping the lid closed when not in use and maintaining records of operations and solvent disposal manifests. If a facility requires a solvent-based parts washer, please contact CFMO-EMB prior to purchase.

Dust Collector Systems

Industrial dust collection systems which attach to woodworking and/or welding equipment may require a permit. The General Permit (GP-016A) allows for the construction, installation, reconstruction, modification, and operation of:

- Uncontrolled equipment: single or multiple pieces of manufacturing and materials handling equipment with a potential to emit less than the reporting threshold for each air contaminant.
- Controlled equipment: single or multiple pieces of manufacturing and materials handling equipment with potential to emit emission prior to the control device less than the reporting threshold for each air contaminant.
- Controlled equipment: Single or multiple pieces of manufacturing and materials handling equipment each with the controlled particulate emissions less than the reporting threshold. All other air contaminants must be less than the reporting threshold prior to a control device.

See Dust Collect Checklist in Section D of this chapter for more specific guidance.

Radon

NJARNG facilities are tested for the presence of radon based on their classification. Priorities for Radon assessment and mitigation are as follows:

- Priority 1- Daycare centers, hospitals, schools, and living areas (family housing, bachelor officer quarters/bachelor enlisted quarters, and billets).
- Priority 2- Areas having 24-hour operations.
- Priority 3- The acceptable recommended guideline radon concentration threshold is 1 to 3 piCu (pico curries). The action level is 4 piCu or greater.

The Indoor Radon Abatement Act of 1988 authorized the funding of radon-related activities at the state and federal level to:

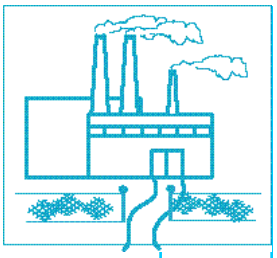
- Establish state programs and provide technical assistance.
- Confect radon surveys of school and federal buildings.
- Establish training centers and a proficiency program for firms offering radon services.
- Develop a citizen's guide to radon.
- Develop a model construction standard.

Department of Military and Veterans Affairs (DMAVA) also participates in the National Radon Action Plan. A copy of the most recent version of the National Radon Action Plan (2021-2025) can be found on the EPA's website.

Appendix E, "Radon Control," of the Public Works Technical Bulletin 200-1-144 provides a discussion of applicable laws, regulations, and standards concerning radon, along with a summary of the properties of radon, health risks associated with radon, the Army strategy for performing indoor radon measurements, and mitigation of Army leased, owned, or otherwise controlled structures. This document explains that AR 420-1 requires that each Army installation establish a radon assessment and mitigation program; however, AR 420-1 erroneously refers to AR 200-1 for this requirement which no longer contained the Army Radon Reduction Program. The requirements for this program differ based on the use of the building. This document can be found via WBDG.org or requested from CFMO-EMB. Any testing or mitigation measures will be handled, if necessary, by CFMO-EMB. CFMO-EMB can also be contacted to determine the current priority status and results of radon testing at your facility.

Other Air Issues

Open burning is prohibited in the State of New Jersey. This includes the burning of leaves, refuse, and building materials and the use of burn barrels. Under no circumstances is the burning of any waste, solid or liquid, permitted by the State of New Jersey.



C. Responsibilities

CFMO-EMB

- Ensures that the required routine radon testing survey is performed at the appropriate installations.
- Ensures that during radon testing, all windows and doors that could let outside air enter the building remain closed, except for normal exit and entry. If the test is less than 4 days in length, the doors and windows should be closed for an additional 12 hours prior to testing.
- Works with CFMO-CMB and CFMO-FMB to initiate corrective actions if radon concentrations exceed thresholds.
- Works with CFMO-FMB to ensure any radon mitigation systems remain operational.
- Implements the ODCEP.
- Maintains the facility in compliance with federal, state, local, and Army ODC regulations.
- Works with CFMO-FMB and Maintenance Shop/Armory/Unit personnel to coordinate transportation of recovered ODCs to the DoD ODC Reserve.
- Monitors maintenance logs of building air conditioning equipment to determine when emission thresholds will be exceeded in any given period.
- Ensures that installations have all required air permits.
- Ensures that all permit conditions are being met, annual combustion adjustments are being performed, and personnel are filling out monthly checklists.
- Provides CFMO-FMB, CFMO-CMB, NJARNG SMO, and NJARNG AASF personnel with training, guidance, and compliance tools for operating their emission sources and complying with radon and ODC rules and regulation.

CFMO-CMB

- Collaborates with CFMO-EMB in the early planning stages for any design or construction project to identify any air permitting requirements.
- Ensures a radon test is taken after construction of any new buildings or remodeling of any existing buildings.

CFMO-FMB

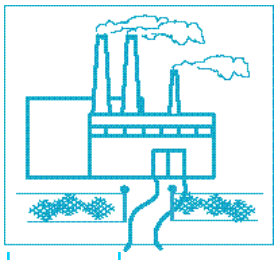
- Completes or coordinates boiler and generator checklists.

CFMO-RPB

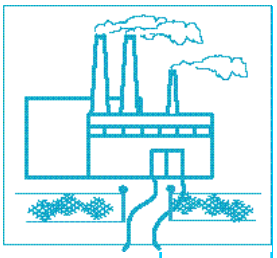
- Performing parts washer inspections and maintenance.

Maintenance Shop/Armory/Unit

- Maintains the facility in compliance federal, state, local, and Army ODC regulations.



- Uses only approved certified refrigerant recycling equipment IAW 40 CFR Part 82, Appendices A through F of Subpart B.
- Ensures that only properly trained and certified personnel IAW 40 CFR 82.40 work with ODCs.
- Maintains all records of refrigerant transfer information and personnel certification records for a period of 3 years IAW 40 CFR 82.42.
- Maintains proper ODC equipment.
- Maintains ODC leak repairs and maintenance records.
- Calls CFMO-EMB before disposing any device that contains refrigerants.
- Not vents a refrigerant into the atmosphere.
- Ensures combustion equipment is easily identifiable with clear and conspicuous labeling.
- Maintains a process flow diagram showing the location of all combustion units and fuel monitoring devices at the facility.
- Signs up for the EPA Quality Index text alerts on their mobile devices if they have a emergency generator at their facility and ensures that the generator does not operate on a day where the NJDEP forecasts air quality anywhere in NJ to be “unhealthy for sensitive groups,” “unhealthy,” or “very unhealthy”.
- Ensures that emergency generator is not in auto-exercise mode and all operation and maintenance runs are done manually.
- Ensures that boiler does not emit visible emissions other than visible condensed water vapor, except for a period no more than three minutes in any consecutive 30-minute period.
- Ensures annual combustion adjustments are performed on applicable boilers and forced-air heaters.
- Conducts all required inspections and checklists.
- Ensures lids are being used to cover buckets or pales of opened thinner/cleaner.
- Maintains paint and related chemical usage logs.
- Ensures fuel-monitoring devices are present at the facility.
- Ensures generator operations do not lead to any ill effects off site.
- Ensures the vapor recovery system is operational.
- Ensures there’s not more than 6 million gallons of throughput documented for any tank.
- Ensures copies of equipment and manufacturer’s specifications and instructions manuals are maintained on site for each emission source.
- Maintains all monitoring records, radon tests, and combustion adjustments on site for a period of 5 years, in either a permanently bound logbook or readily accessible computer memory.
- Submits work order requests as needed.



D. Procedures

This section identifies specific procedures you will use to support the policies/goals of the ODCEP and air permits for boilers and forced air-heaters, emergency generators, gasoline fueling stations, dust collectors, and paint booths. These procedures are associated with specific checklists, logs, or other compliance tools. These step-by-step procedures are easy-to-follow, and support compliance with federal, state, and local requirements.

This section contains the following compliance tools:

- Facility MVAC Compliance Statement
- ODC Compliance Checklist
- Equipment Visual Monitoring Log
- Boiler Compliance Checklist
- Paint Booth Compliance Checklist
- Fueling Facility Checklist
- Paint Booth Usage Log
- Paint Booth Filter Removal Log
- Generator Compliance Checklist
- Equipment Usage Log
- Fueling Facility Tank Identification Log
- Dust Collector Checklist

FACILITY MVAC COMPLIANCE STATEMENT

The _____ facility (ies) located in _____, New Jersey, has acquired and is properly using, approved equipment according to 40 CFR Part 82.36. I certify that any individual servicing MVAC systems is certified according to 40 CFR Part 82.40. The equipment specifications are listed below. ***Email this form to CFMO-EMB at William.McBride@nj.dmava.gov.***

Manufacturer	Model Number	Date Manufactured	Serial Number

I certify that the above information given is true and correct.

Responsible Official:

_____

Date:

_____

Send to:

State of New Jersey Department of Military and Veterans Affairs
Office of Environmental Compliance
101 Eggert Crossing Road
Lawrenceville, NJ 08648

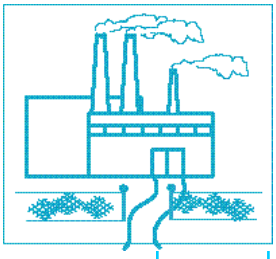
ODC COMPLIANCE CHECKLIST (PERFORMED AS REQUIRED)

Facility Name:_____

Check ODC equipment and records as required. Use this checklist as a guide for completing your inspection. When finished, sign and date the form in the space provided. ***Should you note a deficiency, send an email to CFMO-EMB at William.McBride@nj.dmava.gov.***

Facility Equipment:		
Are all the pieces of equipment used to recycle or recover refrigerant EPA approved?	Yes _____	No _____
Are all pieces of equipment containing ODCs properly maintained and free of leaks?	Yes _____	No _____
Personnel Training:		
Does an EPA-approved Program certify the technicians servicing MVAC equipment?	Yes _____	No _____
Recordkeeping:		
Is there a copy of the technicians EPA-approved MVAC certification on-site?	Yes _____	No _____
Is there a logbook being maintained of the amount and type of MVACs serviced each year?	Yes _____	No _____
Is there a logbook being maintained of the amount and type of ODC that is recovered and being sent off-site, and name and addresses of sites receiving ODCs?	Yes _____	No _____
Are records being maintained for at least three years?	Yes _____	No _____
Is there a copy of the MVAC Compliance Statement (ODC Procedure 1) on-site?	Yes _____	No _____

DATE	INSPECTOR'S NAME	DEFICIENCIES?	DATE CORRECTED
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

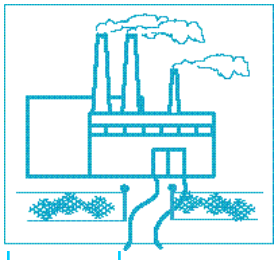


EQUIPMENT VISUAL MONITORING LOG

Facility Name:_____

Visual monitoring shall be performed monthly for each piece of equipment. One log can be used for the entire facility as long as each piece of equipment is identified on the form.
Email this form monthly to CFMO-EMB at William.McBride@nj.dmava.gov.

Date & Time	Observer's Name	Equipment ID	Equipment Running at Time of Observation (Y/N)	Weather Condition	Color of Smoke	Visible Soot Emission (Y/N)	Detectable Smell from Emission (Y/N)	General Observation
1/8/07 0800 hrs	Example	Boiler 1	Y	Sunny	Clear	N	N	
11/10/07 0800 hrs	Example	Boiler 1	N	Sunny	None	N	N	Down for Season



BOILER COMPLIANCE CHECKLIST (PERFORMED MONTHLY)

Facility Name:_____ Equipment ID:_____

Date:_____

Check boiler equipment and records monthly. Use this checklist as a guide for completing your inspection. When finished, sign and date the form in the space provided. ***Email this form monthly to CFMO-EMB at William.McBride@nj.dmava.gov.***

Facility Equipment:

Is all combustion equipment easily identifiable by clear labeling plates?	Yes _____	No _____
Ensuring boiler operations do not lead to any ill effects off site (Visual Monitoring Log).	Yes _____	No _____
Is a copy of equipment manufacturer's specifications and instructions manual maintained on site for the life of each combustion unit?	Yes _____	No _____

Recordkeeping:

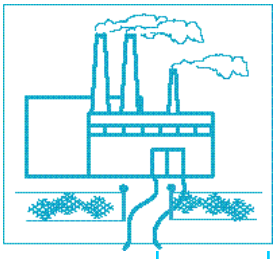
Are all other records maintained on site for a period of five years, in either a permanently bound logbook or readily accessible computer memory including: Yes _____ No _____

- Equipment Usage Log
- Visual Monitoring Log
- Fuel delivery records and invoices
- Records of equipment repairs and corrective actions/preventative measures
- Annual combustion adjustment

Is the permit displayed and current? Yes _____ No _____

Expiration Date of Permit _____

DATE	INSPECTOR'S NAME	DEFICIENCIES?	DATE CORRECTED
_____	_____	_____	_____



PAINT BOOTH COMPLIANCE CHECKLIST (PERFORMED MONTHLY)

Facility Name:_____ Equipment ID:_____
Date:_____

Check paint booth equipment and records monthly. Use this checklist as a guide for completing your inspection. When finished, sign and date the form in the space provided.
Email this form monthly to CFMO-EMB at William.McBride@nj.dmava.gov.

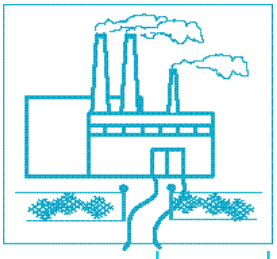
Facility Operational Information:

Does the facility have an operational permit?	Yes _____	No _____
Is the permit, current, or has anything changed since the last inspection?	Yes _____	No _____
Is a copy of equipment manufacturer's specifications and instructions manual maintained on site for the booth, spray guns, and filter material?	Yes _____	No _____
Is there a maintenance SOP for replacing filter material?	Yes _____	No _____
Are lids being used to cover buckets or pales of opened thinner/cleaner?	Yes _____	No _____

Recordkeeping:

Are all other records maintained on site for a period of 5 years, in either a permanently bound logbook or readily accessible computer memory including; • Paint and Thinner usage Log (Paint Booth Procedure 2) • Emissions inventories and PTE calculations • Records of equipment repairs and corrective actions/preventative measures	Yes _____	No _____
Is the permit displayed and current?	Yes _____	No _____
Expiration Date of Permit	_____	

DATE	INSPECTOR'S NAME	DEFICIENCIES?	DATE CORRECTED
_____	_____	_____	_____



PAINT BOOTH USAGE LOG

Facility Name:_____

Date	Painter's Name	Paint/Thinner Type	Gallons Used/Added	Hours Operating	Process

PAINT BOOTH FILTER REMOVAL LOG
(PERFORM AS NEEDED OR PER MAINTENANCE SOP)

Facility Name:_____

Date	Name	Location of Filter	Filter Condition	Why Filter Was Changed

GENERATOR COMPLIANCE CHECKLIST (PERFORMED MONTHLY)

Facility Name:_____ Equipment ID:_____

Date:_____

1. Check generator equipment and records monthly. Use this checklist as a guide for completing your inspection.
2. **Operators shall ensure emergency generators are not used for normal testing and maintenance on days when the NJDEP forecasts air quality anywhere in New Jersey to be "unhealthy for sensitive groups," "unhealthy," or "very unhealthy" (i.e. ozone action days) as defined in the EPA's Air Quality Index, after selecting "New Jersey" under Local Air Quality Conditions and Forecasts at *http://airnow.gov*.**
3. When finished, sign and date the form in the space provided. ***Email this form monthly to CFMO-EMB at William.McBride@nj.dmava.gov.***

Facility Operational Information:

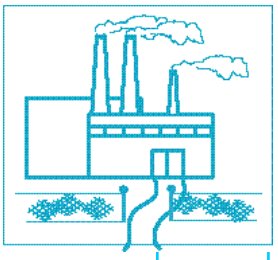
Is all combustion equipment easily identifiable by clear labeling plates?	Yes _____	No _____	
Ensuring generator operations do not lead to any ill effects off site (Equipment Visual Monitoring Log).	Yes _____	No _____	
Is a copy of equipment manufacturer's specifications and instructions manual maintained on site for the life of each combustion unit?	Yes _____	No _____	
Are the fuel-monitoring devices functioning (Equipment Usage Log)?	Yes _____	No _____	
Are the hour meters functioning (Emergency Generator Usage Log)?	Yes _____	No _____	
NJDEP Air Quality Forecast			
Is the generator in auto-exercise mode?	Yes_____	No_____	
If so, when is the generator scheduled to run:	Day _____	Time _____	Duration _____

Recordkeeping:

Are all other records maintained on site for a period of 5 years, in either a permanently bound logbook or readily accessible computer memory including: Yes _____ No _____

- Equipment Usage Log
- Visual Monitoring Log
- Fuel delivery records and invoices
- Records of equipment repairs and corrective actions/preventative measures
- USEPA engine emission certificate
- Is the permit displayed and current? Yes _____ No _____
- Expiration Date of Permit _____

DATE	INSPECTOR'S NAME	DEFICIENCIES?	DATE CORRECTED
_____	_____	_____	_____



GASOLINE FUELING STATION CHECKLIST (PERFORMED MONTHLY)

Facility Name:_____ Equipment ID:_____
Date:_____

1. Check fueling equipment and records monthly. Use this checklist as a guide for completing your inspection.
2. Operators shall ensure emergency generators are not used for normal testing and maintenance on days when the NJDEP forecasts air quality anywhere in NJ to be "unhealthy for sensitive groups," "unhealthy," "very unhealthy," or "hazardous" (i.e. ozone action days) as defined in the EPA's Air Quality Index, after selecting MK under Local Air Quality Conditions and Forecasts at Https://airnow.gov
3. When finished, sign and date the form in the space provided. ***Email this form monthly to CFMO-EMB at William.McBride@nj.dmava.gov.***

Facility Operation Information

Is all combustion equipment easily identifiable by clear labeling plates?	Yes _____	No _____	
Ensuring generator operations do not lead to any ill effects off site (Visual and Olfactory Log).	Yes _____	No _____	
Is a copy of equipment manufacturer's specifications and instructions manual maintained on site for the life of each generator?	Yes _____	No _____	
For diesel fired generators, are the fuel-monitoring devices functioning (Equipment Usage Log)?	Yes _____	No _____	NA _____
Is the hour meter functioning (Emergency Generator Usage Log)?	Yes _____	No_____	
Is the generator in auto exercise mode?	Yes _____	No_____	
If so, when is the generator scheduled to run:	Day_____	Time___	Duration _

Recordkeeping:

Are all other records maintained on site for a period of 5 years, in either a permanently bound logbook or readily accessible computer memory including: Yes _____ No _____

- Equipment Usage Log
- Visual Monitoring Log
- Fuel delivery record and invoices
- Records of equipment repairs and corrective actions/preventative measures
- USEPA engine emission certificate
- Is the permit displayed and current? Yes _____ No _____
- Expiration Date of Permit _____

**Not all generators require a permit. Check with Bill McBride at 609-530-7136 for permit applicability.

DATE	INSPECTOR'S NAME	DEFICIENCIES?	DATE CORRECTED
_____	_____	_____	_____

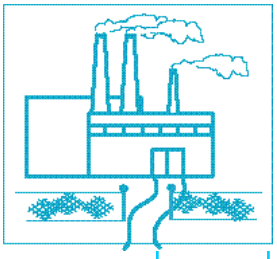
EQUIPMENT USAGE LOG

Facility Name:_____

1. This Equipment Usage Log shall be filled out monthly for each piece of equipment. One log can be used for the entire facility as long as each piece of equipment is identified on the form.
2. For heating oil and diesel fuel, ensure that the sulfur content is indicated on the fuel delivery ticket AND the sulfur content meets the NJDEP standards for sulfur content.
3. ***Email this form monthly to CFMO-EMB at William.McBride@nj.dmava.gov.***

Month	Observer's Name	Equipment ID	Fuel Usage					
			Fuel Type (gasoline, diesel, or No. 2)	Sulfur Content (%)	Amount 1st of the Month (a) (gal.)	Delivery during the Month (b) (gal.)	Amount End of the Month (c) (gal.)	Monthly Consumption (a+b-c) (gal.)
Jan. 08	Example	Gasoline AST	Gasoline	NA	800	1,000	500	1,300

Note: If the generator does not have a fuel meter, estimate fuel consumption after querying the facility maintenance personnel on how often and how much the generator has been refueled.



VISUAL AND OLFACTORY MONITORING LOG

Facility Name: _____

Visual monitoring shall be performed monthly for each piece of equipment. One log can be used for the entire facility if each piece of equipment is identified in the form.

Email this form monthly to Bill McBride at *William.McBride@dmava.nj.gov*.

Date	Observer's Name	Equipment ID	Equipment Running at Time of Observation (Y/N)	Weather Condition	Color of Smoke	Visible Soot Emission (Y/N)	Detectable Smell from Equipment Emission (Y/N)	General Observation
2/2	Example	Boiler 1	Y	Clear	Clear	N	N	

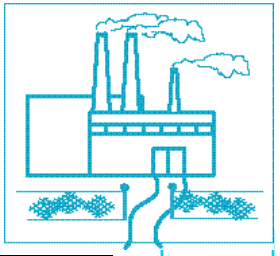
EMERGENCY GENERATOR USAGE LOG

Facility Name:_____

1. **This Emergency Generator Usage Log shall be filled out monthly for each piece of equipment <u>EACH TIME THE UNIT IS OPERATED</u>. One log can be used for the entire facility as long as each piece of equipment is identified on the form.**
2. Operators shall ensure emergency generators are not used for normal testing and maintenance on days when the NJDEP forecasts air quality anywhere in New Jersey to be "unhealthy for sensitive groups," "unhealthy," or "very unhealthy" (i.e. ozone action days) as defined in the EPA's Air Quality Index, after selecting "New Jersey" under Local Air Quality Conditions and Forecasts at *http://airnow.gov*.
3. ***Email this form monthly to CFMO-EMB at William.McBride@nj.dmava.gov.***

Date	Operator's Name	Equipment ID	Start Time	End Time	Hour Meter End (b) (mins.)	Total Run Time (b-a) (mins)	Air Quality Forecast from airnow.gov (1)	Equipment Running at Time of Observation (Y/N)	Weather Condition	Color of Smoke	Visible Soot Emission (Y/N)	Detectable Smell from Emission (Y/N)	General Observation	Reason for Operation (O&M or Power Loss)	Hour Meter End (b) (mins.)

Note: The generator shall not be used for normal testing and maintenance on days when the NJDEP forecasts air quality anywhere in NJ to be "unhealthy for sensitive groups," "unhealthy," "very unhealthy," or "hazardous" as defined in the EPA's Air Quality Index, after selecting NJ under Local Air Quality Conditions and Forecasts at Https://airnow.gov .



DUST COLLECTOR MONITORING LOG

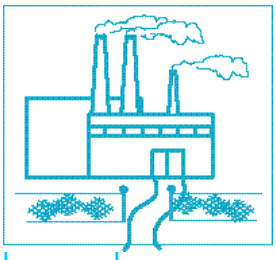
Facility Name: _____

Visual monitoring shall be performed each time the equipment is used but can be summarized daily at one row and list all raw materials processed that day and the start and the end of the day's pressure readings. Email this form monthly to *William.McBride@dmava.nj.gov* and keep a copy onsite for your records.

Date	Observer's Name	Equipment ID	Particulate Control Equipment Running at Time of Observation (Y/N)[1]	Weather Condition	Color of Emissions[2]	Visible Emission (Y/N)[3]	Detectable Smell from Equipment Emission (Y/N)[2]	Raw Material Being Processed[4]	Manometer Pressure Start[5] Inches of Water Column	Manometer Pressure End[5] Inches of Water Column	General Observation

Notes:

1. Item 13 of permit conditions (N.J.A.C. 7:27-8.13(h)). Equipment should be running at time of observation.
2. Item 2 of permit conditions (N.J.A.C. 7:27-5). Emissions should be clear with no odiferous emissions. If not, immediately shut equipment down and investigation why it is malfunctioning.
3. Item 4 of permit conditions (N.J.A.C 7:27-8.13(a)). No visible emissions. If not, immediately shut equipment down and investigation why it is malfunctioning.
4. Item 6 of permit conditions (N.J.A.C. 7:27-8.13(a)). List the type of wood products dust being collected by the dust collector.
5. Item 14 of permit conditions (N.J.A.C. 7:27-8.13(h)). Acceptable pressure is 0.5 to 4.0 inches of water. Manometer is located on the side of the collector facing the building.



E. Training

CFMO-CMB, CFMO-FMB, CFMO-RPB, and CFMO-PPB shall attend the General Environmental Awareness Training annually. Appropriate maintenance shop and Armory personnel shall attend the Boiler Permit General Awareness Training, Emergency Generators General Awareness Training, and Fueling Stations General Awareness. Maintenance Shop personnel will also have to take the ODC General Awareness Training and Paint booth General Awareness Training. Personnel making repairs to any ODC equipment should obtain and maintain an ODC Technical Certification. More information about training requirements can be seen in the Introduction chapter on pages I-4 through I-6.

ODCEP

Only properly trained and certified individuals may perform repairs or service on certified MVAC refrigerant systems. The following four technician certification types are set forth in 40 CFR Part 82.161:

- Type I – Maintain, service, or repair small appliances with five pounds or less of refrigerant.
- Type II – Maintain, service, repair, or dispose of high- or very high-pressure appliances (an appliance using a refrigerant with a boiling point between –50° and 10°C). Typically, these include comfort cooling appliances with greater than 50 pounds of refrigerant charge. Type II technicians can also maintain, service, or repair MVAC-like appliances.
- Type III – Maintain, service, repair, or dispose of low-pressure appliances (an appliance using a refrigerant with a boiling point above 10°C at atmospheric pressure). Typically, these include industrial cooling systems such as large building chillers.
- Type IV (Universal Technicians) – Maintain, service, repair, or dispose of low- and high-pressure equipment must be certified as Universal Technicians.

To arrange to the appropriate level of training for facility personnel, contact CFMO-EMB.

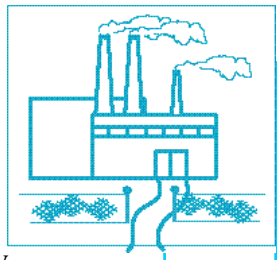
Air Permits

There are currently no training requirements mandated for air permits for boilers and forced-air heaters, gasoline fueling stations, paint booths, emergency generators, and dust collectors.

However, as a best management practice, all facility personnel should be given general environmental awareness training on permit compliance requirements.

Radon

Deploying radon testing equipment is a specialized procedure and requires personnel and their employers to be licensed by the NJDEP and complete required training courses. No personnel



in the NJARNG and/or NJDMAVA are trained or licensed to perform radon testing in any installations. If a radon mitigation system is installed, facility staff will be trained on its operation and maintenance.

F Recordkeeping

General environmental awareness training documents should be retained for at least 3 years for all personnel.

The following records must be maintained in the facility's environmental records for at least 5 years (unless a longer period is specified on the document):

- Permits.
- Inspection checklists and monitoring logs.
- Combustion adjustment and Stage 1 Vapor Recovery System test results.
- Fuel delivery records and invoices.
- Records of equipment repairs and corrective actions/preventative measures.
- USEPA engine emission certificate.
- Paint and Thinner usage log.
- Emissions inventories and PTE calculations.
- Logbook and USEPA MVAC and building air conditioning certification for technicians.
- MVAC Compliance Statement.

Facility radon test results should be maintained indefinitely. Test results are available from the CFMO-EMB by email.

Chapter 2
Asbestos Management

This chapter discusses the New Jersey Army National Guard (NJARNG)'s policies/goals, procedures, and compliance tools used to support its Asbestos Management Program. For any correspondence with the Asbestos Program Manager, refer to page I-7 of the Introduction of the Desktop Guide.

A. Program Overview

Army Regulation (AR) 200-1 Section 9-2 requires that all state Army National Guards (ARNGs) eliminate asbestos-related health hazards by conducting an inventory of all asbestos-containing material (ACM) and providing management guidelines through facility-specific Asbestos Management Plans (AMPs). No regulations currently exist that require removing asbestos just because it is in a building. The regulations require management of asbestos containing material to prevent fiber release. Further, AR 200-1 states that asbestos will only be removed if it:

- Can no longer be managed in place.
- Will be disturbed during maintenance, repair, or construction projects.
- Is friable or will become friable during demolition of a facility.
- Is economically justified to be removed during building deconstruction, or
- Has been identified to be a hazard and the Army is transferring ownership of the facility to a non-federal entity.

Additionally, AR 420-10 requires that the cost of asbestos removal be included in replacement costs for a facility with asbestos. More information regarding this requirement can be found in section 5-4 of AR 420-10. Furthermore, 29 CFR 1910 requires building owners to inform contractors, building occupants, employees, and tenants of the location of asbestos locations within buildings that they are working in.

To comply with these rules, the NJARNG must assess the amount, type, condition, and location of all suspected ACM for each facility. For all NJARNG facilities with suspected ACM, the intent is the NJARNG will prepare a site-specific AMP to describe management techniques and training procedures for the facility. As of the date of the current desktop guide, due to funding constraints and staff scheduling this has not yet occurred. Even though site-specific AMPs have been not developed:

- The NJARNG has developed a Master Asbestos Operation & Maintenance (O&M) Plan that outlines the general responsibilities, notification and labeling, training, work practices, requesting work, emergency response, inspections, and documentation requirements. The O&M Plan can be found digitally via DMAVA.net.
- For large construction projects, the design engineering firm is responsible, in accordance with Environmental Scope of Work, for identifying any ACM within the project area and either design the project to avoid the ACM or develop a work plan to abate it, and
- For self-help projects identified by the work order system that may impact suspected ACM, NJARNG staff holding Environmental Protection Agency (EPA) accredited

asbestos building inspector certification sample the suspect material and if it is asbestos, arrange to hire contractors to abate it. These work orders shall be crated by the requestor of such work.

References

- Industrial Site Recovery Act (ISRA) Rules (NJAC 7:26B)
- Administrative Requirements for the Remediation of Contaminated Sites (NJAC 7:26C)
- Technical Requirements for Site Remediation (NJAC 7:26E)
- NJARNG Asbestos Operation and Maintenance Plans 2003
- Army Facilities Management (AR 420-10)
- Environmental Protection and Enhancement (AR 200-1)
- Occupational Safety and Health Standards (29 CFR 1910)

B. Compliance Thresholds

This section discusses compliance thresholds established in the Asbestos O&M Plan. Asbestos is the name given to several naturally occurring fibrous minerals that have been mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. Asbestos is not always an immediate hazard. If maintained in good condition, asbestos may be left alone. It is only when ACM are disturbed and become damaged that asbestos becomes a hazard. When asbestos become damaged, the fibers separate and may become airborne or "friable." Friable asbestos means that it can be reduced to dust by hand pressure. Non-friable materials, such as brake shoes and floor tiles are not regulated provided it does not become friable.

There should be signs posted in accordance with the Asbestos O&M Plan that shows you where ACM is located. You may contact your Asbestos Program Manager (APM), and they will assist you in determining the presence of ACM in your building. Personnel who plan work that may disturb potential asbestos containing material (PACM) should create a work order to do an ACM survey in their building.

All personnel who, as part of their job requirements, have the potential to disturb ACM in the workplace should be aware of potential ACM at their facility. These materials include:

- Fireproofing materials
- Attic or wall insulation
- Floor tiles
- Plaster materials
- Window glazing and caulking
- Insulation on Heating, Ventilation, and Air Conditioning ducts and mechanical equipment
- Concrete blocks in boiler rooms
- Acoustical materials
- Insulation or piping
- Ceiling tiles and wall tiles
- Floor penetration packing
- Cementitious asbestos material
- Roofing material
- Any other suspected ACM

Notify the APM if any of the following is noted:

- Damaged or missing asbestos warning signs.
- Breeches or openings in the existing suspended ceiling system where ACM is located above the ceiling.
- Performance of any work involving potential disturbances of ACM which is not in accordance with the work procedures described in this plan.
- During building renovation or demolition operations, possible disturbances of hidden or inaccessible ACM (sealed pipe chases, above fixed plaster ceiling, inside wall partitions, etc.) such as fireproofing or insulation material or debris.
- Entry into crawl spaces where soil may have been contaminated with asbestos debris.
- Change in ACM condition that may result in the release of asbestos fibers (i.e. tears in pipe insulation, broken floor tiles, or flaking plaster walls and ceilings).

To prevent the release of asbestos fibers from ACM, all personnel must:

- Pay attention to any asbestos warning signs posted at your facility.
- Not disturb any floor tile, ceiling tile, pipe and boiler insulation, etc., that has been identified as ACM.
- Not use high-speed floor burnishers on ACM floor tile, use appropriate pads, and follow the New Jersey Department of Health procedures (website) for cleaning and buffing asbestos floor tiles.

C. Responsibilities

TAG

- In accordance with AR 200-1, the TAG will appoint an APM with responsibility for the Asbestos Management Program.

CFMO-EMB

- Appoints, on behalf of the TAG, an APM.

APM

- Provides occupants and employees a safe and healthy environment as it relates to the ACM located in their building.
- Minimizes the potential for exposing NJARNG personnel, state workers, contractors, and visitors to asbestos during the use and regular maintenance of NJARNG facilities, as well as during the removal and disposal of ACM and suspected ACM.
- Coordinates all aspects of asbestos operations and/or oversight including coordinating local regulatory requirements with the NJDEP, State of New Jersey Department of Community Affairs, New Jersey Public Employee's Occupation Safety and Health Administration (PEOSHA) and the United States Occupational Safety and Health Administration (OSHA).

- Annually reviews and updates the O&M Plan to ensure it is current with applicable standards and state-of-the-art asbestos control technologies.
- Maintains overall responsibility for the O&M program.
- Oversees all asbestos-related work performed in the facility, including work performed by contractors.
- Maintains asbestos project records.
- Holds a current Asbestos Hazard Emergency Response Act (AHERA) Building Inspector and Management Planner accreditation and attend annual refreshers to maintain accreditation.
- Acts as a competent supervisor when O&M work is conducted by NJDMAVA personnel.
- Carefully following all guidelines of the O&M Plan to minimize the potential for exposing building occupants and employees to airborne asbestos fibers.
- Is familiar with all ACM in NJDMAVA facilities and ensuring that all building occupants and employees are notified of the presence of ACM and the potential hazards of exposure to airborne asbestos fibers.
- Ensures that all NJDMAVA personnel and all those involved with the Asbestos Management Program have received formal training.
- Marks the ACM and/or ACM areas with permanent signs and/or labels to warn building occupants, employees and contractors of the presence of ACM.
- Marks the ACM areas requiring restricted access with permanent signs to warn against entry by unprotected personnel.
- Upon notification of an ACM observation or potential disturbance, takes the immediate precautionary measures and follow-up action.
- Seeks guidance from qualified asbestos management consultants when the complexity or seriousness of the situation is beyond the capabilities of in-house personnel (e.g., large quantities of ACM involved, or abatement projects requiring specialized equipment and/or supplies for ACM removal).
- Updates the Hazardous Materials survey section as needed of the generic environmental scope of work that is included in all design contracts.
- Conducts the annual 2-hour awareness training for NJARNG staff.
- Provides summary reports of all asbestos abatement activities to facility maintenance staff.

CFMO-CMB

- Provides technical support to the APM regarding building construction and drawings.
- Advises the APM of all known building renovations/ modifications so that the disturbance of ACM is avoided.
- Provides written notification to all contractors where ACM is present to avoid accidental disturbances.
- Ensures that design engineering firms conduct asbestos surveys during the design and/or remodeling of NJANRG buildings and infrastructure.

- Ensures that all planned construction work areas that require asbestos abatement shall include all ACM within the work area to the greatest extent possible.
- Provides copies of all asbestos surveys, asbestos abatement work plans, and asbestos abatement reports to the APM for their review and comment.
- Coordinates annual asbestos training between CMB personnel and the APM.

CFMO-FMB

- Advises the APM, via the work order system, of all known building renovations/modifications so that the disturbance of ACM is avoided.
- Provides written notification to the state maintenance force where known ACM is present to avoid accidental disturbances.
- Coordinates annual asbestos training between FMB personnel and the APM.
- Is aware of ACM locations, how to recognize these materials, and the proper procedures to follow to minimize any exposure during routine and non-routine activities.
- Notifies the APM and submit a work order immediately upon discovery of any potential disturbance to ACM including maintenance activities or projects which may affect ACM directly or indirectly.
- During their normal duties, looks for signs of physical damage, such as gouges in pipe insulation, gouges/holes in ceiling tile or acoustical treatments, deterioration/cracking of floor tile, and holes/cracks in wall plaster that could increase the potential for asbestos exposure. Utilize the work order system to request the APM test and assess damaged suspected asbestos building materials.
- Maintains all asbestos abatement summary reports in your facility files indefinitely.

CFMO-RPB

- Advises the APM of all known building renovations/modifications so that the disturbance of ACM is avoided.
- Notifies all NJDMAVA building leases of the location of any ACM to avoid accidental disturbances.
- Coordinates annual asbestos training between RPB personnel and the APM.

Maintenance Shop and Unit

- Follows the work procedures outlined in the Work Practices of the O&M Plan and the National Institute of Building Sciences (NIBS) Guidance Manual to minimize the potential for exposures to airborne asbestos fibers.
- Notifies the APM of degradation of the condition of the ACM.
- Is aware of ACM locations, how to recognize these materials, and the proper procedures to follow to minimize any exposure during routine and non-routine activities.

- Notifies the APM immediately upon discovery of any potential disturbance to ACM including maintenance activities or projects which may affect ACM directly or indirectly.
- During their normal duties, looks for signs of physical damage, such as gouges in pipe insulation, gouges/holes in ceiling tile or acoustical treatments, deterioration/cracking of floor tile, and holes/cracks in wall plaster that could increase the potential for asbestos exposure. Utilize the work order system to request the APM test and assess damaged suspected asbestos building materials.
- Submits work order requests as needed.

D. Procedures

This section identifies specific procedures you will use to support the policies/goals of the Asbestos O&M Plan. These procedures are associated with specific checklists, logs, or other compliance tools. These step-by-step procedures are easy-to-follow, and support compliance with federal, state, and local requirements.

During their normal duties, all personnel should look for signs of physical damage, such as gouges in pipe insulation, gouges/holes in ceiling tile or acoustical treatments, deterioration/cracking of floor tile, and holes/cracks in wall plaster that could increase the potential for asbestos exposure. Utilize the work order system to request the APM test and assess damaged suspected asbestos building materials.

Any observation must be noted and the APM should be notified immediately.
The APM will continue to seek to develop site-level asbestos surveys and conduct periodic updates. Until this is complete, we will follow the procedures outlined in Section A “Program Overview.”

E. Training

All appropriate CFMO-CMB, CFMO-FMB, Maintenance Shop, Armory, and Unit personnel shall complete the General Environmental Awareness training annually. All employees, including custodial and maintenance workers and CFMO-CMB staff, are also required to have formal training on selected asbestos-related subjects. This requirement also applies to all contractors prior to conducting work in the building. The APM, in conjunction with the federal and state health and safety offices, will determine when outside-accredited training organizations will be used to provide the required asbestos training.

All training must be documented, and training records will be forwarded to the human resources department to maintain personnel training records. Each new maintenance, custodial, and CFMO-CMB employee will be provided asbestos general awareness or O&M training and trained on the location of asbestos containing building material and safeguards as part of their orientation program and attend an annual refresher training session.

The O&M Plan describes the required training for managing asbestos in place and the methods for protecting workers from exposure to airborne asbestos. Training is also a requirement of Occupational Safety and Health Administration regulations for asbestos.

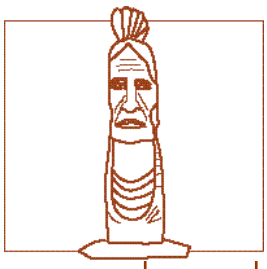
The APM must receive adequate training so they can effectively execute and enforce the requirements of the O&M Plan. This training shall include the AHERA Building Inspector and Management Planner accreditation training, EPA 16-hour O&M Course, and the relevant federal, state, and Army regulations concerning asbestos.

OSHA classifies asbestos-related activities into four categories: Class I (removal of TSI and surfacing ACM and PACM), which involves the highest potential for exposure to asbestos, through Class IV, which has the lowest potential exposure to asbestos. Subsequently, the control measures and training requirements are more rigorous for Class I and II (removal of ACM which is not thermal system insulation or surfacing material) operations and less rigorous for Class III (repair and maintenance operations) and IV (maintenance and custodial activities). NJDMAVA personnel will only be involved with asbestos-related activities of the Class III and IV category. If NJDMAVA personnel are required to do Class I and II asbestos abatement, they will attend asbestos abatement worker and asbestos supervisor training. Following is a list of the suggested training for the various personnel.

Training is not required for CFMO-PPB or CFMO-RPB. More information about training requirements can be seen in the Introduction chapter on pages I-4 through I-6.

F. Recordkeeping

CFMO-EMB maintains all the test results of all suspected ACM building materials, abatement summary reports, and asbestos waste disposal manifests indefinitely. CFMO-CMB will retain any surveys and reports generated as a result of construction activities.



Chapter 3
Cultural & Historic Resources Management

This chapter discusses the New Jersey Army National Guard (NJARNG)'s policies/goals, procedures, and compliance tools used to support its Cultural and Historic Resources Management Program. For any correspondence with the Cultural Resources Manager (CRM), refer to page I-7 of the Introduction of the Desktop Guide.

A. Program Overview

Army Regulation (AR) 200-1 requires that all state Army National Guard (ARNG)s establish a program to manage their cultural and historic resources in compliance with applicable federal, state, and local laws and in a spirit of stewardship of America's historic and cultural heritage.[1] Cultural and historic resources include places, buildings, objects, documents, collections, and customs. This program includes an Integrated Cultural Resources Management Plan (ICRMP).

The NJARNG has developed an ICRMP that identifies, evaluates, and assesses actions on historic properties in compliance with 36 CFR Part 800, The National Historic Preservation Act (NHPA), AR 200-4 and Department of the Army (DA) Pamphlet (PAM) 200-4. The ICRMP is a comprehensive decision and compliance-planning document that outlines specific regulatory issues and Standard Operating Procedure (SOP)s.

The most recent version of the ICRPM can be found at the following web link:

https://www.nj.gov/military/construction-facilities-management/environmental-management/documents/NJARNG%20ICRMP.pdf

A-2. Mission and Goals for the NJARNG Cultural Resource Program

The mission of the NJARNG cultural resource program is to support the NJARNG mission, achieve regulatory compliance, and ensure that NJARNG stewardship responsibilities are met. Fundamental to this mission is the identification of cultural resources and evaluation of their eligibility for listing in the National Register of Historic Places (NRHP).

A successful cultural resources management program requires projects to identify and evaluate resources, implement protection and compliance actions (such as review of proposed undertakings under Section 106 of the National Historic Preservation Act (NHPA)),

[1] The Army's cultural and historic resources policies and goals are stated in AR 200-1, 15-4. The Army's procedure for managing cultural resources are described in AR 200-4 and DA PAM 200-4.

and collaborate with internal and external stakeholders to advance awareness and preservation.

Accordingly, the goals for the NJARNG cultural resource program are as follows:

- Support Sustainable Training (I)
- Reduce / Eliminate Landscape Access Restrictions (II)
- Protect Resources from Damage (III)
- Conserve Resources and their Information for Future Generations (IV)
- Increase Cultural Resource Appreciation (V)
- Contribute to Local, National and International Knowledge Base (VI)

To support these goals, the NJARNG has established measurable objectives:

- Protect cultural resources known to be eligible or of unidentified eligibility for the NRHP.
- Protect artifacts previously discovered on NJARNG property in a manner consistent with 36 CFR Part 79 and arrange for their curation.
- Continue consultation as needed with the New Jersey SHPO, and the Advisory Council on Historic Preservation (ACHP) on preservation programs and management and rehabilitation plans for historic buildings and structures to comply with Section 106 of the NHPA.
- Initiate and continue consultation with Native American Tribes.
- Complete surveys and testing of areas of medium and high-probability for archaeological resources.
- Evaluate National Register of Historic Places (NRHP) eligibility of cultural resources that are known but unevaluated and that have reached 50 years of age, as funds allow.
- Integrate cultural resources compliance and management activities earlier in the planning process and at the headquarters level to better establish funding priorities in the Status Tool for the Environmental Program (STEP).
- Ensure that staff members and others responsible for cultural resources administration and protection receive adequate training in cultural resources regulations and procedures; incorporate cultural resources awareness into annual training for New Jersey Armorers.
- Update the Geographic Information System (GIS) as additional cultural resources and cultural resource data are evaluated or discovered.

Historic Buildings and Structures

Some facilities that could be identified as meeting criteria of historical significance and sufficient architectural integrity is evaluated for its eligibility for listing on the National and New Jersey Register of Historic Places. The buildings and associated standing structures on these properties should not be demolished, refurbished, repaired, sold, or otherwise modified unless such actions are in strict accordance with the Secretary of Interior's Standards for Rehabilitation.

All projects, planned or in progress, shall be coordinated through CFMO-EMB Cultural Resource Manager, must evaluate each construction, rehabilitation, or maintenance project it for its possible effects to the cultural and/or historical integrity of the facility. The project cannot begin until the evaluation is complete.

Architectural investigations have been performed by the NJARNG. As of 2022, 9 facilities have been deemed eligible for the national register of historic places and therefore must be subject to certain standards for maintenance and operation. The following locations are listed below:

- Atlantic City Armory
- Jersey City Armory
- Morristown Armory
- Sea Girt Quarters
- Teaneck Armory
- Vineland Armory
- Westfield Armory
- West Orange Armory
- Woodbury Armory (full site)

Historical Objects and Collections

Any damage or planned movement of historic artifacts, documents, monuments, or memorabilia should be reported to the State (NJDMAVA) Museum Committee. Curators should conduct annual reviews.

Archeological Sites

Since 2004, the NJARNG has systematically completed archeological surveys to identify any facilities that have archaeological potential per the identification processes outlined in 36 CFR 800 and State Historic Preservation Office (SHPO) archaeological survey guidelines. This has also had the benefit of clearing most facilities of the necessity of any further archaeological investigations (Table 3.1) since Phase IA/IB studies identified no or low archaeological potential.

However, prior to any land disturbance, archeological surveys shall be performed to determine the archeological potential. It should be confirmed with CFMO-EMB that the project area is clear for groundbreaking prior to any land disturbance. If any inadvertent discovery of human remains or cultural items (pottery, arrowheads, etc.) must be reported to CFMO-EMB.

Table 3-1. Summary of Previous Archaeological Investigations

Site Name	Level of Survey	Year(s) Completed	Recommendations
Atlantic City	Phase 1A	2021	No further survey*
Bordentown	Phase 1A	2021	No further survey*
Cape May	Phase 1A, Phase 1B	2017, 2020	Avoidance of 28-CM-60*
Cherry Hill	Phase 1A, Phase 1B	2018, 2020	No further survey
Dover Picatinny Arsenal	Phase 1A, Phase 1B	2004, 2005	No further survey
Dover	Phase 1A	2021	No further survey*
Flemington	Phase 1A, Phase 1B	2021, 2022	No further survey
Fort Dix Training Site	Phase 1A, Phase 1B	2004, 2005	No further survey
Freehold	Phase 1A	2021	No further survey*
Hackettstown	Phase 1A, Phase 1B	2021, 2022	No further survey
Hammonton	Phase 1A, Phase 1B	2017, 2020	No further survey
Jersey City	Phase 1A	2021	No further survey*
Lakehurst AASF	Predictive modeling via GIS	2007	Testing prior to disturbance and avoidance of known sites
Morristown	Phase 1A, Phase 1B	2004, 2005	No further survey
Mount Holly	Phase 1A, Phase 1B	2018, 2020	No further survey
Newark	Phase 1A	2017	No further survey
Princeton	Phase 1A, Phase 1B	2021, 2022	No further survey
Riverdale	Phase 1A	2018	No further survey
Sea Girt NGTC	Phase 1A, Phase 1B, I, II	2004, 2005, 2014, 2013	Avoidance of 28-MO-407 and -408*
Somerset	Phase 1A, Phase 1B	2017, 2020	No further survey
Teaneck	Phase 1A, Phase 1B	2017, 2020	No further survey
Toms River	Phase 1A, Phase 1B	2017, 2020	No further survey
Vineland	Phase 1A	2004, 2005	No further survey
Washington	Phase 1A	2017	No further survey
West Orange	Phase 1A, Phase 1B	2004, 2005	No further survey
Westfield	Phase 1A, Phase 1B	2018, 2020	No further survey
Woodbridge	Phase 1A	2018	No further survey
Woodbury	Phase 1A	2021	No further survey*
Woodstown	Phase 1A, Phase 1B	2017, 2020	No further survey

** No further survey and Phase 1B archeological survey is recommended by the consultant. Consultation with SHPO is still required.*

References

- New Jersey Conservation Restriction and Historic Preservation Restriction Act (NJSA 13:8B-1 to -9)
- Conservation and Development – Parks and Recreation (NJSA 13:1B-15.100 to -15.158)
- New Jersey Historic Trust (NJSA 13:1B-15.111)
- Environmental Protection and Enhancement (AR 200-1)

- Cultural Resources Management (AR 200-4)
- Cultural Resources Management (DA PAM 200-4)
- Curation of Federally Owned or Administered Archeological Collections (36 CFR 79)
- Protection of Historic Properties (36 CFR 800)
- National Historic Preservation Act (42 CFR 137.288)
- NJARNG Integrated Cultural Resources Management Plan, November 2002
- Historic Objects Inventory, May 1999
- Architectural inventory, April 1999

B. Compliance Thresholds

The NEPA Rec and Check form may be used to ensure compliance:

- If a building or structure has been surveyed for the National Register of Historic Places.
- If the building or structure is eligible for the National Register of Historic Places.
- If the actions proposed involves ground disturbing activities.
- If an archeological inventory or research been completed in the proposed area to determine if any archeological resources are present.
- The determination made under the National Historic Preservation Act.

C. Responsibilities

TAG

- Designated Cultural Resources Manager as the delegate between government to government communication with tribal governments.

CFMO-EMB – Cultural Resources Manager

- Implements the overall ICRMP to ensure compliance with applicable federal, state, and local laws and regulations.
- Identifies, evaluates, and assesses the impacts of any action on historic properties via consultation with the SHPO, Tribes, or other Interested Party.
- Trains personnel on the Cultural Resources and ICRMP requirements.
- Informs proponent of facility-specific action of the ICRMP guidelines that govern any project that may alter the characteristics of property.
- Works with SHPO if any inadvertent discovery of archeological material due to construction, erosion, or other soil disturbance.
- Completes assessment and determination for inclusion in all National Environmental Policy Act (NEPA) documents.

CFMO-CMB

- Encourage awareness of facilities that are deemed eligible for the national register and ensure that SHPO consultation is conducted, if necessary, prior to the start of any

construction projects. It is recommended that this process begins at the planning stage of any project or program.
- Notify CFMO-EMB if an upcoming project is suspected to affect the integrity of a historic property, if ground breaking disturbance will occur, or if the project is located in a historic district or on an eligible historic property.
- For facilities that are deemed eligible for listing on the NJ or national historic register, ensure that engineering firms design projects as to not incur an adverse effect determination against a facility's ability to be listed on the historic register.
- Planned projects can be reported to CFMO-EMB through the work order system.
- Project Managers must ensure that all contractors follow all guidelines set forth by the Historic Preservation Office, the Secretary of the Interior, and any design requirements to ensure the facility can continually be eligible for listing on the historic register.
- Notify CFMO-EMB of any inadvertent discovery of archeological material due to construction, erosion, or other soil disturbance.

CFMO-PPB

- Encourage awareness of facilities that are deemed eligible for the national register and ensure that SHPO consultation is conducted, if necessary, prior to the start of any construction projects. It is recommended that this process begins at the planning stage of any project or program.
- Notify CFMO-EMB if an upcoming project is suspected to affect the integrity of a historic property, if ground breaking disturbance will occur, or if the project is located in a historic district or on an eligible historic property.
- Must ensure that all leases follow all guidelines set forth by the Historic Preservation Office and the Secretary of the Interior.
- Notify CFMO-EMB of any inadvertent discovery of archeological material due to construction, erosion, or other soil disturbance.

CFMO-FMB

- Encourage awareness of facilities that are deemed eligible for the national register and ensure that SHPO consultation is conducted, if necessary, prior to the start of any construction projects. It is recommended that this process begins at the planning stage of any project or program.
- Planned projects can be reported to CFMO-EMB through the work order system.
- Notify CFMO-EMB if an upcoming project is suspected to affect the integrity of a historic property, if ground breaking disturbance will occur, or if the project is located in a historic district or on an eligible historic property.
- Must ensure that all contractors follow all guidelines set forth by the Historic Preservation Office and the Secretary of the Interior.
- Notify CFMO-EMB of any inadvertent discovery of archeological material due to construction, erosion, or other soil disturbance.

Armorer:

- Notifies CFMO-FMB of any action believed could impact the cultural and/or historic resources of the facility and of any inadvertent discovery of archeological material due to construction, erosion, or other soil disturbance.

CFMO-RPB

- Maintains their records showing status of buildings, facilities, and archeological sites that are eligible for listing on the state and national register of historic places.
- Coordinates with CFMO-EMB Geographic Information System (GIS) specialist on ensuring all cultural resource data layers are up to date.

Maintenance Shop/Armory/Unit

- Facilitates shop personnel's awareness of the actions that could impact the cultural and historic resources of the facility.
- Informs proponent of facility-specific action of the ICRMP guidelines that govern any project that may alter the characteristics of property.
- Notifies CFMO-EMB immediately prior to any action that is believed to compromise the cultural and/or historic resources of the facility.
- Is aware of the actions that could impact the cultural and historic resources of the facility.
- Notifies Armorer of any action believed could impact the cultural and/or historic resources of the facility and of any inadvertent discovery of archeological material due to construction, erosion, or other soil disturbance.

Museum Curators

- Maintains historical collections and appoints directors of museums and/or historical holdings at their respective installations.
- Notifies CFMO-EMB immediately prior to any action that is believed to compromise the cultural and/or historic resources of the facility.

D. Procedures

This section identifies specific procedures personnel will use to support the policies/goals of the ICRMP. These procedures are associated with specific checklists, logs, or other compliance tools. These step-by-step procedures are easy-to-follow, and support compliance with federal, state, and local requirements.

Historic Buildings and Structures

If new construction, or modifications to existing structures are planned, notify CFMO-EMB early in the design process to identify any potential NRHP-eligible properties, traditional cultural properties, or sacred sites that may be affected.

Historical Objects and Collections

The Museum Committee is responsible for maintaining objects/collections. If there are any inadvertent discoveries of archeological material, contact CFMO-EMB immediately and cease work until further notified.

Archeological Sites

If there are any inadvertent discoveries of archeological material due to construction, erosion, or other soil disturbance, the project manager should contact CFMO-EMB immediately by telephone or email, and work should cease until NHPA and NAGPRA regulations are initiated and followed.

E. Training

The CRM shall attend the National Guard Bureau Program Guidance Course. CFMO-CMB, CFMO-FMB, CFMO-RPB, CFMO-PPB, Maintenance Shop, Armory, and Unit personnel shall attend General Environmental Awareness training annually.

CFMO-EMB is responsible for training unit commanders and shop supervisors on the ICRMP. Unit commanders and supervisors are responsible for ensuring that their personnel receive general awareness training on the ICRMP. More information about training requirements can be seen in the Introduction chapter on pages I-4 through I-6.

F. Recordkeeping

CFMO-EMB maintains:

- Archived architectural and archaeological assessments of NJARNG facilities.
- Records of all activities associated with the ICRMP.
- All records of National Historic Preservation Act compliance including SHPO and Tribal correspondence.

Building signs, plaques, monuments, and buildings will be maintained indefinitely. Museum curators are responsible for maintaining all artifacts, documents, monuments, and memorabilia.

Chapter 4
Hazardous Material Management

This chapter discusses the New Jersey Army National Guard (NJARNG)'s policies/goals, procedures, and compliance tools that support its Hazardous Materials Management Program. For any correspondence with the Hazardous Material Manager, refer to page I-7 of the Introduction of the Desktop Guide.

A. Program Overview

The purpose of this program is to provide guidance for the safe management of hazardous materials in accordance with applicable federal, state, and Army Regulations (ARs), and policies. The program establishes procedures which enable Department of Military and Veterans Affairs to comply with annual reporting, recordkeeping, and training requirements.

The NJARNG has implemented the Hazardous Material Management Program (HMMP) which is designed to reduce and eliminate hazardous materials from guard sites. These processes are accomplished by following the target cycle of procurement, storage, handling, use and final disposition.

References

- Determination of Reportable Quantities for Hazardous Substances (40 CFR 117)
- Hazardous Chemical Reporting: Community Right-to-Know (40 CFR 370)
- Reporting Hazardous Substance Activity When Selling or Transferring Federal Real Property (40 CFR 373.3)
- Designation of Hazardous Substances (40 CFR 116)
- Emergency Planning and Community Right-to-Know Act (EPCRA) (40 CFR 350-372)
- Environmental Protection and Enhancement (DA PAM 200-1)
- Hazardous Material Management Program (DA PAM 710-7)

B. Compliance Thresholds

Most facilities utilize hazardous materials to support their mission. A hazardous material management program should be utilized in order to track all types, quantities and locations of hazardous materials purchased through the military system and locally. According to Department of the Army (DA) Pamphlet (PAM) 200-1, hazardous material inventories shall be maintained and updated annually. This information will be used and updated annually for Emergency Planning and Community Right-to-Know Act (EPCRA), state, and local reporting requirements. Hazardous material inventory maintenance also aids in pollution prevention, procurement and shelf-life.

Hazardous materials can include cleaning products, paints, Petroleum/Oils/Lubricants (POLs), solvents, pesticides, acids, aerosols, etc.

C. Responsibilities

USP&FO

- Maintains records of hazardous material purchases.

CFMO-EMB

- Assist with updating Safety Data Sheets (SDS) in Armories and Maintenance Shops.
- Is responsible for ensuring compliance of current chemicals inventory on an annual basis through the state's EPCRA website via NJ.Gov.

CFMO-BMB

- Update the existing NJARNG Hazardous Materials Inventory Control List to comply with the Community Right-to-Know Act.

CFMO-FMB

- State Supply maintains records of hazardous materials purchased and provides SDS to each facility upon purchase and delivery to the site.
- Flammable Materials Cabinets shall have Chemical Inventory Forms posted on the exterior of the cabinet and updated as-needed.
- Submits work order requests as needed.

Armorer: Maintains current up to date chemical inventory and SDS sheets on an annual basis or whenever a new chemical is brought into the facility.

Maintenance Shop/Armory/Unit

- Maintain SDS Binder with hands-on materials.
- Maintains Chemical Inventory sheets on flammable cabinets.
- Ensures proper storage and segregation of hazardous materials.
- Ensures proper inventory completion.
- Monitors the use of hazardous materials to ensure that conditions and practices do not degrade personnel safety.
- Attends any required hazardous material management training as directed.
- Conducts any inventories or inspections of hazardous materials as directed by the supervisor.
- Responsible for ensuring products are within shelf-life or uses shelf-life extension tool.
- Flammable Materials Cabinets shall have Chemical Inventory Forms posted on the exterior of the cabinet and updated as-needed.
- Submits work order requests as needed.

The following branches are exempt from responsibilities regarding hazardous material management:

- TAG
- CFMO-RPB
- CFMO-PPB

D. Procedures

This section addresses the following topics:

- Inventory Control
- Safety Data Sheets (SDSs)
- Material Compatibility
- Maintaining Material Shelf-life

This section also identifies specific procedures you will use to support the policies/goals of the hazardous materials management program to include completing the Hazardous Material Storage Unit Inspection Checklist (located at the end of this section).

Inventory Control

According to AR 200-1, paragraph 4-2c, it is Army policy to apply inventory control techniques to prevent waste generation. Further, AR 200-1, paragraph 4-3b requires that a current hazardous material inventory be maintained.

Proper inventory of hazardous materials is essential in controlling the amount and types of hazardous materials. Perform inventories of hazardous material in accordance with existing Federal Worker Communications Act, New Jersey Worker & Emergency Planning Community Right-to Know Act, and all other applicable programs.

Track, review, and approve hazardous material (HM) usage through established processes and work centers. Reduce the acquisition and use of hazardous materials and the generation of solid or hazardous wastes (HW) through centralized inventory control, best management practices (BMPs), pollution prevention actions, improved procurement practices, material re-use, recycling, and enhanced shelf-life management. HMs should be procured through the standard Army supply system.

CFMO-BMB is responsible to update the existing NJARNG Hazardous Materials Inventory Control List to comply with the Community Right-to-Know Act.

As specified on Chapter 10 (Spill Planning and Response/POL Management) of this guide, the Installation On-Scene Coordinator (IOSC) for each spill plan is responsible for updating CFMO-EMB with hazardous material storage information in their spill plans as needed.

In addition, Flammable Materials Cabinets shall have Chemical Inventory Forms posted on the exterior of the cabinet and updated as-needed.

Chemical Inventory Form		
Point of Contact:		Flammable. Cabinet Name:
Product Name	Quantity	Date Updated

Safety Data Sheets

The Globally Harmonized System (GHS) has standardized the format and content of SDSs to uniformly inform chemical users of the hazards of chemical substance(s) or mixture(s) and provide advice on safety precautions. SDSs are intended to provide comprehensive information about a substance or a mixture for use in workplace chemical management. The SDS is normally product-related and not specific to the workplace. The information on an SDS enables the employer to:

- Develop an active program of worker protection measures, including training, which is specific to the workplace.
- Consider measures necessary to protect the environment.
- Use the SDS as an important source of information for other target audiences of GHS.

Each facility must maintain a binder that contains SDSs for all the hazardous material being stored at the facility. This binder must be centrally located and organized so an SDS can be located quickly in case of a spill or exposure.

The SDS binder must always be accessible for review by employees or emergency personnel. Follow the steps below to create a master binder that contains SDSs for all hazardous material at the facility.

Step 1. Obtain an SDS for each hazardous material at the facility from the Hazardous Materials Information Resource System (HMIRS) or contacting the manufacturer listed on the label

The SDS must be specific to the product's National Stock Number (NSN), manufacturer's code, or product name. These numbers or identification is printed on the SDS and on the hazardous material container.

Step 2. Place all SDSs in a binder so that specific products can be associated with the corresponding SDS. Create an index in the front of the binder(s) listing the SDSs. Centrally locate the binder in the facility.

All SDSs must be maintained for 30 years. If a facility is closed or excessed, SDS binders and any old Material Safety Data Sheets should be sent to CFMO-EMB.

Format

Information in the SDS includes 16 headings in the following order:

1. Identification
2. Hazard(s) identification
3. Composition/information on ingredients
4. First-aid measures
5. Fire-fighting measures
6. Accidental release measures
7. Handling and storage
8. Exposure controls and personal protection
9. Physical and chemical properties
10. Stability and reactivity
11. Toxicological information
12. Ecological information
13. Disposal considerations
14. Transport information
15. Regulatory information
16. Other information

Material Compatibility

Once all the SDSs are obtained for all the hazardous material at the facility, determine what types of chemicals can be stored together and what types must be segregated. Personnel in charge of material storage should review sections 9 and 10 of the SDS to determine if particular chemicals will react with one another or need to be stored under special conditions. If a chemical or material compatibility cannot be determined from review of the SDSs, CFMO-EMB should be contacted for determination.

Setting Up Storage Areas

Flammable Cabinets and Storage Lockers

Flammable Cabinets and Storage lockers are intended for use in the immediate work area. They should be National Fire Protection Association (NFPA) approved and should contain only small quantities of HM that are used in the facility daily.

Ensure that cabinets are kept organized and not overfilled. Store excess containers of HM in storage rooms or buildings away from the work area. Use the lockers for their intended purpose. For instance, do not store non-flammables, such as oil, in a Flammables Locker. Only store flammables (those with a flashpoint <200°F) in Flammables lockers. Keep lockers clean and orderly, and maintain all structural integrity and hardware, including doors, hinges, and shelves. Do not remove the door or ventilation bungs, penetrate the wall, modify ventilation, or otherwise modify the locker. Keep locker doors closed. To set up a locker, complete the following steps:

Step 1. Locate the locker indoors in a well-ventilated area near where the HM will be used, or outdoors under cover.

- Maintain easy access to the locker; do not block doors or place “stuff” on the locker.
- Do not place the locker near doors, break rooms, bathrooms, offices, or other occupied non-shop areas.
- Do not place the locker near floor drains, drainage channels, or areas with high foot or vehicle traffic.

Step 2. Mark and label the locker.

- Do not place unauthorized signs, labels, stickers, or markings on the locker.

Step 3. Ensure that an appropriately rated fire extinguisher and spill response equipment are located nearby.

Storage Rooms and Buildings

Storage rooms and buildings are intended for storage of backup supplies of hazardous materials not kept in storage lockers and large containers of HM (>1 gallon). Locate storage rooms and buildings out and away from the work area. Keep them clean and orderly, and maintain all structural integrity and hardware including doors, hinges, and shelves. Do not remove doors, penetrate walls, modify ventilation, or otherwise modify the room or building,

if it has already been approved. To set up a storage room or building, complete the following steps:

- Provide primary and secondary containment.
- Ensure that an appropriately rated fire extinguisher/extinguisher system and spill response equipment are located nearby.
- Mark and label the storage area. Do not place unauthorized signs, labels, stickers, or markings on the storage area.

Storage Racks

To set up a storage rack, complete the following steps:

- Provide primary and secondary containment.
- Ensure that an appropriately rated fire extinguisher and spill response equipment are located nearby.
- Mark and label the storage rack. Do not place unauthorized signs, labels, stickers, or markings on the storage rack.

Stocking a Hazardous Materials Storage Locker

- Check the compatibility of HM items before placing them in the storage locker.
- Determine the amount of required shelf space needed for the storage of HM.
- Ensure that all hazardous material containers have labels and place them in the storage unit in an orderly fashion. Rotate the containers so that items that expire first are in the front. Remember: FIRST in, FIRST out.

Maintaining and Tracking Inventory

Once storage units are stocked, perform an initial and annual inventory of all HM in the storage location. It is mandatory to update inventory whenever new supplies are obtained or old supplies are depleted. This section explains how to conduct the HM inventory.
HM storage units should be inspected weekly.

Conducting a Hazardous Material Inventory

To conduct an inventory, complete the following steps:

- Check that every container, bottle, can, box, etc., is labeled with the following and replace any labels that are missing or unreadable:
  - Product name
  - Any warning of physical or health hazards listed on the SDS
- Check the expiration, inspection, or testing dates on all shelf life HM and manage by using the Department of Defense Shelf-Life Program.
- Remove any old or unidentified materials. Attempt to locate the matching SDSs and contact the authorized WASTE user to arrange for disposal.
- Maintain a copy of the Hazardous Materials Storage Inventory.

Maintaining Material Shelf-life

Most hazardous material purchased through the military supply system has an expiration date (test date or inspection date) printed on the container label. These dates are key to the shelf-life program. Hazardous material purchased locally usually does not have a published expiration date. Call the manufacturer to establish a shelf life for these items.

Materials with expiration dates are classified as either Type I or Type II. Containers of Type I materials have an alphabetical shelf-life code and an expiration date. These materials are not extendible. Containers of Type II materials have a numeric shelf-life code and either a test date or an inspection date. These materials may be extended through visual inspection or laboratory testing. Type II chemicals must be used, extended, or disposed of within 90 days of their expiration date.

To extend by…	Consult the…
Laboratory testing	Quality Status Listing (QSL*)* - the QSL provides laboratory testing data for hazardous material.
Visual inspection	Material Quality Control Storage Standard (MQCSS) - the MQCSS provides information from NSN on how to visually inspect an item and how many times an item may be extended.

To extend the shelf-life, follow the steps below:

Step 1. Determine if the material is Type I or Type II.

Step 2. If the shelf-life of a Type I material has not expired but is no longer needed, contact the USP&FO for turn-in procedures.

Step 3. If the shelf-life has expired, follow the appropriate procedure for Type I or Type II materials.

- For Type I materials, **STOP**. Turn the material in for disposal in accordance with established turn-in procedures.
- For Type II materials, determine if the shelf-life can be extended by test or inspection. Proceed to Step 4.

Step 4. Access the QSL online to see if the material has a test date. If test data is not available, go to Step 6.

Step 5. If test data is available, complete a shelf-life extension label and attach it to the container, or mark each container with the following information, if not already present:

- NSN
- Lot/batch number
- Date test (day visually extended or QSL date)
- Next inspection/test date
- Authority (QSL, MQCSS, laboratory name)
- Initials of person who inspected and extended the item.

Step 6. Access the MQCSS online to see if the material has inspection information. If inspection data is not available, go to Step 8.

Step 7. If inspection data is available, complete a shelf-life extension label and attach it to the container, or mark each container with the following information, if not already present:

- NSN
- Lot/batch number
- Date test (day visually extended or QSL date)
- Next inspection/test date
- Authority (QSL, MQCSS, laboratory name)
- Initials of person who inspected and extended the item.

Step 8. If a Type II item is not listed on the QSL or MQCSS, call the United States Property & Fiscal Officer (USP&FO) Warehouse for guidance.

Step 9. If the USP&FO determines that the shelf-life cannot be extended, turn the material in for disposal.

HAZARDOUS MATERIAL STORAGE UNIT INSPECTION CHECKLIST (PERFORMED AS DIRECTED)

Check hazardous material (HAZMAT) storage units as directed by your supervisor. Use this checklist as a guide for completing your inspection. When finished, sign and date the form in the space provided. ***Should you note a deficiency, send a copy of the inspection form to the CFMO-EMB.***

Containers:

Containers good condition	Yes _____	No _____
Containers marked/labeled	Yes _____	No _____
Containers closed	Yes _____	No _____
Marking/label visible	Yes _____	No _____
No incompatibles	Yes _____	No _____
No loose lids or open bungs	Yes _____	No _____

Spills and Spill Equipment:

No spills	Yes _____	No _____
Spill kit available	Yes _____	No _____

Signs and Other Equipment:

Fire extinguisher near	Yes _____	No _____
Ground wire with alligator clip (for ignitables)	Yes _____	No _____
Sign posted	Yes _____	No _____
Emergency information posted	Yes _____	No _____

DATE/ ID of HAZMAT UNIT/AREA	INSPECTOR'S INITIALS	DEFICIENCIES?	DATE CORRECTED
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

E. Training

Designated CFMO-EMB, CFMO-CMB, CFMO-FMB, Maintenance Shop, Armory, and Unit personnel shall attend the General Environmental Awareness training annually. Personnel handling hazardous materials must successfully complete general awareness and familiarization training, function-specific training, and safety training upon assignment and then annually thereafter. Training is not required for CFMO-PPB, and CFMO-RPB. More information about training requirements can be seen in the Introduction chapter on pages I-4 through I-6.

F. Recordkeeping

Hazardous materials checklist is part of the Spill Prevention Control and Countermeasure (SPCC) and can be found in the Spill Planning/Prevention and POL Management section of this guide (Chapter 10). In addition, all SDSs must be maintained for 30 years.

Chapter 5
Hazardous Waste Management

This chapter discusses the New Jersey Army National Guard (NJARNG)'s policies/goals, procedures, and compliance tools that support its Hazardous Waste (HW) Management Program. For any correspondence with the Hazardous Waste Management, refer to page I-7 of the Introduction of the Desktop Guide.

A. Program Overview

The purpose of this program is to provide guidance for the safe management of hazardous waste with IAW applicable federal, state, and Army regulations, and policies. The program establishes procedures, which enable the Department of Military and Veterans Affairs (DMAVA) to track all hazardous waste from generation to disposal ("cradle-to-grave") and comply with annual reporting, recordkeeping, and training requirements.

References

- Regional Low-Level Radioactive Waste Disposal Facility Siting Act (NJSA 13:1E-77 to -198)
- Waste Control Act (NJSA 13:1I-1 to -8)
- Industrial Site Recovery Act (NJSA 58:10B)
- Brownfield and Contaminated Site Remediation Act (NJSA 58:10B)
- Regulations Governing the Certification of Laboratories and Environmental Measurements (NJSA 7:18)
- Reporting Hazardous Substance Activity When Selling or Transferring Federal Real Property (40 CFR 373.3)
- HW Treatment, Storage and Disposal (40 CFR 260 through 279)
- Designation, Reportable Quantities, and Notification (40 CFR 302)
- Draft, Solid and Hazardous Waste Management (AR 420-47)

B. Compliance Thresholds

Most NJARNG facilities are "very small quantity generator" (VSQG). In order to maintain VSQG status, each facility must not generate more than 220 lbs. of hazardous waste or 2.2 lbs. of acute hazardous waste per calendar month. Exceeding these thresholds will put the facility into the small quantity generator (SQG) or Large Quantity Generator (LQG) status, which have additional recordkeeping and reporting requirements. Every effort should be made to recycle and implement waste reduction procedures.

NJARNG facilities on the Joint Base McGuire-Fort Dix-Lakehurst (JBMDL) and Picatinny Arsenal must comply with LQG requirements of the larger facilities hazardous waste management program.

C. Responsibilities

CFMO-EMB

- Performs annual Environmental Compliance Assessment Survey (ECAS) inspections, and issues compliance findings, when necessary, through National Guard Bureau Compliance System "WEBCASS"
- Secures funding for hazardous waste disposal
- Assists units in turn procedures through Web Application System for Turn-in Execution (WASTE) or State contracts
- Assists in waste characterization
- Providing universal waste disposal methods (recycling bins, battery boxes, fluorescent light tubes, etc)

CFMO-CMB

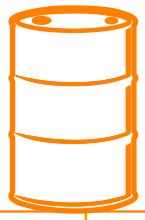
- Project managers must ensure that contractors and vendors complete all tasks associated with solid and hazardous waste management as written in contracts

CFMO-FMB

- Ensures universal waste (i.e. bulbs and batteries) are properly disposed of. Please see Solid Waste Management (Chapter 13) for more information

Maintenance Shop/Armory/Unit

- Ensures proper collection and segregation of hazardous and non-hazardous wastes generated at the facility
- Ensures proper accumulation and packaging of hazardous waste in authorized containers
- Determines, monitors, and verifies correct accumulation start dates for all hazardous waste accumulated at the facility
- Ensures the inspection of hazardous waste containers and accumulation areas
- Ensures the timely and proper disposal of hazardous and universal wastes
- Ensures the proper labeling of hazardous waste containers
- Maintains a record of completed hazardous waste manifest
- Maintains a notice of land disposal restriction form in an active file for 3 years
- Oversees facility's hazardous waste management program and compliance with all applicable laws and regulations
- Oversees completion of hazardous waste inspection checklists at assigned facility
- Reviews hazardous waste management handling, storage and disposal activities at assigned facility
- Attends required environmental compliance training
- Back-briefs Station Commander on environmental compliance laws and regulations and applicability to facility operations
- Submits work order requests as needed



- Ensures personnel has received proper hazardous waste training

D. Procedures

This section addresses the following topics:

- Identifying Hazardous Waste
- Counting Hazardous Waste and Determining Generator Status
- Accumulating Hazardous Waste/ Universal Waste
- Marking and Labeling Containers
- Hazardous Waste Turn-in
- Manifest Tracking System
- Weapons Cleaning Waste Management

This section also identifies specific procedures you will use to support the policies/goals of the hazardous waste management program. These procedures are associated with specific checklists, logs, or other compliance tools and are located at the end of this section.

Identifying Hazardous Waste

NJARNG activities generate a wide variety of waste streams ranging from hazardous (such as paint thinner) to the least hazardous (such as waste paper). Generally, NJARNG's waste streams fall into the 6 categories outlined in Table 5-1.

For a material to be a hazardous waste, it must a used or discarded material that can damage the environment and be harmful to health. If you are not sure whether a used or discarded material or chemical is a hazardous waste, you should contact CFMO-EMB for a determination.

Table 5-1. Types of Waste Streams

Type of Waste	Definition
Hazardous Waste [1]	A discarded solid, semi-solid, liquid, or contained gas that because of its quantity, concentration, or its physical, chemical, or infectious characteristics poses a present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed, or otherwise managed. Examples of potentially hazardous include unusable waste fuel, waste solvent, sandblasting residue, aerosol cans, and expired chemicals. These waste streams must be managed in accordance with all applicable federal and state hazardous waste management regulations.[1]
Universal Waste	These wastes include used fluorescent lights, mercury-containing thermostats, recyclable batteries, pesticides, consumer electronics, and oil-based paints that are defined as hazardous under Resource Conservation and Recovery Act (RCRA). Although hazardous, they are subject to a reduced set of hazardous waste management regulations.
Recyclable/ Reusable Materials	If they are recycled or reused, these materials are either excluded from hazardous waste regulations or subject to a reduced set.
Non-hazardous Waste	These are certain waste streams that are not regulated as hazardous under RCRA but may be regulated by other laws and pose a potential danger if improperly handled. These wastes include asbestos containing buildings materials (ACBM), used oil, oil spill cleanup materials, and Polychlorinated Biphenyls (PCBs) including old ballasts.
General Refuse	These waste streams are not regulated as hazardous under RCRA, nor do they pose an immediate threat. They may be thrown in the dumpster.
Process Waste Managed under Contract	These wastes generate in-process (e.g., sludge that accumulates in the oil/water separator) wastes. They remain in process until picked up by the contractor.

[1] Hazardous waste is a solid waste that is not specifically excluded from regulation and meets one of the following criteria: ignitable, corrosive, reactive, or toxic as measured by standard test methods or can be reasonably determined through generator knowledge; specifically listed in 40 CFR 261, Subpart D or NJAC 7:26.

Typical waste streams (hazardous as well as non-hazardous) managed at NJARNG VSQG facilities are listed on Table 5-2.

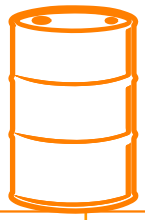


Table 5-2 Typical Waste Streams Found at VSQG NJARNG Facilities

Type of Waste	Waste Characterization	Container Used[1]
Alkaline Batteries (Non-rechargeable)	Non-Hazardous	General refuse
Consumer electronics	Universal Waste	Call CFMO-EMB. Dispose as directed
Corrosive Liquids, e.g., bleach, battery acid	Hazardous Waste	Closed Top 30 Gallon Metal Drum
Empty Aerosol Spray Cans	Recyclable Material	General refuse or recycle with metal scrap. **At JBMDL:** Puncture, drain to closed container, and recycle empty cans in closed top metal drums
Empty Paint Cans	Non-Hazardous (Solid Waste)	General refuse or recycle with metal scrap.
Expired Latex Paints	Non-Hazardous	Mix with paint hardening agent. General refuse.
Fluorescent Light Bulbs, Compact Fluorescent Lights (CFLs)	Universal Waste	Obtain box from State Supply for recycling or reuse box that bulbs came in. Label appropriately.
Mercury containing equipment, e.g., thermostats	Universal Waste	Call CFMO-EMB. Dispose as directed
Oil-Based Paints	Universal Waste	Call CFMO-EMB. Dispose as directed
Oil-Saturated Rags (Shop Rags Not Containing Solvents)	Non-Hazardous	Open Top 55 Gallon Metal Drum
Partially Full Aerosol Spray Cans	Hazardous Waste	Check with CFMO-EMB. Dispose as directed.
Pesticides	Universal Waste	Call CFMO-EMB. Dispose as directed.
Solvent Saturated Rugs	Hazardous Waste	Open Top 30 Gallon Metal Drum
Synthetic Brake Fluid	Hazardous Waste	Closed Top 30 Gallon Metal Drum
Used Antifreeze	Recyclable Material	Closed Top 55 Gallon Metal Drum or Used Antifreeze Collection Tank - 55 Gallon Drum
Used Automotive Batteries (Lead-Acid) Including Hawker	Recyclable Material	Call CFMO-EMB for pickup and testing. Do not store more than 50 used lead-acid batteries on location
Used Magnesium, Nickel-Cadmium, Mercury, Lithium Ion, Lithium sulfur dioxide (Non-Automotive Lead-Acid)	Universal Waste	Call CFMO –EMB for proper recycling containers. Special instructions based on the type of recycled battery will be provided.
Used Engine Oil, Transmission Fluid, Non-Synthetic Hydraulic Fluid	Recyclable Material	Closed top 55 Gallon Metal Drum or Used Oil Collection Tank

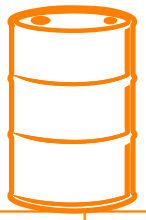
Used Fuels: Mixed Gasoline and Diesel	Hazardous Waste	Closed Top 30 Gallon Metal Drum
Used Oil Filters	Recyclable Material	Puncture, hot drain for 12 hours. Add used oil to used oil drum or tank. Recycle as scrap metal.
Used Spill Absorbent Containing Oil (Not Solvent)	Non-Hazardous	Open Top 55 Gallon Metal Drum
Weapons Cleaning Rags	Non-Hazardous	Closed metal container. Call CFMO-EMB. Dispose as directed.

[1] In this case, NJARNG has adopted the definition of RCRA empty in 40 CFR 261.7. A container is empty if all material has been removed that can be removed using the practices commonly employed to remove materials from that type of container, and either of the following are true: no more than one inch of residue remain on the bottom of the container; no more than three percent by weight of the total capacity of the container remains in the container (if the container is less than or equal to 110 gallons in size); or more than 0.3 percent by weight of the total capacity of the container remains in the container or inner liner (if the container is greater than 110 gallons in size). For a container that has held a compressed gas (e.g., spray paint), the container is empty when the pressure in the container approaches atmospheric.

Occasionally, a facility will find unidentified chemicals/materials left by other occupants, previous tenants or units. These chemicals/materials may include rusting drums or gallon containers or miscellaneous other containers. These chemicals/materials will need to be identified before disposal. Shop chiefs and/or armorers should inspect any unidentified materials and their containers for markings and call CFMO-EMB for assistance.
For typical hazardous wastes generated at NJARNG LQG facilities (JBMDL and Picatinny Arsenal), contact CFMO-EMB's Hazardous Waste Management personnel.

Universal Wastes (UWs) are a special category of hazardous wastes. They usually are generated in a wide variety of shops or activities, do not pose severe risks to the environment or human health, and can be recycled. There is special collection, labeling, and handling procedures that are required, but they are not as restrictive as procedures for other hazardous wastes. For example, UWs can normally be accumulated on-site for up to one year and can be stored on-site at a time without triggering more restrictive regulations. Note that UWs must be recycled (not landfilled or incinerated), and the generating facility may not "treat" (e.g., crush, dismantle the waste) prior to shipping it off-site.

UW in NJ are recyclable batteries, used fluorescent lights, mercury-containing thermostats, pesticides, consumer electronics, and oil-based paints. Recyclable batteries include Magnesium, Nickel-Cadmium, Mercury, Lithium Ion, and Lithium Sulfur Dioxide. Used fluorescent lights include all types of fluorescent lights as well as compact fluorescent lights. Consumer electronics means any appliance that includes circuitry. Consumer electronics includes the components and sub-assemblies that collectively make up the electronic products. Examples of consumer electronics include, but are not limited to, computers, printers, copiers, telefacsimiles, VCRs, stereos, televisions, and telecommunication devices.



Counting Hazardous Waste and Determining Generator Status

There are 3 categories of hazardous waste generators: VSQG, SQG, and LQGs. Generator status is determined by the quantity of hazardous waste generated by a facility per calendar month. See Table 5-3 below.

Table 5-3. Generator Status, Time Limits, and Quantity Limits

Generator Status	Haz. Waste Generated per Calendar Month (kg) [1]	Accumulation Time Limit	Accumulation Quantity Limit (kg) [3]
VSQG	No more than 100	None	1,000
SQG	Greater than 100 but less than 1,000	180 days [2]	6,000
LQG	Greater than 1,000	90 days	None

[1] 100 kg = 220 lbs = 1/2 drum; 1,000 kg = 2,200 lbs = 5 drums; 6,000 kg = 13,200 lbs = 30 drums.
[2] In some cases, 270 days. Call CFMO-EMB for guidance.
[3] Maximum amount of hazardous waste accumulated onsite at any one time.

Certain categories of hazardous waste do not have to be counted when determining your generator status. For example, hazardous waste managed under the Universal Waste regulations: recyclable batteries, oil-based paints, pesticides, used fluorescent lights, and consumer electronics as well as used oil and antifreeze are not counted.

Although hazardous waste generator status should be based on a month-to-month basis, for the purpose of enforcing the hazardous waste management regulations, the New Jersey Department of Environmental Protection (NJDEP) bases its generator status determination on the quantities of hazardous waste shipped offsite as documented on hazardous waste manifests.

Of course, the best way to minimize your generator status is to minimize the quantity of hazardous waste generated (see Chapter 11, Pollution Prevention). Try to generate no more than one 30-gallon drum per month. Once a 30-gallon drum of hazardous waste is full, it should be scheduled for disposal. By arranging for prompt disposal of a full 30-gallon hazardous waste drum, you avoid giving the appearance to NJDEP that you may be a larger generator than you really are. You should make sure that your yearly offsite shipments of hazardous waste as documented in the WASTE do not exceed 2,640 lbs. (exceeding the monthly average of 220 lbs. per calendar month over a 12-month period). Generators who exceed their accumulation quantity limit become regulated as the next level of generator. For example, VSQGs who accumulate more than 2,200 lbs. (about five drums) of hazardous waste become SQGs. Likewise; SQGs who accumulated more than 13,200 lbs. (about 30 drums) become LQGs.

If, due to unusual circumstances, your facility generates more than 30 gallons of hazardous wastes per month, contact CFMO-EMB for assistance.

Accumulating Hazardous Waste

Federal, state, and local regulation strictly control the generation and accumulation of hazardous waste; the following section provides guidance regarding the required inspections and log keeping for the management of hazardous waste.

Types of Accumulation Areas

Satellite Accumulation Points

These are areas where small containers (55-gallons or less) are used to accumulate hazardous waste at the point of generation. These accumulation points allow the accumulation of hazardous waste without the restraint of accumulation times. Satellite accumulation points (SAPs) are to be inspected daily for JBMDL and Picatinny.

Hazardous Waste Accumulation Areas (HWAA)

These are areas where containers of hazardous waste are placed for accumulation prior to being sent off-site. Table 5-3 depicts accumulation time limits. Containers in this area may have a 90-day (for LQGs) or a 180-day (for SQGs) accumulation time limit. VSQGs have no accumulation time limit. Determination of generator status can be done by contacting CFMO-EMB.

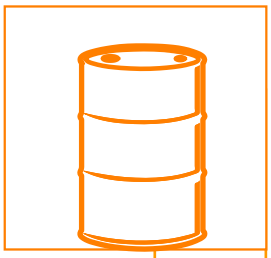
Containerizing Waste

Selecting the proper container to accumulate hazardous waste is extremely important. The container must be compatible with the type of hazardous waste placed in the container. For example, do not put corrosive waste streams in metal drums. The size of the container is also important and prevents a facility from exceeding their VSQG status. Containers must be in good condition with no major dents, no leaks in wall and head seams, no wall or head punctures, any rusted areas, and reusable container lids and caps.

Whenever practical, reuse empty containers that once stored degreasing solvents, anti-freeze, hydraulic fluids, engine lube oils, and brake fluids. These containers may be used to accumulate the spent material generated from the original product. For example, return spent degreasing solvent back into the empty container in which it was delivered. Make sure that the labels on any reused container have been changed to reflect the chemicals or materials currently stored in it.

If the facility does not have the proper containers for accumulating hazardous wastes, neighboring NJARNG maintenance shops may have extras they can spare. Facility personnel may contact the United States Property & Fiscal Officer (USP&FO) and request containers for additional hazardous waste accumulation by submitting a Department of the Army (DA) Form 2765-1.

Only certain containers are authorized for waste accumulation.



Approved containers are:

- 30 Gallon Drums for Hazardous Waste Only
  - Liquids should be stored in closed head drums
  - Solids should be stored in open head drums
- 55 Gallon Drums for Non-Hazardous Waste Only, e.g., Used Antifreeze, Used Oils
- Wooden Pallets for Lead-Acid Batteries
- Cardboard boxes for Used Fluorescent Light Tubes or Compact Fluorescent Lights
- Plastic Containers from CFMO-EMB for Recyclable Batteries or as otherwise directed
- Containers as directed by CFMO-EMB for Mercury- Containing Devices
- Original Labeled Paint Cans/Containers for Oil-Based Paints
- Wooden Pallet or Other Plastic Lined Container for Consumer Electronics Table 5-4 lists approved containers

Table 5-4. List of Containers

Hazardous Waste	NSN	Capacity
Flammable Solids	8110-00-254-5716	12 gal.
Flammable Solids	8110-00-366-6809	30 gal.
Flammable Liquids	8110-00-282-2520	5 gal.
Flammable Liquids 30-Gallon Non-Removable-Head Drum, Steel	8110-01-447-2937	30 gal.
Brake Fluids	8110-00-282-2520	55 gal.
Cleaning Compound Solvents 30-Gallon Non-Removable-Head Drum, Steel	8110-01-447-2937	30 gal.
Contaminated Heating Oil #2 30-Gallon Non-Removable-Head Drum, Steel	8110-01-447-2937	30 gal.55 gallon
Contaminated Diesel Fuel 30-Gallon Non-Removable-Head Drum, Steel	8110-01-447-2937	30 gal.55 gallon
Corrosives	8100-01-150-0677	30 gal.
Overpack Drum 85-gallon Removable Head Recovery Drum	8110-01-101-4056	85 gal.
Packing Material	5640-00-801-4176	Bag, 4 cu. ft.
Contaminated Heating Oil #2	Same as Flammable Liquids	55 gal.
Contaminated Diesel Fuel	Same as Flammable Liquids	55 gal.
Overpack Drum	8110-01-101-4056	85 gal.
Packing Material	5640-00-801-4176	Bag, 4 cu. ft.

Only place liquid waste streams in closed top drums (drums with 2 bung ports). Place solid wastes in open top drums. These items are requisitioned by the individual facilities and not CFMO-EMB.

Containerizing Used Batteries

Used Battery Storage Requirements – General

- An activity storing used and unused batteries MUST provide fire suppression equipment.
- Batteries should be kept cool and dry, and away from open flame, heat and combustibles, in well ventilated areas with temperatures not exceeding 130F (54C). Refrigeration or air conditioning is not required.
- DO NOT smoke or eat in battery storage areas. DO NOT wear contact lenses in battery storage areas.
- Store batteries separately from other hazardous materials.
- DO NOT package any battery if it is hot or warm. Package batteries only when they are cool to the touch.
- DO NOT heat, incinerate, crush, puncture, or mutilate batteries. Exercise care in handling batteries and containers of batteries to prevent damage.
- Separate the batteries by type before turning them in.
- DO NOT store used batteries for more than one year.

Used Battery Packaging Requirements – General

Small recyclable used batteries must be provided with an effective means of preventing external short circuits. Tape the exposed contacts (preferably with electrical tape) or place the used batteries in a small individual plastic bag. Used battery containers may be requested from CFMO-EMB.

DO NOT seal batteries in gas tight plastic bags, drums), or any non-vented container. Damaged batteries should not be packaged with undamaged batteries. Damaged batteries with cells that have ruptured, or otherwise have sharp edges, should first be placed in a sealable plastic bag.

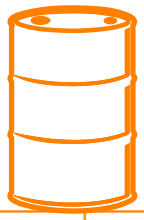
Personal protective equipment (PPE) MUST be used when handling batteries that show signs of leaking, bulging, swelling or deformity, or handling corrosive electrolyte. Check the Safety Data Sheet for specific information on PPE for each battery type.

Packaging Requirements - Used Lead Acid Batteries

Lead acid batteries contain caustic electrolyte (H2SO4 – sulfuric acid). If H2SO4 electrolyte spills or leaks, DO NOT touch the spilled material. Stop the leak if you can do it without risk. Spread sand or other noncombustible material, and then flush the area with water.

DO NOT use water on fires involving H2SO4. H2SO4 is highly reactive and can react with finely divided combustible materials (e.g. sawdust) on contact.

DO NOT neutralize battery acid with vinegar or any other acidic solutions if it gets on your skin. Neutralization will do more harm than good, as it will trap caustic under the skin, preventing it from coming out.



If you accidentally contact battery acid, follow these procedures:

- Flush with copious amounts of water.
- If the battery electrolyte gets into your eyes, it can cause severe damage and/or blindness. Flush with water for at least 15 minutes. Seek immediate medical attention! Assistance is necessary for effective eye irrigation, as the eyelids go into spasms and remain shut making it difficult for a person to flush the eyes without assistance.
- Obtain immediate medical attention.

Used Lead Acid batteries may be secured to pallets. Drum(s) are NOT approved.

- Batteries which are placed on pallets must be securely fastened using non-metallic strapping.
- Height of the palletized unit (including batteries, strapping and pallet) must not exceed 1 1/2 times the width of the pallet and may not contain less than one complete layer or more than two layers of batteries per unit.
- The palletized unit must be able to support twice its own weight without damage to batteries, pallet or strapping.
- Battery terminals must not be relied upon to support any weight from batteries or units stacked above them.
- Package and stack vented batteries in an upright position. DO NOT stack batteries on their sides, in order to prevent unintentional draining.
- If the palletized batteries cannot be protected from exposure to the weather (rain, snow, etc.), the unit must be protected with plastic sheeting.

Do not store more than 15 used lead acid batteries onsite at maintenance shops except for facilities at JBMDL which provide battery testing.

Packaging Requirements - Used Lithium Batteries

Li-SO2 batteries contain pressurized SO2 gas. SO2 gas has a sharp suffocating odor and is a corrosive and poisonous material. It may irritate the eyes, nose, throat, and upper respiratory tract. Personnel can detect SO2 at 1 part per million (ppm) concentration, and concentrations above 10 ppm are dangerous. The gas has a pungent odor and is highly toxic.

If Li-SO2 batteries with the built-in Complete Discharge Device (CDD), show signs of damage prior to discharge; complete deactivation cannot be ensured. If the battery shows evidence of overheating during use (too hot to hold, melted plastic case, vented cell, etc.); complete discharge similarly cannot be ensured. If complete deactivation cannot be completed, contact CFMO-EMB for assistance. If you hear a hissing sound (battery venting), or smell irritating gas, LEAVE THE AREA IMMEDIATELY until any smell or signs of leaking gas have been cleared from the area.

For Lithium Sulfur Dioxide batteries with a CDD, the discharge procedure MUST be followed prior to disposal:

Step 1: Activation of the CDD is to be done by personnel aware of the correct procedures and designated by their supervisor to complete the operation.

Step 2: Place the batteries to be discharged in a ventilated area that is away from high occupancy areas that can be secured to prevent inadvertent entry.

Step 3: Mark all batteries with the date that the CDD is activated with a grease pencil or marker pen.

Step 4: Remove the label covering the CDD and activate the switch for the CDD according to the instructions on the label.

Step 5: Once the CDD has been activated, place the batteries on the floor or on a shelf separated at least 2 inches on all sides. Allow the batteries to sit for at least 5 days. Li-SO2 batteries will get warm/hot during discharge with a built-in CDD, and the battery jacket may deform. This does not constitute a failure of the discharge process.

Step 6: After 5 days, providing there is no indication of a venting, contact CFMO-EMB for disposal.

Step 7: If any of the batteries do vent, allow the area to clear until the odor is dissipated. Call CFMO-EMB for assistance.

Handling and Containerizing Broken Fluorescent Lamps

Fluorescent light bulbs and compact fluorescent light bulbs contain a small amount of mercury sealed within the glass tubing. When a fluorescent bulb breaks, some of this mercury is released as mercury vapor and powder. Procedures to clean up a broken bulb are:

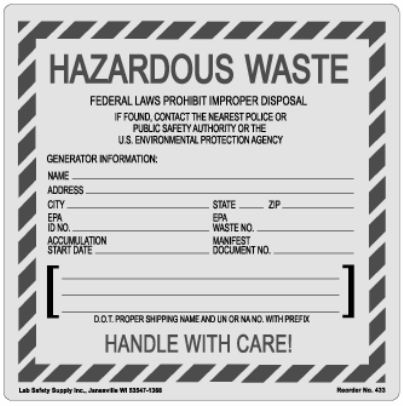
- Keep the area well ventilated.
- Wear latex gloves.
- Carefully scoop up glass fragments and powder using stiff paper or cardboard.
- Use sticky tape, such as duct tape, to pick up any remaining small glass fragments and powder.
- Wipe the area clean with damp paper towels or disposable wet wipes.
- Place cleanup debris and used paper/cardboard/tape/wipes in a sealable container or plastic bag.
- DO NOT use a vacuum.
- Place sealed container /bag in used fluorescent lamp recycling container. Wash your hands with soap and water.

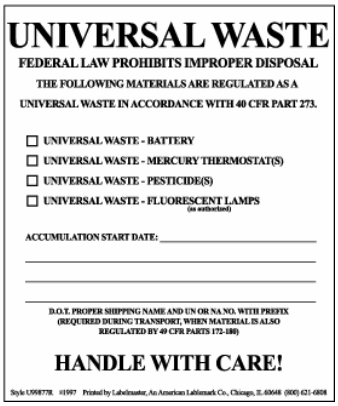
For additional information, please refer to Chapter 15 ‘Fluorescent Light Tubes and Ballasts’.

Marking and Labeling Containers

This section contains procedures for properly marking a container. All containers used to accumulate HW and Non-RCRA Regulated Waste must be marked IAW this section. All containers used to accumulate UW in any location at a facility must be marked IAW this section.

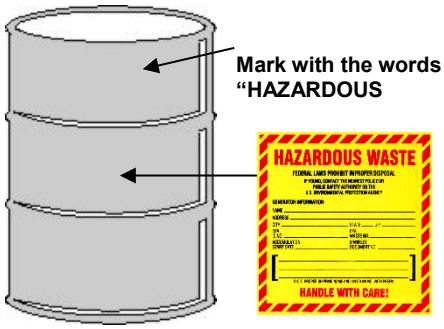
First select the appropriate marking label for your waste (see below). Note that marking labels may look slightly different, depending on the manufacturer.





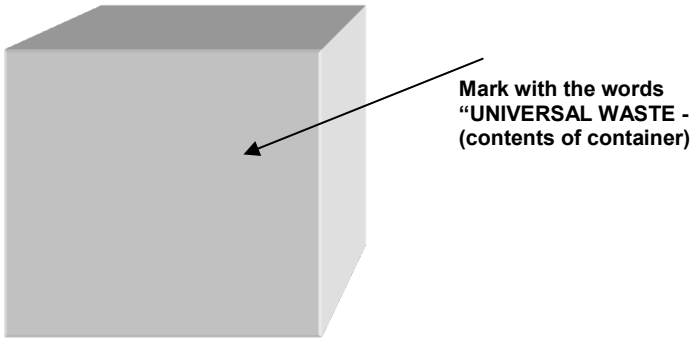
Containers holding hazardous waste should be properly marked and labeled in accordance with Figure 5-1.

Figure 5-1. Hazardous Waste Marking and Labeling



Containers holding universal waste should be properly marked and labeled in accordance with Figure 5-2.

Figure 5-2. Universal Waste Marking and Labeling



Use an indelible ink marker to complete the following information, if there is a place for it, on the marking label.

- The name, street address, city, state, and zip code of the generator.
- Your Environmental Protection Agency (EPA) ID number.
- Identifying information, e.g., Used Oil, Used Antifreeze, Gasoline/Diesel Mix, Universal Waste – Used Fluorescent Lights

Attach the marking label securely to the side of the container. The waste transporter/contractor will apply the Department of Transportation (DOT) hazard class labels to your containers prior to transportation of your waste.

For UW, Mark containers of UW with the date when waste is first placed in the container or discarded. A start date is required as soon as universal waste is placed in the container or discarded, regardless of where it is stored. UW must be recycled of within one year from the start date.

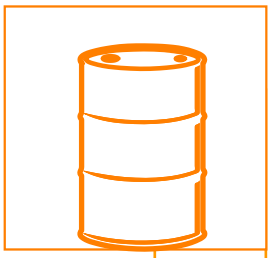
All containers – HW and UW – must be closed between uses. Replace any covers, lids or bungs on containers. Never leave the container open.

Hazardous Waste Turn-in

Waste turn-in documents must be prepared and submitted through WASTE. Do not wait to accumulate a group of drums (two or more) before submitting turn-in documents. Prepare turn-in documents as follows:

Step 1. Obtain the Waste Profile Sheet with the technical information required for prepare turn-in documents and drum labels.

Step 2. Add the Waste Profile Number to each DA Form 2765-1 document in the Publication Data Block. The Waste Profile Number is located in the upper right-hand corner of the waste profile sheet (HQ DRMS FORM 0120). Example: Profile #NJARNG-007.



Step 3. Add the waste container size (e.g., 55 gallons, 40 gallons, etc.) and approximate total weight in the Publication Data Block of each DA Form 2765-1.

Step 4. The individual preparing waste turn-in documents must place the following statement on to the Hand Receipt (DA Form 2062) and sign the turn-in document:

> "I CERTIFY THAT THE ABOVE ITEM(S) HAS/HAVE BEEN INSPECTED AND IS/ARE PROPERLY CLASSIFIED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE DOT, EPA, AND NJDEP."

Self-transportation of hazardous waste without the expressed written permission of CFMO-EMB is prohibited. Public road restrictions apply. Any questions are to be directed to CFMO-EMB.

In addition to the above, hazardous waste managers will maintain copies of all waste disposal requests submitted to the USP&FO. Facility managers must maintain a 60-day suspense file for all waste turn-in documents. If managers have not been contacted by the Defense Reutilization and Marketing Office (DRMO) within 60 days of submittal of turn-in documents, they must notify the USP&FO at commercial telephone number (609) 530-6748/6872 and request the status of turn-ins.

If you have any waste that is not described in your set of profile sheets, contact CFMO-EMB for guidance before preparing turn-in documents.

Manifest Tracking

Manifests are tracked from the point of generation through final disposal. Throughout the entire process, the generator is responsible for proper storage, transportation and disposal of hazardous waste. Manifests are required for all hazardous waste transported off DMAVA property and onto public property or roadways.

The generator must ensure that all data recorded on the manifest is legible and correct. See Table 5-5 for EPA ID numbers.

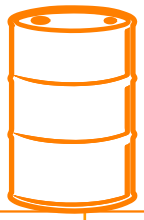
Table 5-5. NJARNG Facility EPA ID Numbers

Facility	ID Number	Facility	ID Number
Atlantic City	NJD980790729	Riverdale	NJD980791016
Bordentown FMS	NJD980790737	Sea Girt	NJD980791024
Cape May	NJD980790786	Somerset	NJD980791032
Cherry Hill	NJD980790794	Teaneck	NJD980791040
Dover	NJD980790802	Toms River	NJD980791057
Ft. Dix FMS	NJD986612380	Teaneck	NJD980791040
Flemington	NJD980790844	Vineland	NJD980791073
Freehold	NJD980790869	Washington	NJD980791081
Hackettstown	NJD980790877	Westfield	NJD980791099
Hammonton	NJD980790885	West Orange CSMS	NJD980791115
Jersey City	NJD980790893	Woodbridge	NJD980791123
Lawrenceville	NJD980790901	Woodbury	NJD980791131
Lodi	NJD980790919	Picatinny AASF	NJ4210093577
Morristown	NJD980790935	JB MDL T3BL	NJD980791149
Mt. Holly	NJD980790943	USP&FO	NJD980769889
Newark	NJD980790950		

Upon completion of the manifest, submit the "Generator State's Copy" and "Disposer State's Copy" to CFMO-EMB. Retain the "Generator Copy" on file at the facility. Within 30 days, the facility should receive a copy of the signed manifest from the treatment, storage and disposal facility (TSDF). Attach the signed manifest to the "Generator Copy." If the signed manifest copy is not received within 30 days of the shipment, contact the TSDF listed on the manifest. If the problem is not resolved immediately, contact CFMO-EMB.

Unknown Waste/ Determination

Sometimes there will be situations where a waste is not specifically identified in the above tables, or the particular constituents of the waste may be unknown such as in the case of Oil Water Separator Sludge, Parts Washer residue, Oily rags etc. Where this is the case the Generator should contact the Environmental Office (CFMO-EMB) to determine the type of waste. This determination will be made using product knowledge or Toxic Characteristic Leaching Procedure (TCLP) test results from similar samples. Test Results will be maintained in the Document Control Library.



WEEKLY HAZARDOUS WASTE INSPECTION LOG

Check hazardous waste accumulation areas weekly. Use this checklist as a guide for completing your inspection. When finished, sign and date the form in the space provided. ***Should you note a deficiency (next page), forward a copy of the form to CFMO-EMB.***

Facility _____ Yr _____

A.	Is holding area marked as such?	Yes _____	No _____
B.	Is holding area at least 50 feet from property line?	Yes _____	No _____
C.	Are containers located in designated storage areas properly labeled?	Yes _____	No _____
D.	Are outdoor containers in good condition (no rust, dents, gaskets in place, etc.)?	Yes _____	No _____
E.	Containers compatible with waste stored?	Yes _____	No _____
F.	Are hazardous waste labels visible and legible?	Yes _____	No _____
G.	Are containers in all areas kept securely closed when not in use?	Yes _____	No _____
H.	Is waste stream in satellite accumulation 55 gallons or less?	Yes _____	No _____
I.	Are satellite containers properly labeled?	Yes _____	No _____
J.	Are satellite containers in good condition (no rust, dents, gaskets in place, etc.)?	Yes _____	No _____
K.	Are all containers located away from ignition source?	Yes _____	No _____
L.	Are satellite containers moved to designated storage area within three days of being filled?	Yes _____	No _____

Initial weekly inspections in spaces provided below.

Month	Week 1	Week 2	Week 3	Week 4	Week 5
January					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November					
December					

Deficiency Comments:

_____

_____

Joint Base Maguire-Dix-Lakehurst (JBMDL)

At JBMDL, any jet fuel issues, handling, and storing wastes shall follow the requirements for an LQG. In addition, hazardous waste training shall be provided specifically for JBMDL.

E. Training

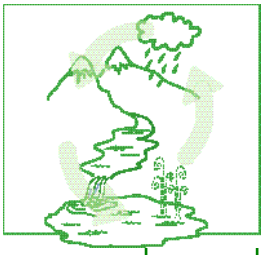
Appropriate CFMO-CMB, CFMO-RPB, CFMO-FMB, CFMO-PPB, Maintenance Shop, Armory, and Unit personnel shall attend the General Environmental Awareness training annually. JBMDL hazardous waste personnel shall attend their own specialized training. Unit Environmental Compliance Officers must attend the Hazardous Waste Operations, Communication, and Spill Response training within 6 months of their employment and annually thereafter. More information about training requirements can be seen in the Introduction chapter on pages I-4 through I-6.

Hazardous waste training ensures that personnel can effectively manage hazardous waste generated at the facility. The CFMO-EMB coordinates all required training regarding the management and handling of hazardous waste. Personnel must successfully complete the requirements of 40 CFR 265.16. Minimum training program will include the following:

- Complete classroom or on-the-job training related to the assigned duties at the facility regarding hazardous waste.
- Complete training in hazardous waste management procedures regarding contingency plan implementation related to the operator's position including:
    - Procedures for using, inspecting, repairing and replacing emergency and monitoring equipment.
    - Communications and alarm systems.
    - Response for fires or explosions.
    - Response to releases or spills to the environment.
    - Shutdown of operations.

F. Recordkeeping

Maintain all turn-in documents and inspection logs for at least 3 years. Manifests must be kept indefinitely.



Chapter 6
Natural Resources Management

This chapter discusses the New Jersey Army National Guard (NJARNG)'s policies/goals, procedures, and compliance tools used to support its Natural Resources Management Program. For any correspondence with the Natural Resources Manager, refer to page I-7 of the Introduction of the Desktop Guide.

A. Program Overview

Starting in 1998, the NJARNG initiated statewide Planning Level Surveys (PLS) for rare species, wetlands, and other sensitive natural habitats that are protected by federal and state regulations. Geographic Information System (GIS) data is generated as a deliverable for all PLSs. CFMO-EMB can be consulted for a summary and interpretation of the following survey documents:

- 2019 Vernal Pool Habitat Assessment Survey
- 2019 Pine Barrens Tree Frog Presence/Absence Survey at NJARNG Installations
- 2021 Menlo Park Veterans Home Wetlands and Rare Species Planning Level Survey
- 2021 Paramus Veterans Home Wetland and Rare Species Survey
- 2021 Vineland Veterans Home Wetland and Rare Species Survey
- 2021 Landscaping Plan Along Stockton Lake Bulkhead and Walking Path at the Sea Girt NGTC
- 2021-2022 Wood Turtle Survey Results Report

The PLSs are intended to serve as the foundation for future planning and natural resources management at NJARNG installations, both at individual and collective levels. These PLS are updated at least once every ten years in accordance with National Guard Bureau guidance. The identification of accurate information about existing natural resources is necessary to ensure compliance with various requirements and to ensure effective management and stewardship of NJARNG lands.

References

- Soil Erosion and Sediment Control (NJSA 4:24-39 to -55)
- Waterfront and Harbor Facilities (NJSA 12:5-1 to -11)
- Endangered Plant Species List Act (NJSA 13:1B-15.151 to -15.158)
- Open Lands Management Act (NJSA 13:1B-15.133 to -15.150)
- Recognition of Department of Conservation and Economic Development (NJSA 13:1D-1 to -19)
- Construction Permits (NJSA 13:1D-29 to -34)
- Environmental Aid Act (NJSA 13:1H-1 to -7)
- Aid for Urban Environmental Concerns Act (NJSA 13:1H-8 to –11)
- State Park and Forestry Resources Act (NJSA 13:1L-1 to -25)
- NJARNG Natural Resources Planning Level Survey Report, November 1999

- Sea Girt Integrated Natural Resources Management Plan 2006-2010
- 2004 Seabeach Amaranth Memorandum
- 2005 Invasive Plant Survey Report and Management Plan or 25 NJANRG Installations
- 2018 Rare Species Report
- 2019-2020 Emerald Ash Borer and Spotted Lanternfly Survey Results and Recommended Best Management Practices
- 2020-2021 Rare Species Report
- Sea Girt Integrated Natural Resources Management Plan 2018-2022
- 2007 Wetland Delineation Report
- 2016 Wetland Delineation Report
- Wetland Permits (40 CFR 230 through 233)
- Natural Resources – Land, Forest, and Wildlife Management (AR 200-3)
- NGB-ARE Memorandum, New Inventory of installations that Require an Integrated Natural Resources Management Plan Based on Army Criteria, 23 April 2002
- Invasive Species (EO 13112)
- Protection of Wetlands (EO 11990)
- Floodplains Management (EO 11988)

B. Compliance Thresholds

Project proponents should engage the CFMO-EMB early in the planning stages to identify ways to mitigate impacts to natural resources such as the need to conduct clearing activities in certain times of year, obtaining permits to work in wetland and wetland buffer areas, and permits at facilities in the New Jersey Coastal Zone. Work conducted at the following facilities may require various New Jersey Department of Environmental Protection (NJDEP) land use permits.

Table 6-1. Facilities Natural Resources Information

Installation Name	Wetlands Onsite?	Within Coastal Zone? (Y/N)	Within the Pinelands? (Y/N)	Within the Highlands? (Y/N)	Within the Delaware and Raritan Canal? (Y/N)
Atlantic City	0 acres	Y	N	N	N
Bordentown	0.3 acres	N	N	N	N
Cape May	10.87 acres	Y	N	N	N
Cherry Hill	3.56 acres	N	N	N	N
Dover	2.93 acres	N	N	Y	N
Flemington	2.07 acres	N	N	N	Y
Joint Base MDL	2.82 acres	N	Y	N	N
Hackettstown	0.16 acres	N	N	Y	N
Hammonton	3.72 acres	N	Y	N	N

Korean War Memorial	0 acres	Y	N	N	N
Lakehurst AASF	0 acres	Y	Y	N	N
Lakehurst CLTF	0 acres	Y	Y	N	N
Lawrenceville	0.7 acres	N	N	N	Y
Morristown	4.23 acres	N	N	Y	N
Picatinny	0.01 acres	N	N	Y	N
Princeton	1.03 acres	N	N	N	N
Riverdale	0 acres	N	N	Y	N
Sea Girt NGTC	5.08 acres	Y	N	N	N
Toms River	6.84 acres	Y	N	N	N
Veterans Haven North	0 acres	N	N	Y	N
Veterans Haven South	0 acres	N	Y	N	N
Vietnam War Memorial	0 acres	N	Y	N	N
Vineland	0.08 acres	N	N	N	N
Warren Grove	0 acres	N	Y	N	N
Washington	0 acres	N	N	Y	N
Westfield	0.07 acres	N	N	N	N
West Orange	0.9 acres	N	N	N	N
Woodbury	0 acres	N	N	N	Y
Woodstown	0.06 acres	N	N	N	Y

In special cases, PLS may lead to the preparation of site specific Integrated Natural Resources Management Plan (INRMP), such as was done at the Sea Girt National Guard Training Center, or other project specific natural resource permits such as wetlands and/or coastal zone permits. Facility-level personnel are not responsible for preparing INRMPs and/or permit applications. CFMO-EMB will facilitate developing any INRMPs and/or permit applications. See Section C below for facility-level responsibilities.

United States Fish and Wildlife Service requires federal or state entities that use federal funding to consult with them in accordance with Section 7 of the US Endangered Species Act. The intent of consultation is to identify mitigation or protection measures for listed species and their habitats that may occur at a site and may be impacted during the execution of a project or military training activity.

All facilities are subject to Section 7 consultation as part of the National Environmental Policy Act (NEPA) process. Facility-level personnel are not responsible for conducting Section 7 consultation. The proponent is required to notify CFMO-EMB during the initial planning of any construction projects and/or training activities at their installation. CFMO-EMB will obtain the

permits and conduct the Section 7 consultation and relay any mitigation or protection requirements to the facility level personnel for them to implement.

More information regarding the NEPA process can be found in Chapter 7 of this Desktop Guide. Also, proponents are encouraged to review the timeline schedule (Appendix E) so timelines to obtain permits and conduct NEPA analysis and Section 7 consultation can be worked into a project's implementation schedule.

C. Responsibilities

TAG

- Ensures Department of Military and Veterans Affairs (DMAVA) staff complies with all federal and state laws and regulations regarding natural resources protection.

Public Affairs Office

- Serves as DMAVA liaison to the public, media and government agencies.
- Establishes a public affairs program when required.
- Provides public affairs guidance in planned activities.
- Is the DMAVA point of contact (POC) for media inquiries.

CFMO-EMB

- Budgets for and conducts PLSs on a recurring basis to keep them updated.
- Reviews PLS for presence or absence of rare species, wetlands, and other sensitive natural habitats that are protected by federal and state regulations.
- Assists action proponents in the development of alternatives to proposed projects in order to minimize or avoid adverse environmental impacts and/or negate the need to obtain a natural resource permit from state or federal regulators.
- If needed, after reviewing the PLS, determines the level of additional study and evaluation needed to address known or potential impacts.
- Assists CFMO-CMB, CFMO-FMB, and action proponents in hiring consultants to perform additional studies and obtaining natural resources land use permits.
- Conduct Section 7 consultations and relay any mitigation or protection requirements to the facility level personnel for them to implement.
- If required, develops an INRMP for NJARNG installations.

Action Proponents and CFMO-CMB

- Coordinates environmental reviews with CFMO-EMB early in the planning process for any design or construction project.
- Submits review documentation (e.g. Requests for Information's, change orders, 420, 13-90/91s, project manuals, scopes of works, etc.) to CFMO-EMB for concurrence or non-concurrence.
- For projects that may impact natural resources, ensures that engineering firms design projects that avoid impacts, includes mitigation measures such as the need to conduct

clearing activities in certain times of year, or obtain various state and federal landuse permits such as but not limited to, wetland and wetland buffer areas, the New Jersey Coastal Zone, and the New Jersey Pinelands.
- Ensures permit requirements and mitigation measures are incorporated in design and construction documents.
- Implements protection measures and ensures permit requirements are met.

CFMO-PPB

- Initiates 13-90/91 and 420 documents and coordinates with CFMO-EMB early in the planning stages for any design or construction project, master plan, and/or real property development plan updates.

CFMO-FMB

- Initiates environmental reviews early in the planning process for any self-help project
- Submits review documentation (e.g. Requests for Information's, change orders, 420, 13-90/91s, project manuals, scopes of works, etc.) to CFMO-EMB for concurrence or non-concurrence.
- Ensures permit requirements and mitigation measures are incorporated into the project's implementation and contract documents (e.g. Scope of Work, change orders, proposals, etc.) and coordinate with CFMO-EMB to do inspections when required.
- Implements protection measures and ensures permit requirements are met.

Armorer:

- Complies with any applicable INRMP requirements and/or state or federal natural resources management law or regulation.
- Ensures that personnel are familiar and can recognize endangered and/or threatened species that may be encountered during training.

CFMO-RPB

- Engages CFMO-EMB early in the planning stages for any master plan and/or real property development plan updates.

Maintenance Shop/Armory/Unit

- Complies with any applicable INRMP requirements and/or state or federal natural resources management law or regulation.
- Ensures that personnel are familiar and can recognize endangered and/or threatened species that may be encountered during training.
- If applicable, training shall be provided by CFMO-EMB to personnel to familiarize themselves with threatened or endangered species that are present at their site. Such personnel shall ensure that environmental consideration is given to any actions that might affect the environment including:
    - Unit training activities

  - Installation restoration
  - New installation construction
- Real property transactions.
- Routine property maintenance.
- Engages CFMO-EMB early in the planning stages for any unit training activities on site.

D. Procedures

Action proponents, CFMO-CMB, CFMO-PPB, and CFMO-RPB should familiarize themselves with the installation fact sheets (Appendix D) and NEPA documents (e.g. environmental assessment, rec and check, etc.) as they provide an overview of the natural resources at their facilities. If a proposed project or training activity appears to impact any site level natural resources, contact CFMO-EMB early in the planning stages.

An INRMP was created for the Sea Girt National Guard Training Center (NGTC) in 2007 due to the presence of nesting Piping Plovers (federally threatened), Least Terns (state endangered), and Seabeach Amaranth (federally threatened). The INRMP has been updated every 5 years. The most current edition was created in 2018. The Sea Girt NGTC INRMP documents the policies, practices, and desired future direction of NJARNG's natural resource programs that are consistent with military training and use at Sea Girt NGTC. The INRMP consists of the following management areas: land and watershed, fish and wildlife, rare species, outdoor recreation, and information.

Land and watershed management consists of coastal zone management, erosion and sediment control, stormwater management, wetlands management, shoreline management, and invasive plant management. Projects related to these topics include routine mowing to suppress invasive or noxious plants and removing invasive plant species when discovered. In addition to these ongoing projects, there is limited transportation of soil to prevent the spread of invasive species and there is a plan that non-native plantings will eventually be phased out where feasible.

Fish and wildlife management consists of habitat management, wildlife management, nuisance wildlife management, fisheries management, and natural resources law enforcement. Projects related to these topics include mosquito sampling at the freshwater wetlands to monitor the Zika virus and nuisance species management projects. The priority target of nuisance species management has been the Canadian goose. The facilities management staff have used several techniques such as decoys, vehicle flushing, reproductive controls, and hazing by trained dogs or laser to discourage Canada geese from using portions of the installation. In addition, the feeding of Canadian geese is strictly prohibited at the installation.

Rare species management consists of conserving listed species in accordance with the Endangered Species Act (ESA), Endangered Species Recovery Plans, US Army regulations and guidance, and approved site-specific management plans. Majority of the rare species found at Sea Girt NGTC reside in beach habitats. Beach management is pertinent to properly manage

beach access, beach use, rare species protection areas, pedestrian traffic and pets, vehicle use, beach raking, sand scraping, and aviation operations. Most of the projects related to rare species management involve rare species monitoring and data sharing, predator control, dune and vegetation management, and environmental awareness training. Specifically, the rare species found at Sea Girt NGTC include seabeach amaranth, piping plover, osprey, seabeach knotweed, and least tern. NJDMAVA works cooperatively with USFWS and NJDEP-ENSP to monitor and manage listed species at the beach since 2000. On-site protection measures are also given to the piping plover, seabeach amaranth, and any other listed species found.

These protection measures are often in the form of protective fencing to establish a protection area. In 2001, the Northern Protection Area (NPA) was established to protect rare species habitat and minimize human disturbance. The Southern Protection Area (SPA) was established in 2005 for the same purpose. In addition to rare species management, there is a "no rake zone" from March 15 through December 1 each year to protect potential unfledged chicks, and there is a 100-meter vehicle buffer around the NPA when piping plover or least tern nests or unfledged chicks are present. In addition, predators are subject to predator surveys and predator control events.

Representatives from Sea Girt NGTC, CFMO-EMB, USFWS, NJDEP-ENSP and designated biological consultants hold annual meetings or conference calls in February to review and coordinate monitoring and management activities planned for the upcoming season. At this time, issues from previous seasons are discussed and protocol and management improvements are considered.

Outdoor recreation management addresses consumptive and non-consumptive natural resources-based recreation. Project management areas pertaining to outdoor recreation management are access for outdoor recreation and outdoor recreation areas and uses.
More information about conservation projects and overall project goals can be found in the 2019 Sea Girt INRMP.

E. Training

Appropriate CFMO-CMB, CFMO-PPB, CFMO-FMB, Maintenance Shop, Armory, and Unit personnel shall attend the General Environmental Awareness training annually. CFMO-EMB must also attend various conferences and training classes each year.

Annual briefs regarding protection measures listed in the INRMP are presented to tenants and facilities staff are presented at Sea Girt NGTC each year. Borough of Sea Girt and Manasquan are invited to attend this yearly meeting. More information about training requirements can be seen in the Introduction chapter on pages I-4 through I-6.

F. Recordkeeping

The PLSs document where sensitive site level natural resources are present at each site and offer recommendations to conserve those natural resources. The NEPA memorandums provide a brief overview of conservation measures and activities that can or cannot be done at a site. An annual report is generated documenting projects implemented under the INRMP. Additional natural resources management documents can be requested from CFMO-EMB.

Chapter 7
National Environmental Policy Act (NEPA)

This chapter discusses the New Jersey Army National Guard (NJARNG)'s policies/goals, procedures, and compliance tools used to support its National Environmental Policy Act (NEPA) Program. For any correspondence relating to NEPA, refer to page I-7 of the Introduction of the Desktop Guide.

A. Program Overview

NEPA contains "action forcing provisions" that require federal agencies to consider the environmental impacts of their actions before they are implemented, document those considerations, and involve the public in their planning process. NEPA is triggered when Federal finances are spent, or a Federal Nexus is created. The NEPA process includes public notification and participation for projects/activities with significant impacts on the environment. An overview of the NEPA process is presented in Figure 7-1.

NEPA requires NJARNG decision makers to analyze the environmental effects of proposed programs, projects, and actions before initiating them. All actions must be reviewed to determine the potential for impacts to human and environmental health. The NEPA process will assist the decision maker in selecting a preferred course of action. It provides the relevant background information and subsequent analyses of the proposal's positive and negative environmental effects. CFMO-EMB codes Status Tool for the Environmental Program (STEP) projects for Environmental Assessment (EA) and Environmental Impact Statement (EIS).

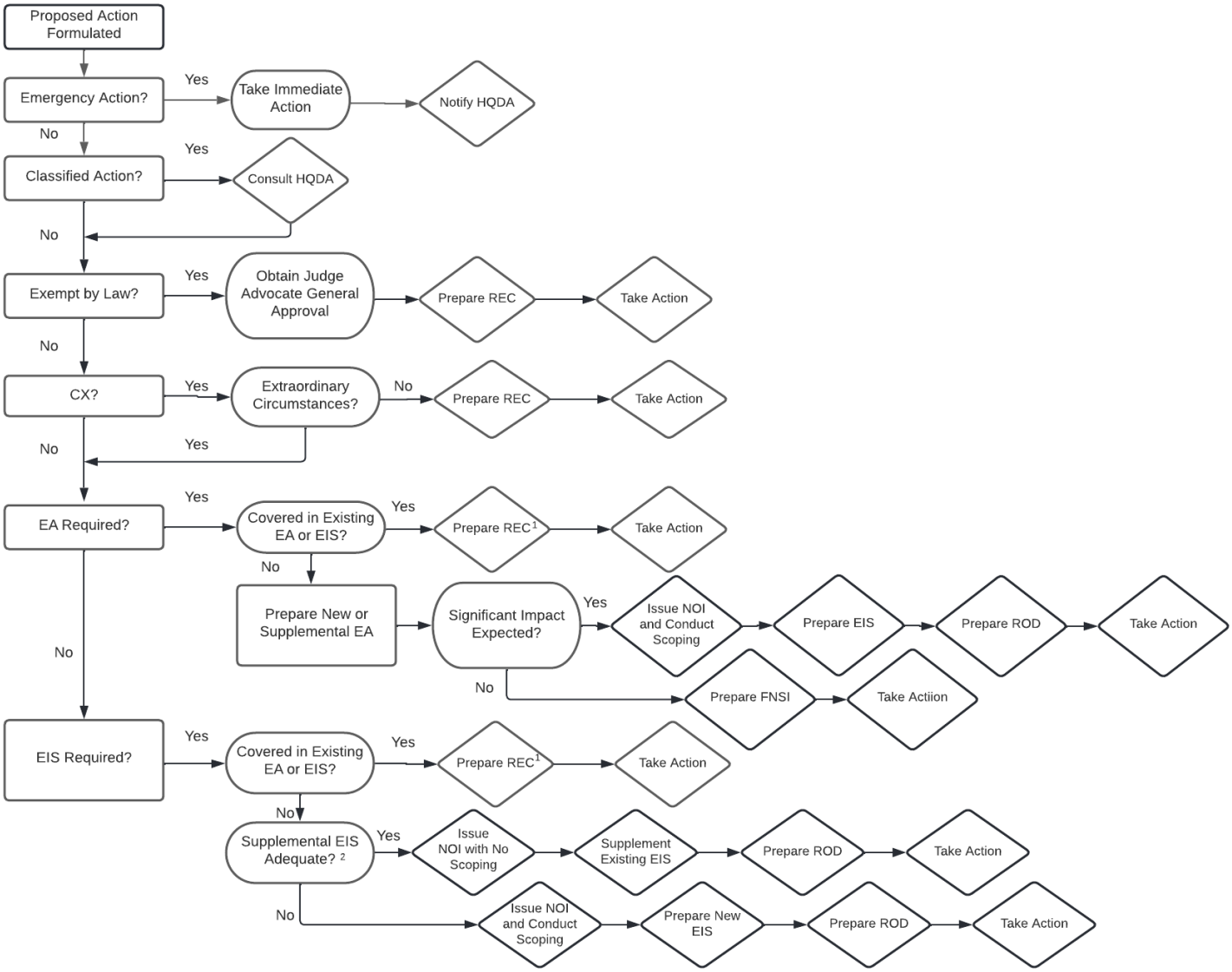
As illustrated in Figure 7-1, the degree of NEPA documentation depends on how significant the action is expected to have on the environment. Depending on the expected impact, the decision maker's written environmental evaluation is either:

- A Record of Environmental Consideration (REC) if the action is meets the Categorical Exclusion (CX) criteria (that is, expected to have no significant impact).
- An EA if the action may have a potential significant impact.
- An EIS if the action is expected to have a significant impact.

After completion of an EA, the analysis may show that the action will have no significant impact. In this case, the resulting decision document will be a Finding of No Significant Impact (FONSI). The proposed action may then be taken. However, the EA may conclude that there will be a significant impact and therefore, an EIS would be required. The decision document resulting from an EIS is called a Record of Decision (ROD). The proposed action may only be taken after the ROD is prepared. The ROD will dictate how the action will be implemented (if at all).

Once NEPA is complete, CFMO-EMB project manager will approve 420 in PRIDE.

Figure 7-1. NEPA Overview

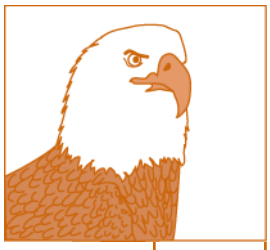


[1] As a general rule, the existing EA or EIS covering an action may not be more than 3 years old.
[2] Existing EIS should be re-examined if more than 5 years old.

Objectives

The objectives of the NJARNG NEPA program are to:

- Integrate environmental considerations into the planning and decision-making process.
- Identify, and be responsible for, environmental impacts of planned decisions in a detailed, systematic process.
- Minimize or avoid adverse environmental impacts from Department of Military and Veterans Affairs (DMAVA) actions.



References

- National Environmental Policy Act (42 USC 4321)
- Environmental Assessment (NJ EO 215)
- Categorical Exclusions (24 CFR 58.35)
- Regulations Implementing the National Environmental Policy Act, 1969 (40 CFR 1500-1508)
- Environmental Analysis of Army Actions, 2002 (AR 200-2)
- The NGB NEPA Handbook, March 2002
- NGB-ARE Memorandum, Guidance for Environmental Documentation, 13 November 2002

B. Compliance Thresholds

NEPA applies to ***any*** project or action that may impact cultural resources, soils, forests, rangelands, water and air quality, and fish and wildlife as well as any other natural resources or environmentally sensitive areas. Exceptions to NEPA are known as CXs. These exceptions include actions like emergency disaster relief, preparation of administrative reports, ceremonies, funerals, and concerts.

As the proponent of the action (see Section C for responsibilities), you will be required to consult with CFMO-EMB regarding the ARNG Environmental Checklist (see Section D for instructions) before initiating any action. CFMO-EMB will determine if the proposed action qualifies as a CX.

NOTE	Do not make a CX determination on your own. Submit the ARNG Environmental Checklist to CFMO-EMB. They will make the CX determination.

Environmental Justice (EJ) is defined by the EPA as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies." To stride toward the mission of NJDMAVA, CFMO-EMB considers EJ during the NEPA documentation process. As part of the NEPA documentation process, all projects and programs taking place at an installation located within an overburdened community require consultation with CFMO-EMB in the early planning stages to ensure compliance with related environmental justice requirements. CFMO-EMB will develop an impact analysis with proposed actions to help mitigate any findings if deemed necessary through initial assessment.

C. Responsibilities

TAG

- Ensure DMAVA staff consider environmental impacts when planning actions.
- Comply with those responsibilities outlined in AR 200-2, Environmental Analysis of Army Actions, 1 July 2004, paragraph 1-4(j).

Action Proponents (CMB, PPB, EMB, and Veterans Affairs)

- Proponents of ARNG actions will initiate environmental reviews early in the planning process.
- Proponents will consult with CFMO-EMB regarding the ARNG Environmental Checklist for concurrence or non-concurrence.

CFMO-EMB

- Assist action proponents in the preparation of environmental documents (ARNG Environmental Checklist or REC).
- Assist action proponents in the development of alternatives to proposed projects in order to minimize or avoid adverse environmental impacts.
- Determine the level of study and evaluation needed to address known or potential impacts.
- Coordinate with DMAVA staff throughout the NEPA review process.

Public Affairs Office

- DMAVA liaison to the public, media and government agencies.
- Establish a public affairs program when required.
- Provide public affairs guidance in planned activities.
- Be the DMAVA POC for media inquiries.

Unit Commanders

- Comply with the INRMP, if one exists.

NOTE	Unit Commanders should assure that environmental consideration is given to any actions that might affect the environment.

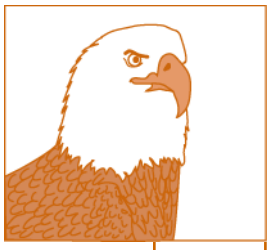
- Examples include:
  - Unit training activities
  - Installation restoration
  - New installation construction
  - Real property transactions

The following branches are exempt from responsibilities regarding NEPA management:

- CFMO-FMB
- CFMO-RPB

D. Procedures

Unit Commanders and/or CFMO-CMB and CFMO-PPB must consult with CFMO-EMB to begin the process for planning and/or starting a project involving federal dollars. Proponents shall work with CFMO-EMB and CFMO-CMB to complete the ARNG Record of Environmental Consideration form. This form shall be kept on-site and sent to CFMO-EMB. This form can be seen on the next page.



ARNG RECORD OF ENVIRONMENTAL CONSIDERATION	
Project Name:	
Enviro Tracking #	State ARNG
Project Number: (MILCON if applicable)	Date Prepared:
Start Date of Proposed Action (dd-mm-yy):	Note: This must be a future date
Programmed Fiscal Year:	
End Date (if applicable):	
Description and Location of Proposed Action:	
a. Location (include a detailed map, if applicable):	
b. Description:	

Choose ONE of the Following:

- ☐ An existing environmental assessment* adequately covers the scope of this project. Attach FONSI if EA was completed by another federal agency (non-ARNG)
  EA Date (dd-mm-yy): Lead agency:
- ☐ An existing environmental impact statement* adequately covers the scope of this project
  EIS Date (dd-mm-yy): Lead agency:
- ☐ After reviewing the screening criteria and completing the ARNG environmental checklist, this project qualifies for a Categorical Exclusion (select below)
  - Categorical Exclusion Code: _____ See 32 CFR 651 Appendix B
  - Categorical Exclusion Code: _____ See 32 CFR 651 Appendix B
  - Categorical Exclusion Code: _____ See 32 CFR 651 Appendix B
- ☐ This project is exempt from NEPA requirements under the provisions of:
  Cite Superseding Law: _____

*Copies of the referenced EA or EIS can be found in the ARNG Environmental Office within each state

Remarks:

_____ Signature of Proponent (Requester)	_____ Environmental Program Manager
_____ Printed Name of Proponent (Requester)	_____ Printed Name of Env. Program Manager
_____ Date Signed	_____ Date Signed

Proponent Information:

Proponent _____
Address _____
POC _____
Comm. Voice: _____
Proponent Email:

E. Training

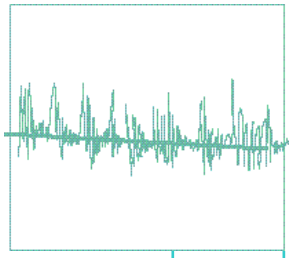
General Environmental Awareness training shall be attended by appropriate CFMO-CMB, CFMO-PPB, CFMO-FMB, CFMO-RPB, Maintenance Shop, Armory, and Unit personnel annually. More information about training requirements can be seen in the Introduction chapter on pages I-4 through I-6.

F. Recordkeeping

Anytime a project is planned, the approved ARNG Environmental Checklist must be retained in the facility files. Specifically, the ARNG Record of Environmental Consideration section of this checklist shall be kept on-site and updated as needed. In addition, this checklist is kept indefinitely by CFMO-EMB. Any resulting REC, FONSI, or ROD must also be kept on file in addition to EAs and EISs. This documentation shall be maintained for a minimum of 5 years. Other types of supporting NEPA documentation shall also be maintained, including:

- Notice of Intent (NOI)
- Environmental Planning Guide
- Environmental Planning Record
- Environmental Monitoring Report

In addition, CFMO-EMB will ensure CFMO-PPB has a copy of NEPA documentation for PRIDE and CFMO-CMB has NEPA documentation for project folders. CFMO-EMB will maintain digital copies of NEPA documents for EPAS audits and inspections.



Chapter 8
Noise Management

This chapter discusses the New Jersey Army National Guard (NJARNG)'s policies/goals, procedures, and compliance tools that support its Noise Management Program. For any correspondence regarding Noise Management, refer to page I-7 of the Introduction of the Desktop Guide.

A. Program Overview

This chapter establishes local policies, assigns responsibilities, directs actions, and prescribes procedures to achieve compliance with applicable outdoor noise regulations in a manner consistent with mission accomplishment. The Statewide Operational Noise Management Plan (SONMP) provides strategies for noise management at NJARNG facilities including the National Guard Training Center at Sea Girt, Lakehurst AASF, and other NJARNG facilities. Elements of the SONMP include education about noise and Army noise metrics, complaint management, and noise abatement procedures.

The SONMP provides a methodology for analyzing exposure to noise associated with military operations and provides land use guidelines for achieving compatibility between the Army and the surrounding communities. The Army has an obligation to U.S. citizens to recommend uses of land around its installations which will: (a) protect citizens from noise and other hazards; and (b) protect the public's investment in these training facilities.

References

- New Jersey Noise Control Act, 1971 (NJSA 13:1G-1 to -23)
- Noise Control Regulations (NJAC 7:29)
- Occupational Noise Exposure (29 CFR 1910.95)
- Environmental Noise (40 CFR 201 through 211)
- Environmental Noise Abatement, 'Policies' (32 CFR 650.164)
- Noise Control Act of 1972 (42 USC 4901)
- DoD Operational Noise Program (2020) (DoD 4715.13)
- Hearing Conservation Program (DA PAM 40-501)
- DA Memorandum "US Army Garrison Daegu Policy Letter #73 Noise Control
- NJARNG Environmental Noise Abatement Program SOP, 2000
- Personal Hearing Protection Devices (Technical Guide No.41)
- Readiness thru Hearing Conservation: Guide for Unit Commanders and Supervisors" (Technical Guide No.175)
- Readiness thru Conservation (Technical Guide No.250)
- NJARNG Statewide Operational Noise Management Plan, 2007
- Army Public Health Program (AR 40-5)
- The Army Safety Program (AR 385-10)

B. Compliance Thresholds

The Department of the Army (DA) was advised by the Department of Defense (DoD) to develop a noise management plan. This program would aim to control the environmental noise to protect the health and welfare of military personnel and their dependents, civilian employees, and members of the public on lands adjacent to military installations. It would also help to reduce the community annoyance from environmental noise, to the extent feasible, consistent with training and materiel testing activities.

Under the environmental noise abatement program, the NJARNG will:

- Assess the impact of all noise that may be produced by proposed NJARNG actions/activities and lessen harmful or objectionable impacts to the greatest extent possible.
- Comply with all applicable federal, state, and local laws and regulations respecting the control and abatement of environmental noise.
- Ensure the execution of the Noise Compliant Management Program in coordination with the Public Affairs Office (PAO). Accept noise complaints and address issues outlined in a timely manner.

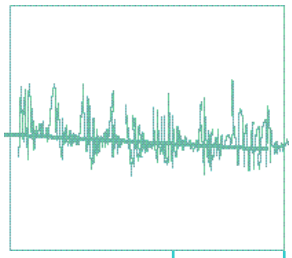
It is suggested that firing exercises be done on days with clear skies with billowy cloud formations, especially during warm periods of the year, if possible. It is also suggested to avoid firing on days where:

- Steady winds of 5-10 miles per hour with gusts of greater velocity (above 20 miles per hour) in the direction of nearby residences.
- It is clear, but smoke or fog layering is observed.
- It is a cold, hazy, or foggy morning.
- Extreme temperature differentials between the day and night are observed.
- The barometer readings are high, and the temperature is low.

The Noise Control Act of 1972 (42 USC 4901) establishes a national policy to promote an environment for all Americans free from noise that jeopardizes their health and welfare. It establishes a means for effective coordination of Federal research and activities in noise control, authorizes the establishment of Federal noise emissions standards for products distributed in commerce, and provides information to the public respecting the noise emission and noise reduction characteristics of such products.

The New Jersey Noise Control Act of 1971 authorized the New Jersey Department of Environmental Protection (NJDEP) to promulgate codes, rules, and regulations relating to the control and abatement of noise. This act also allows municipalities to adopt noise control ordinances that are more stringent than the state code.

NJAC 7:29, Noise Control Regulations (2007) is applicable to stationary commercial and industrial sources. This regulation permits such sources to produce 65 dBA from 0700 to



2200m and 50 dBA from 2200 to 0700. If a source is exceeding this limit, they will receive a notice of violation for minor violations.

DoD 4715.13, DoD Operational Noise Program (2020) applies to DoD operations, activities, and military installations. This program attempts to consider environmental impacts of noise and manage noise so that personnel and on-site equipment are protected. This program also requires that when noise is tested at an installation, that the measurement must follow applicable standards. The following are all components that may generate a considerable amount of noise which could be hazardous to personnel, equipment, and the surrounding community:

- Aircrafts
- Artillery and Explosives
- Small Arms Ranges

According to 29 CFR 1910.95, Occupational Noise Exposure, the protection against the effect of noise exposure shall be provided when the sound levels exceed acceptable levels. It also requires that when information indicates that personnel exposure may equal or exceed an 8-hour time-weighted average of 85 decibels, a monitoring program shall be developed and implemented.

DA PAM 40-501, Hearing Conservation Program, outlines procedures to meet the requirements set forth in Army Regulation (AR) 40-5 and AR 385-10. These regulations provide standards for health and safety of Army personnel and civilians. The pamphlet requires that a roster of the noise-exposed personnel is kept and updated annually. It also requires the use of disposable earplugs or noise muffs at all noise-hazardous sites.

DA Memorandum "US Army Garrison Daegu Policy Letter #73 Noise Control" applies to all military and civilian employees of the US Government and their family members. This memorandum establishes standards for noise control within the US Army Garrison Daegu area of responsibility. It sets forth specified quiet hours, and states that most noises can be tolerated during the day hours (0700-2200), however, at no time will sound equipment be turned up loud enough to disturb anyone in adjacent rooms, housing, or buildings.

The Army uses a system whereby noise is partitioned into three noise zones, each labeled by Roman numerals and each representing an area of increasing noise. As particular uses such as schools, residences, and churches are more sensitive to noise than other more industrial uses, the zones help to create a picture of where things should be located.

- **Noise Zone I (NZ I)**: Includes all areas in which the PK15(met) decibels are less than 87 dB (for small arms), the ADNL is less than 65 (for aircraft), or the CDNL is less than 62 (for large arms and explosions)—it's usually the furthest zone from the noise source, and it is basically all areas not in either of the next two zones. As a rule, this area is suitable for all types of land use.

- **Noise Zone II (NZ II)**: This is the next closest area to the noise source where the PK15(met) decibels are between 87 and 104, the ADNL is between 65 and 75, or the CDNL is between 62 and 70. The noise exposure here is considered significant and the use of land in this zone should generally be limited to activities such as manufacturing, warehousing, transportation, and resource protection. Residential use is strongly discouraged; however, if the community determines that this land must be used for houses, then the integration of NLR features into the design and construction should be required. Further details of NLR ideas and strategies are available from USACHPPM.

- **Noise Zone III (NZ III)**: This is the area closest to the source of the noise where the PK15(met) decibels are greater than 104, the ADNL is greater than 75, or the CDNL is greater than 70. The noise level in this area is so severe that no noise-sensitive uses should be considered therein.

One final zone is the more informal Land Use Planning Zone (LUPZ). This zone is at the upper end of the NZ I and is defined by a CDNL of 57-62 or an ADNL of 60-65. It accounts for the fact that some installations have seasonal variability in their operations (or several unusually busy days during certain times of the year) and that averaging those busier days over the course of a year (as with the DNL) effectively dilutes their impact. Please see Section 9 and Appendix E of the NJARNG Statewide Operational Noise Management Plan for more details regarding which uses should be permitted in each noise zone.

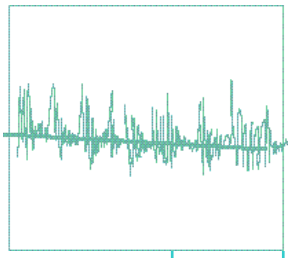
Chapter 14 of AR 200-1 details information relevant to noise management at an installation. AR 200-1 provides a table of the noise limits for noise zones. This table can be seen below:

Table 8-1. Noise Limits for Noise Zone

Noise Zone	Noise Limits (dB)	Noise Limits (dB)	Noise Limits (dB)
	Aviation ADNL	*Impulsive CDNL*	*Small Arms*
LUPZ	60-65	57-62	N/A
I	<65	<62	<87
II	65-75	62-70	87-104
III	>75	>70	>104

LUPZ: Land Use Planning Zone
ADNL: A-Weighted Day-Night Levels
CDNL: C-Weighted Day-Night Levels

32 CFR 650.164 states that the Department of the Army shall comply with all DoD and applicable Federal, State, and local noise control standards promulgated pursuant to the Noise Control Act in the planning, siting, design, construction, and operation of Army controlled facilities and installations.



C. Responsibilities

Maintenance Shop/Armory/Unit

- Ensures the Noise Complaint Form is completed and submitted within five calendar days of receiving a complaint.
- Track and maintain records of noise complaints and surveys.
- Ensure the completion of follow-up action.

CFMO-CMB/EMB

- Evaluate the likelihood of noise impacts from planned construction projects. If it is determined that noise may impact the vicinity surrounding the project location, work with CFMO-EMB to conduct any necessary pre or post noise monitoring that may be needed. Ensure that mitigation measures are taken to reduce noise and/or noise complaints.
- CFMO-EMB will inform the EQCC of any active noise complaints on a quarterly basis.

The following branches are exempt from responsibilities regarding noise management:

- TAG
- CFMO-PPM
- CFMO-RPB
- CFMO-FMB

D. Procedures

The NJARNG will perform the following:

- Control environmental noise at the greatest extent possible to protect the health and welfare of military personnel and their dependents, Army civilian employees, tenants and the public adjacent to our facilities.
- Reduce community annoyance from environmental noise to the extent feasible, consistent with NJARNG training and activities.

Noise Complaint Reporting

The Noise Compliant Management Program deals with issues caused by noise. These issues can range from addressing community complaints to advising local planning commissions. The Noise Compliant Management Program accepts noise complaints and addresses the issues outlined in a timely and polite fashion.

A noise complaint will be processed as follows:

- The NJARNG facility receiving the complaint will complete and forward a copy of the Noise Complaint Form to the Public Affairs Office (PAO) within 5 calendar days. The Noise Complaint Form is found on the following page.
- The PAO will notify the complainant in writing within five days of receipt that the complaint has been received, an investigation is being conducted into the cause of the disturbance, and that a final response should be expected within thirty days of the incident.

- The noise-generating activity causing the complaint will complete a follow-up by identifying the cause of the noise and any action taken to correct the deficiency. A copy of the follow-up report will be forwarded to the PAO, CFMO-EMB and military higher headquarters. CFMO-EMB will forward the report to the PAO and EQCC chairman.
- The noise-generating activity will maintain a log of all noise complaints.

The NJARNG facilities will handle jet aircraft noise complaints. The State Army Aviation Office (SAAO) in coordination with the EQCC, CofS, and CFMO-EMB will handle helicopter noise complaints. However, it is up to shop-level personnel to report any noise complaint using the Noise Complaint Form found at the end of this chapter.

E. Training

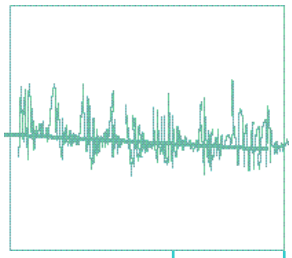
All appropriate Maintenance Shop, Armory, and Unit personnel shall attend the General Environmental Awareness training annually. Training associated with noise management is not required for CFMO-EMB, CFMO-CMB, CFMO-FMB, CFMO-PPB, and CFMO-RPB. More information about training requirements can be seen in the Introduction chapter on pages I-4 through I-6.

F. Recordkeeping

Maintain the following records for at least 3 years.

- Document awareness training for all facility personnel.
- A log of all noise complaints.

In addition, a digital copy of the 2007 Statewide Operational Noise Management Plan can be requested through CFMO-EMB.



NOISE COMPLAINT FORM

Facility: _____**Date**:_____**Time**:_____

Facility POC: _____**Telephone Number** _____

Name of Person Making Complaint: _____

Address: _____**City:** _____**State:** ____**Zip:** _____

Telephone Number: _____

Type Noise: _____

Description of Facility Activities During Time of Complaint:

_____

_____

Facility Commander/AO: _____ **Phone:** _____

Complaint Received By: _____ **Date:** _____

***Date Forwarded To PAO**: _____

Copy To: CFMO-EMB: _____**PAO**: _____

How Resolved? (List All Actions/Dates Taken to Resolve the Complaint): _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

EQCC Review Date_____

*** Must Be Within 5 Calendar Days of Complaint**

Chapter 9
Pesticide Management

This chapter discusses the New Jersey Army National Guard (NJARNG)'s policies/goals, procedures, and compliance tools that support its Pesticide Management Program. For any correspondence regarding Pesticide Management, refer to page I-7 of the Introduction of the Desktop Guide.

A. Program Overview

This chapter provides guidance for operating and maintaining an effective Integrated Pest Management (IPM) Program. The IPM plan applies to all the facilities, activities, and individuals working, residing or otherwise conducting business on NJARNG sites. Pests can interfere with the military mission, damage real property and the environment, increase maintenance costs and expose personnel to diseases unless properly controlled. As per Army Regulation (AR) 200-1, the Army National Guard's (ARNG) pest management program uses integrated pest management (IPM) to achieve effective pest control with minimal environmental impacts. The IPM Program consists of the use of cultural, physical, mechanical, biological, and chemical control techniques to achieve effective pest management with minimal environmental contamination. NJARNG has developed an Integrated Pest Management Plan (IPMP). The current version is listed on the DMAVA Web Site in the Environmental Publications Section. Adherence to this plan will ensure effective, economical, and environmentally acceptable pest management and will maintain compliance with pertinent laws and regulations. This plan follows the management framework and principles established in Department of Defense (DOD) Instruction (DODI) 4150.07, DOD Integrated Pest Management Program.

IPM Document Link

https://www.nj.gov/military/construction-facilities-management/environmental-management/documents/NJARNG_IPMP_2019_2023_Appendices.pdf

References

- Pesticide Control Act, 1971 (NJSA 13:1F-1 to -18)
- Insecticides and Environmental Pesticide Control (7 USC 136)
- Integrated Pest Management Program, April 1996 (DoD Instruction 4150.07)
- Environment, Safety, and Occupational Health (ESOH) (DoD Directive 4715.1)
- Pesticide Management (AR 200-5)
- NJARNG Pest Management Plan, May 2000 (Revised 2003)
- Integrated Pest Management Plan for the NJARNG, 2019-2023
- New Jersey Department of Agriculture, Pests and Diseases

B. Compliance Thresholds

Nonchemical control efforts will be used to the maximum extent possible before pesticides are used. All pesticide or herbicide applications on any NJARNG property will be made by certified applicators only, either contractor or NJARNG personnel. Pesticides and herbicides used on NJARNG property must be listed on the NJARNG State Pesticide Use List (SPUL) and approved by the ARNG Pest Management Consultant (PMC). The application of pesticides is governed by the label. No pesticide will be applied contrary to its label.

The purpose of the IPM Plan is to meet DOD policy requirements pursuant to DOD Directive 4715.1, Environment, Safety, and Occupational Health (ESOH), DODI 4150.07, DOD IPM Program, and 7 USC 136. The plan identifies elements of the program including responsibilities; pest identification and pest management; health and environmental safety; and environmental considerations. This plan is to be used as a tool to reduce reliance on pesticides, to enhance environmental protection, to maximize the use of IPM techniques, and to meet regulatory requirements.

The IPM plan will be implemented to the maximum extent possible. At no time will IPM operations be performed in such a manner as to cause harm to personnel or the environment. IPM responsibility begins with those individuals occupying or maintaining buildings or open space on NJARNG property. This plan will be reviewed and revised every 5 years.

C. Responsibilities

TAG

- Designate a NJARNG PMC[1] for all pest management activities.
- Approves and supports the NJARNG Integrated Pest Management Plan (IPMP).
- Ensures that NJARNG personnel performing pest control receive adequate training and achieve pest management certification (if required).
- Ensures that all pest management operations are conducted safely and have minimal impact on the environment.
- Has ultimate responsibility for pest management actions at both State and Federally owned New Jersey ARNG sites.

Integrated Pest Management Coordinator (IPMC)

- Function as NJARNG's Integrated Pest Management Coordinator.
- Prepare and maintain the IPMP with 5-year revisions.
- Review and approve pesticide purchases for use by pesticide applicators. Review pesticides to be used by contracted pesticide applicators and ensure they are listed on the NJARNG SPUL prior to application at NJARNG sites.

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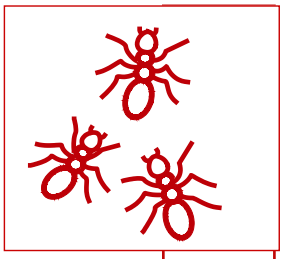
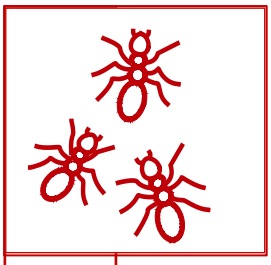
[1] The NJARNG PMC is appointed, in writing, in the NJARNG Integrated Pest Management Plan. The duties of the PMC are described in this plan.



- Ensure all pesticides used on NJARNG property are approved by the ARNG PMC prior to use. All pesticides used at all NJANRG sites are listed on the NJARNG SPUL and have a current Environmental Protection Agency and/or State registration.
- Update the IPMP and submit changes yearly to the ARNG PMC. Ensure that all references, methods, and materials are current, and that effective management of all pests is included. Any changes in pest management requirements will be incorporated into the plan during annual revisions or more frequently as needed.
- Maintain adequate records of pest management operations.
- Act as the Pest Management Quality Assurance Evaluator for contracted pest management operations.
- Coordinate with personnel conducting pest surveillance or controlling pests to ensure all applicable information is recorded and reported as required by this plan.
- Function as a point-of-contact between those individuals who store and apply pesticides and activities or individuals who document or deal with pesticide use in their programs.
- Monitor certification and continuing pest management training for pesticide applicators at NJANRG facilities.
- Coordinate and monitor contracts dealing with pesticide application and keep a copy of each contract on file. Obtain review and approve of pesticide use submittals in accordance with DoD and ARNG policy and derivatives.
- Oversee, manage, monitor, and document the technical aspects of the Self-Help Program with respect to pest control products and training of program participants.
- Coordinate with local, state, and Federal agencies, as necessary, to conduct the NJARNG's pest management program.
- Provide answers to questions concerning pest management from Commanders, the Major Command, Department of the Army (DA), and interested state agencies.
- Coordinate with the CFMO to ensure that contracts including pest management activities at NJARNG sites are forwarded to the ARNG PMC for technical accuracy and sufficiency review prior to the solicitation of the contract. For contracted pre-construction treatment of soil to control termites, ARNG PMC review and approval of the termite management section of contracts is not required if the contract language is in accordance with the current Unified Facilities Guide Specification for chemical termite control.
- Perform, design, and review new construction projects to ensure that pest entry points and potential harborage have been eliminated and that proper preconstruction termite treatment is included in specific projects.
- Initiate requests for aerial application of pesticides when necessary.
- Determine the pest management requirements for the NJARNG facilities and submit requests for funding.
- Coordinate with the NJARNG Natural Resources Manager (NRM) about pest control action in semi-improved or unimproved grounds where there may be endangered, threatened, or sensitive animals or plants.



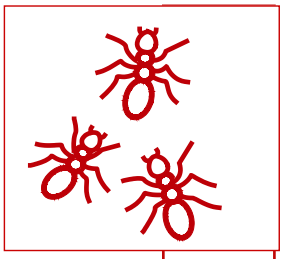
- Coordinate with the NJARNG Cultural Resources Manager (CRM) when pest control actions may impact native plants or interest of the Tribes, cultural sites, or affect a building eligible for National Register of Historic Places.
- Coordinate with NJANRG Directorate of Plans, Training, Mobilization, and Security (DPTMS) for all pest management performed on training or maneuver land.
- Coordinate with local health officials to determine the prevalence of disease vectors and other public health pests in the area surrounding NJANRG sites.
- Coordinate with the State Surgeon on any necessary measures for control of disease vectors and other public health pests of NJARNG sites.
- Obtain Integrated Pest Management applicator certification within 2 years of being appointed to the position and maintain certification with refresher every 3 years.

Pest Management Quality Assurance Evaluator (PMQAE)

- The PMQAEs for pest management contracts are trained in the Environmental Protection Agency (EPA) categories for which pest control work is performed on the NJARNG site.
- Authorizes PMQAE Training or other training approved by the ARNG PMC is required for personnel who perform quality assurance of contractual pest-control services.
- Provides onsite surveillance for all termite treatments, and a written quality assurance surveillance plan to evaluate the work being performed by contractors.
- Obtain PMQAE certification and maintain certification with refresher training every 3 years.
- If an installation's pest management contract efforts are less than 0.25 work-years, the presence of a trained PMQAE at the installation is not mandatory.

Pest Management Provider (PMP)

- Use IPM techniques to the maximum extent possible.
- Maintain current DOD or State of New Jersey Department of Environmental Protection, Bureau of Licensing and Registrations (NJDEP BL&R) certification to apply pesticides in the category of pest control for work being done at New Jersey ARNG sites and comply with all state and federal regulations.
- Control pests according to the provisions of this plan, and in accordance with DOD, Army and ARNG instructions, regulations and policies (DODI 4150.07, AR 200-1, ARNG Integrated Pest Management Program Policy Memorandum).
- Conduct surveillance for mosquitoes, ticks, cockroaches, or other pests that could adversely affect the health and welfare of installation personnel.
- Operate in a manner that minimizes risk to personnel and the environment.
- When using pesticides, always read and follow the label.
- Keep records of all pest surveillance and control efforts and provide reports to the IPMC using the format(s) and at the frequency as specified in this plan.
- Maintain effective liaison with county, state, and federal health and environmental officials, as necessary.



- Use IPM and conduct pest management in accordance with this plan, including ARNG PMC pre-approval of pesticides applied at NJARNG sites.
- Comply with all federal, state, and local laws and regulations.
- Submit written records of all pest management activities to the IPMC using the proper format(s) and at the frequency.
- Use IPM Techniques to control pests on NJARNG property.
- Be State of New Jersey Department of Environmental Protection, Bureau of Licensing and Registrations (NJDEP BL&R)-certified in all applicable EPA pesticide application categories.
- Control pests according to the provisions of the IPM plan.
- Operate in a manner that minimizes risk of contamination to the environment and personnel.
- Ensure that facility managers are kept informed of changes in pest management requirements.
- Request pest management supplies and equipment in a timely manner and ensure appropriate personal protective equipment (PPE) is available to support operations.
- Submit records of surveillance activity and control efforts to the Armory/Facility Manager within 10 days of performing work.
- Carry the necessary pesticide spill equipment on pest-control vehicles as appropriate.
- Conduct pest surveillance to determine if chemical application is needed.
- Maintain copies of Safety Data Sheets (SDSs) for each pesticide.

Pest Management Personnel

- Uses IPM techniques to the maximum extent possible.
- Controls pests according to the provisions of the IPM.
- Operates in a manner that minimizes risk of contamination to the environment and personnel.
- Ensures the Facility Manager is kept informed of changes in pest management requirements.

Directorate of Plans, Training, Mobilization, and Security (DPTMS)

- Determine the pest management requirements for the NJARNG training and maneuver lands and request appropriate ITAM funding when pests are impeding training or maneuvers. For management of pests that are not impeding training and maneuvers, use all non-chemical pest control techniques as recommended in the IPM outlines before requesting further assistance from the CFMO-EMB for in-house or contracted pest control.
- Coordinate with the IPMC any pest management activities occurring on NJARNG training and maneuver lands.
- Initiate requests for aerial application of pesticides, when necessary.
- Ensure all pest management activities on training or maneuvered lands are perfumed IAW the IPM plan.

State Surgeon

- Evaluate the human health aspects of the IPM program.
- Coordinate with the IPMC any necessary human health-related measures or control of disease vectors and other public health pests at NJARNG sites.

Unit Commanders/Officers-In-Charge

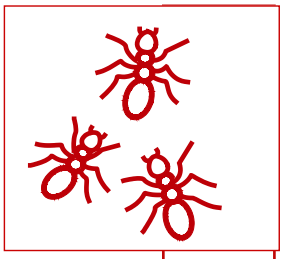
- Ensure the proper use of the DOD repellent system and other protective measures while troops are exposed to potential disease vectors.
- NJARNG is required to appoint a field sanitation team for each company, troop, or battery size unit.
- Ensure that field sanitation teams are trained and supplied and mission capable prior to deployment (FM 21-10-1). Field Preventive Medicine.
- Brief troops on potential biological threats (such as poison oak) before training exercises.
- Contact the U.S. Army Public Health Command (USAPHC) or the Defense Pest Management Information Analysis Center (DPMIAC) prior to deployment.

Building Occupants

- Apply good sanitary practices to prevent pest infestations. Areas need to be free of open food containers. Don't accumulate pest harborage materials such as empty boxes or dunnage.
- Cooperate fully with contractors and armory/facility personnel in scheduling pest management operations, to include preparing the areas to be treated.
- Use all nonchemical pest-control techniques as instructed in the IPM outlines before requesting further assistance from the NJARNG IPMC, facility maintenance, or certified pest management personnel.
- Report pest concerns and complaints in a timely manner to building managers and assist with pest surveillance and monitoring as needed.

Self-Help Program

- Keep all areas clean, dry, and sanitary. Areas need to be free of open food containers. Don't accumulate pest harborage materials such as empty boxes or dunnage.
- Using the IPM outlines in Appendix B, determine if Self-Help (Appendix E) is allowed for the pest problem.
- If Self-Help is appropriate, follow the requirements found in Appendix E covering the Self-Help Program. Only pesticides that are pre-approved for Self-Help Program use and listed as such on the New Jersey ARNG SPUL (Appendix C) are allowed.
- All training, recording, reporting, handling and storage of pesticides must be done as specified under the Self-Help Program (Appendix E) and in accordance with the pesticide label.



- If Self-Help is not appropriate for the pest or level of the pest problem, fill out a work-order requesting assistance with your pest problem and submit it to the Facility Manager.
- When using pesticides as part of the Self-Help Program, always read and follow the label. The label is the law.

CFMO

- Review NJARNG's IPM Plan.
- Coordinate with the IPMC, contracted pest controllers, and certified pest management personnel to ensure all applicable information is recorded and reported as required by this plan.
- Provide appropriate funding support for the pest management program through NJARNG's Environmental State Operating Budget (ESOB) and Real Property Operation and Maintenance (RPOM) budget.
- Request and monitor contracted pest control operations.
- Ensure all pest management activities, including those that are part of the Self-Help Program, are recorded in accordance with this plan and reports are provided to the IPMC at intervals as specified in the IPM plan.
- Ensure that CFMO personnel obtain and maintain adequate supplies of pesticides and pesticide dispersal equipment, if required, and ensure that equipment is properly maintained.
- Ensure that CFMO personnel performing pest control receive adequate training and achieve pest management certification (if required).
- Coordinate with the IPMC to ensure that contracts including pest management activities at NJARNG sites are forwarded to the ARNG PMC for review for technical sufficiency prior to solicitation of the contract. For contracted pre-construction treatment of soil to control termites, ARNG PMC review and approval of the termite management section of contracts is not required if the contract language is in accordance with the current Unified Facilities Guide Specification for chemical termite control.
- Initiate requests for aerial application of pesticides, when necessary.

CFMO-EMB

- Maintain adequate records of pest management operations.

CFMO-FMB

- Apply good sanitary practices, landscape maintenance, and materials management to prevent pest infestations.
- Use all non-chemical pest control techniques as recommended in the IPM outlines before requesting further assistance from the CFMO for in-house or contracted pest control.

- Ensure all pest management activities, including those that are part of the Self-Help Program, are recorded in accordance with this plan and reports are provided to the IPMC at intervals specified in this plan.
- Cooperate fully with pest management personnel in scheduling pest management operations to include preparing the areas to be treated.
- Obtain and maintain adequate supplies of approved self-help pesticides and pest control equipment and ensure that equipment is properly maintained.
- Have available on-site SDSs for any pesticide stored or used on the premises.
- Ensure that NJARNG personnel performing pest control receive adequate training and achieve pest management certification (if required).
- Obtain IPMC approval of all pest-control contracts initiated for organizational use prior to solicitation.

Maintenance Shop/Armory/Unit

- Obtains and maintains adequate supplies of approved self-help pesticides and pest control equipment that functions properly.
- Ensures that NJARNG personnel performing pest control receive adequate training and achieve pest management certification (if required).
- Maintains adequate records of pest management operations.
- Obtains PMC approval of all pest control contracts initiated for organizational use prior to solicitation.
- Requests pest management trained Quality Assurance Evaluators (QAE) to monitor contractor performance.
- Practices good sanitary practices to prevent pest infestations.
- Only applies those pesticides approved for use by Facility Managers.
- Cooperates fully with contractors and armory/facility personnel in scheduling pest management operations, to include preparing the areas to be treated.
- Uses all nonchemical and chemical pest control techniques available through the self-help program to the fullest extent before requesting additional assistance.
- Submits a work order when required.

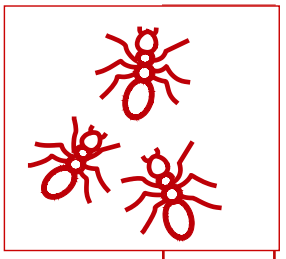
The following branches are exempt from responsibilities regarding hazardous material management:

- CFMO-PPB
- CFMO-CMB
- CFMO-RPB

D. Procedures

Prior to any pesticide application, refer to the NJARNG Integrated Pest Management Plan for the specific procedures to be used.

Integrated pest management is the use of multiple techniques to prevent or suppress pests in a given situation. Although IPM emphasizes the use of nonchemical strategies, chemical control may be an option used in conjunction with other methods. IPM strategies depend on



surveillance to establish the need for control and to monitor the effectiveness of management efforts.

The 4 basic types of pest control techniques used at NJARNG sites to manage pests are described below. Specific IPM measures can be found in the NJARNG Integrated Pest Management Plan.

- **Mechanical and Physical Control**: This type of control alters the environment in which a pest lives, traps and removes pests where they are not wanted, or excludes pests. Examples of this type of control include harborage elimination through caulking or filling voids, screening, mechanical traps or glue boards, and nets and other barriers to prevent entry into buildings. Mechanical and physical controls are the primary means for pest control whenever possible.
- **Cultural Control**: Strategies in this method involve manipulating environmental conditions to suppress or eliminate pests. For example, spreading manure from stables onto fields to dry prevents fly breeding. Elimination of food and water for pests through good sanitary practices may prevent pest populations from becoming established or from increasing beyond a certain size.
- **Biological Control**: In this control strategy, predators, parasites or disease organisms are used to control pest populations. Sterile flies may be released to lower reproductivity. Viruses and bacteria may be used which control growth or otherwise kill insects. Parasitic wasps may be introduced to kill eggs, larvae, or other life stages. Biological control may be effective in and of itself but is often used in conjunction with other types of control.
- **Chemical Control**: Pesticides kill living organisms, whether they are plants or animals. At one time, chemicals were the most effective control available, but pest resistance rendered many pesticides ineffective. Since personal protection and special handling and storage requirements are necessary with the use of chemicals, the overall cost of using chemicals as a sole means of control can be quite costly when compared with nonchemical control methods. Whenever possible, chemical control will be considered the last option when performing control operations.

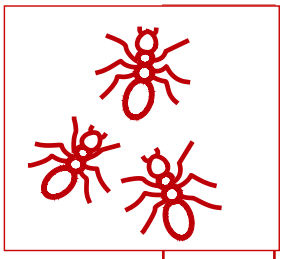
Pest management requirements at the NJARNG sites vary considerably. Table 9-1 provides a list of major pest categories of possible concern at NJARNG facilities. The priority will vary according to specific sites.

Table 9-1. Priority of Pest Management Work for the NJARNG

Category	Pest	Notes
Public Health-Related Pests	• Rats and Mice	
	• Cockroaches	German and American
	• Mosquitoes	
	• Wasps, Yellow Jackets, and Hornets	
	• Spiders	Black widow and brown recluse
	• Ants	
	• Filth flies	
	• Ticks	
	• Lice	
	• Fleas	
Stored Products Pests	• Pantry Moths	Set pheromone traps to identify stored product pest.
	• Varies	
Real Property Pests	• Subterranean termites	
Nonnative or Nuisance and Quarantined Pests	• European starling	
	• House sparrow	
	• Crickets	
	• Earwigs	
	• Beetles	
	• Silverfish	
	• Gypsy moth larvae	
Ornamental Plant and Turf Pests, and Undesirable and Noxious Vegetation	• Bagworms	Parade fields, lawns, and other common grassy areas. Utility pole and hydrant bases, sidewalks, around building foundations, parking lots, and fence lines.
	• Broadleaf weeds	
	• Grassy weeds	
	• Undesirable and Noxious Vegetation	
Vertebrate Pests	• Deer	
	• Birds	Pigeons, Geese
	• Feral cats and dogs	
	• Mammalian Wildlife Pests	Raccoons, Fox, Skunks, Tree squirrels, Opossums, Beaver
	• Snakes	

Pests of Emerging Concern in New Jersey

This section lists species of emerging concern for New Jersey and is updated annually with current invasive/nuisance pests. Please refer to Appendix O of the NJARNG IPMP 2019-2023 for fact sheets, reference materials, and NJ Department of Environmental Protection (NJDEP) and NJ Department of Agriculture (NJDOA) recommendations on targeting and treatment for such species.



Emerald Ash Borer:

- The emerald ash borer is an invasive insect native to Asia and was first discovered in New Jersey in May 2014 in Somerset County. Infestations throughout the U.S. and Canada have killed tens of millions of ash trees since 2002.
- On May 19th, 2016, the New Jersey Department of Environmental protection launched an aggressive program to protect state owned lands from the emerald ash borer.
- Through November 13, 2018, emerald ash borer has been found in New Jersey in Bergen, Burlington, Camden, Essex, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Somerset, Sussex and Warren counties.
- Report signs of the beetle to the Department of Agriculture at 609-406-6939.

Spotted Lanternfly:

- The spotted lanternfly is an invasive planthopper insect native to Asia that is destructive to the agriculture, horticulture, and forest industries of New Jersey and was confirmed to be in Southern Warren and Northern Mercer counties in New Jersey.
- In 2018, emergency rules were adopted to quarantine Warren, Mercer, and Hunterdon counties. In February and March 2019, the Department confirmed the existence of the Spotted Lanternfly in Burlington and Salem counties. In 2021, the Department expanded the quarantine zone once again to include Morris, Monmouth, Middlesex, Essex, and Union counties. This proposed amendment seeks to include all counties that have not yet been quarantined, effectively enacting the Spotted Lanternfly quarantine throughout the entire State of New Jersey.
- This quarantine requires all businesses and organizations moving within or from the quarantine zone in the course of their work to obtain permits issued by NJDA.
- The quarantine strictly prohibits the movement of any spotted lanternfly living stage including egg masses, nymphs, and adults, and restricts the movement of articles that may harbor the insect. The following are examples of but not limited to restricted articles:
    - Landscaping, remodeling or construction waste.
    - Logs, stumps, or any tree parts.
    - Firewood of any species.
    - Grapevines for decorative purposes or as nursery stock.
    - Nursery stock.
    - Packing materials such as pots, crates, pallets, etc.
    - Outdoor household articles including recreational vehicles, tractors and mowers, grills and furniture and their covers, tarps, mobile homes, tile, stone, deck boards, mobile fire pits, any associated equipment and vehicles not stored indoors.

Aedes Mosquito (Zika Vector):

- Zika is a viral infection that is usually spread by the bite of an infected mosquito. The most common symptoms are fever, rash, joint pain or red eyes, and other common symptoms include muscle pain and headache.
- Outbreaks typically occur in tropical Africa and southeast Asia, but in May 2015, Brazil reported the first outbreak of Zika in the Americas. Zika is now present in many countries and territories, although a widespread outbreak in the continental United States is not expected.
- Zika Monitoring took place at the NJ National Guard Training Center in Sea Girt, New Jersey during FY 17 by Monmouth County Mosquito Control Division, Department of Health. Results of the testing reported no signs of the Zika Virus. Community education remains paramount for protecting against any mosquito related illnesses.

Asian Long-horned Beetle:

- This insect is a non-native, invasive wood-boring threat to the state's trees. Beetle larvae tunnel through tree stems causing girdling that cuts off the flow of nutrients, eventually killing the tree and resulting in coarse sawdust at the base of infested parts of the tree. Adult beetles leave round exit holes in the tree after they emerge.
- There is no known practical control for this wood-boring pest other than eliminating infested trees.
- During the summer and fall, check your trees and report any sightings by calling 1-866-702-9938.

Equipment

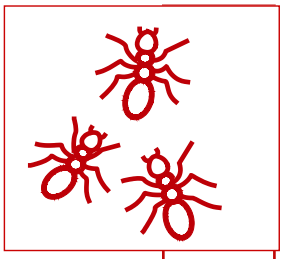
- Only authorized, trained personnel shall operate pest control equipment.
- Only authorized, trained personnel IAW manufacturer's instruction manuals for the specific equipment item shall do cleaning and storage of pest control equipment.
- Maintenance and adjustment of pest control equipment shall be carried out in accordance with the manufacturer's instructions for the specific equipment item.
- All equipment used in pest control activities shall be marked "Contaminated with Pesticides".

Personnel Safety

All NJARNG personnel who apply pesticides should be included in a medical surveillance program. It is not anticipated that federal employees or M-Day soldiers will be authorized to perform pest management activities requiring medical surveillance.

The following minimum protective clothing and equipment will be provided:

- Full-face shield
- Splash goggles
- Coveralls
- Chemical resistant gloves, aprons, and boots
- Respirators approved for use with pesticides



Pesticide Storage

- All pesticides shall be stored in buildings, or rooms within buildings, designated for this purpose. The pesticides shall be stored in their original containers. The buildings/rooms shall be kept locked when not in use.
- All pesticides shall be segregated as to kind of pesticide during storage (i.e., insecticides, herbicides, fungicides, etc.). Labels on all containers shall always be visible. Pesticides that are classed as moderately or highly toxic must be stored in facilities that meet the criteria described in MIL-HDBK-1028/8A, Design of Pest Management Facilities.
- The local fire department shall be furnished with an inventory of the kinds and amounts of pesticides present at each storage or mixing location. This inventory shall be updated at least annually using the Community Right-to-Know Report when due by the PMC.
- A pesticide spill cleanup kit, appropriate to the type and amount of pesticide used or stored, should be located in each building where pesticides are stored.

Pesticide Transportation

- Only authorized operators shall transport pesticides upon approval by the PMC.
- When transporting pesticides, operators shall have with them protective clothing and equipment.
- Pesticides will not be transported in the cabs or passenger compartments of vehicles.
- Pesticides will not be left unattended or unsecured in the vehicle.

Pesticide Mixing

- Only authorized, trained, and certified personnel shall handle and mix pesticides.
- Personnel mixing pesticides will use a back-flow preventer to prevent contamination of the facility's water source.
- Contractors will not dispose of empty pesticide containers on government property.
- All pesticides shall be mixed and applied in accordance with the label directions. The certified pest controller will determine what pesticide to use, what rate to use, and how it should be mixed and applied.
- Self-Help pesticides will be handled and mixed by authorized, certified personnel only.
- Dispensing concentrates and mixing of all liquid pesticides must be done on a nonporous surface (e.g., cement, asphalt).
- Any pesticide contamination on the skin must immediately be washed off with soap and water. Contamination of the eyes must be flushed generously with water. After washing, the individual will secure immediate medical attention.
- Pesticide containers must be returned to their storage locations upon completion of mixing.

- When mixing liquid pesticides, the spray tank should be filled 1/3 to 1/2 full with the diluent, the pesticide shall be added, and the spray tank shall then be filled with diluent. All pesticide mixtures must be agitated.

Pesticide Application

Guidelines for pesticide applications include the following:

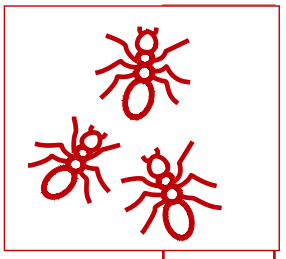
- Only authorized, trained, and certified personnel shall apply pesticides. This excludes Self-Help pesticides which may be applied by non-certified personnel.
- Pesticide application must be carried out in accordance with the label directions of the pesticide used and the manufacturer's operating instructions for the equipment used.
- Pesticide application operations shall be conducted as follows:
    - Dry, granular pesticide application must be conducted when the wind speed is less than 5 miles per hour to prevent drift. An approved respirator must be worn whenever required by the pesticide label. The operator must wear a respirator when pesticide dust is a hazard.
    - Outdoor liquid pesticide application must be conducted when the wind speed is less than 5 miles per hour to prevent drift. Approved respirators must be worn whenever required by the pesticide label.

Pesticide Container Disposal

- Liquid pesticide containers shall:
    - Be triple rinsed, with the rinse water placed in the spray tank and used as a diluent.
    - Be emptied and then crushed and placed in the garbage dumpster.
    - Pesticide containers shall not be used for any purpose except that of holding the pesticide shown on the label.
    - Do not use pesticide containers.
- Dry, granular pesticide containers (bags and/or sacks) shall:
    - Be emptied thoroughly and placed in the garbage dumpster.
    - Not be burned or stored near heat or open flame.

Equipment Cleaning

- Clean equipment at the site of application and apply rinse water to treatment site when complete. Equipment should not be cleaned on a wash rack with a drain that runs to sewer or septic system.
- Cleaning solvents may be used for flushing fogging machines and neutralizing residue in spray tanks. Use biodegradable cleaning solvents and apply to treatment site when complete.
- Pesticide contaminated clothing should not be home-laundered. Heavily contaminated clothing should be considered waste product and be disposed of according to the label instructions for pesticide waste.



E. Training

All appropriate CFMO-CMB, CFMO-FMB, Maintenance Shop, Armory, and Unit personnel shall attend the General Environmental Awareness training annually. Training is not required for CFMO-EMB, CFMO-PPB, and CFMO-RPB. More information about training requirements can be seen in the Introduction chapter on pages I-4 through I-6.

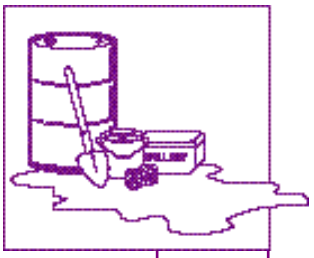
All NJARNG personnel who apply pesticides will be DOD or state-certified and licensed IAW the NJARNG Integrated Pest Management Plan. The PMC and personnel who evaluate the quality of work of pest control contracts, should also be certified. Personnel must be certified, as appropriate, in the following categories:

- Ornamental and Turf Pest Control
- Right-of-way Pest Control
- Industrial, Institutional, Structural, and Health Related Pest Control

F. Recordkeeping

Facility personnel responsible for the storage, control, and application of pesticides will maintain the following records for at least 3 years:

- Adequate records of all pest management operations performed by maintenance personnel, contractors, and self-help.
- Maintain the daily pesticide application and surveillance records are using DD Form 1532-1, Pest Management Maintenance Record. These forms are properly maintained to provide a permanent historical record of pest management operations for each building, structure, or outdoor site on the armory/facility.
- Applications done by commercial applicators will be recorded on the DMAVA form provided in the NJARNG Integrated Pest Management Program and copies forwarded to CFMO-EMB.



Chapter 10
Spill Planning and Response/ POL Management

This chapter discusses the New Jersey Army National Guard (NJARNG)'s policies/goals, procedures, and compliance tools that support its Spill Planning, Spill Response, and Petroleum, Oils, and Lubricants (POL) Management Program. For any correspondence regarding Spill Plans, Spill Response Procedures, and POL Management, refer to page I-7 of the Introduction of the Desktop Guide.

A. Program Overview

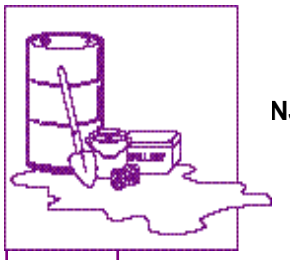
This chapter discusses NJARNG policies/goals, procedures, and compliance tools used to support its Spill Planning and Response/POL Management Program and includes regulations, responsibilities, and compliance requirements associated with POL management. AR 200-1 defines policy for prevention, control, reporting, and contingency planning for spills of oil and hazardous substances. The Army's goal is to use, generate, transport, store, handle, and dispose of oil and hazardous substances in a manner that protects the environment and public health.

Only major facilities in New Jersey, such as Joint Base Maguire-Dix-Lakehurst (JBMDL), which have a total combined storage capacity of 200,000 gallons or more of hazardous substances including petroleum products **or** 20,000 gallons or more of hazardous substances other than petroleum products, are required to prepare and submit a Discharge Prevention Containment and Countermeasure (DPCC) plan and Discharge Cleanup and Removal (DCR) Plan.

The plans must be submitted to the NJDEP Bureau of Discharge Prevention. A Spill Prevention Control and Countermeasure Plan (SPCCP) is required for all facilities that store POL product aboveground at a quantity equal or greater than 1,320-gallons, such as Sea Girt and Lawrenceville campus'. Equipment contributing to the quantity can include drums, totes, mobile tanks, hydraulic equipment, storage tanks, and generators. An SPCCP would also be required for a facility that has 42,000-gallons of oil storage capacity on-site that is underground.

References

- Motor Vehicle and Traffic Regulation (NJSA 39:5B-25)
- New Jersey Spill Compensation and Control Act (NJSA 58-10-23.11-23.44
- Oil and Gas Wells (NJSA 13:1M-1 to -18)
- Transportation of Hazardous Liquids (NJSA 58:10-46 to -50)
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 USC 9601)
- National Oil and Hazardous Substances Spill Contingency Plan (40 CFR 300)
- Oil Pollution Prevention (40 CFR 112)



- Hazardous Waste Operations and Emergency Response Regulations (29 CFR 1910.120)
- Emergency Planning and Community Right-to-Know Act (EPCRA) (40 CFR 350-372)
- The Federal Water Pollution Control Act, commonly known as the Clean Water Act (CWA)
- Resource Conservation and Recovery Act (42 USC 6901)
- Oil Pollution Act (OPA), 1990 (33 USC 2701)
- National Guard Bureau-Army Environmental (NGB-ARE) Army National Guard Mobile Fuel Tanker Policy, 8 September 2020
- Army Environmental Hygiene Agency (AEHA) Information Paper No. 12, Preparation of Oil and Hazardous Substance Spills, 1990
- Toxic Chemical Release Reporting: Community Right-to-Know (40 CFR 372)
- Emergency Planning and Notification (40 CFR 355)
- USAEHA Water Quality Paper No. 12, Preparation of SPCCPs
- Facility-Specific Spill Prevention and Contingency Plans (SPCPs)
- NJDMAVA Department Directive No. 600.9 (Installation Spill Plan)

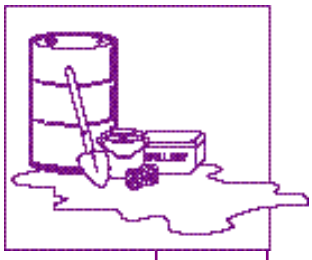
B. Compliance Thresholds

NJARNG facilities are generally subject to three types of spill response plans.

- **RCRA Contingency Plan**: Required under the hazardous waste management regulations of 40 CFR 262, certain hazardous waste generators are required to develop and maintain procedures for responding to spills of hazardous waste.

- **Facility Response Plan (FRP), formerly known as Integrated Spill Contingency Plan (ISCP)**: This AR requirement (see AR 200-1, paragraph 3-3 and DA PAM 200-1, paragraph 3-4) applies to facilities and activities that store or use oil and/or hazardous substances. ARs and policy require these facilities/activities to implement an FRP for their home stations, as well as for field locations where oil and hazardous substances are used. However, this Army-required FRP is not the same as the federally-required FRP under 40 CFR 112.20. Federally-required FRPs apply to facilities that, because of their location, could be expected to cause substantial harm to the environment by discharging oil into waters or adjoining shorelines.

- **Spill Prevention Control and Countermeasure Plan (SPCCP)**: 40 CFR 112 requires that SPCCPs be prepared for facilities that meet one of the following conditions:
    - There is a reasonable potential for discharging oil from fixed facilities into waters of the United States and one of the following is true:
        - Oil storage capacity on site exceeds 42,000 gallons of total underground storage of which those tanks that are not currently subject to all the technical requirements of 40 CFR 280 or all of the technical requirements of a State program approved under 40 CFR 281.



- Oil storage capacity on site exceeds 1,320 gallons of total aboveground storage counting only storage containers of 55 gallons or greater toward that total capacity.
- A toxic storage and disposal facility is present or enough hazardous material (HAZMAT) is stored on site to produce a reportable quantity (RQ) release.
- A substance is present in amounts equal to or above its threshold planning quantity (TPQ).

The Army also requires SPCCPs to be prepared for Large Quantity Generator (LQG)s and for units or activities that store more than consumer quantities of hazardous substances. See AR 200-1, paragraph 4-2d, 4-2e, and 11-4b and DA PAM 200-1, paragraph 3-3.

Spill Prevention and Contingency Plan (SPCP)

NJARNG has developed spill plans for there facilities designed to meet the requirements of a RCRA contingency plan, FRP (formerly ISCP), and SPCCP. These spill plans, called Spill Prevention and Contingency Plans (SPCPs) which goes above and beyond the SPCCP requirements in that it requires that all hazardous materials, not just petroleum/oil products, be addressed. In addition, SPCPs require that secondary containment be provided for all aboveground oil and hazardous material storage facilities/systems and that spill contingency planning for field exercises and training activities must be included in the plan.

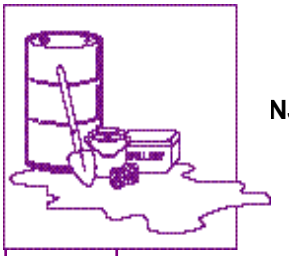
C. Responsibilities

Installation On-Scene Coordinator (IOSC)

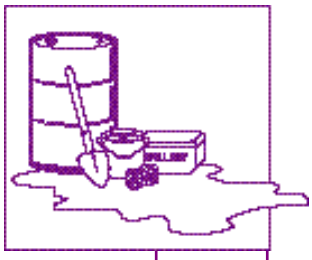
All NJDMAVA installations/facilities will maintain an IOSC and Alternate. The IOSC coordinates and directs control and cleanup efforts at the scene of an oil or hazardous substance discharge on or adjacent to any NJARNG facility. All references to the IOSC refer to the full-time supervisor, readiness non-commission officer (NCO), shop chief, or designated alternate. They will coordinate and direct all efforts at the scene of a spill or discharge.

An IOSC's job obligations:

- The responsibility is assigned to full-time personnel at the facility.
- Is accountable for discharge prevention.
- Ensures that emergency response information is posted in prominent locations at potentially significant spill sites.
- Ensures that employees know where spill-response equipment is located in each work area.
- Notifies local law enforcement and medical authorities if needed (Call 911).
- Notifies CFMO-EMB of any spills.
- Instructs employees to only clean up a spill if they have training, sufficient equipment, and specific written instructions.
- Requests assistance from other response agencies as needed.



- Maintains all records related to this document.
- Coordinates/ conducts all required training.
- Evaluates system changes to determine if they affect the SPCP.
- Conducts inspections.
- Periodically reviews the SPCP.
- Establishes and implements spill prevention and control procedures.
- Coordinates with the CFMO-EMB to review this plan when amendments are required or at least once every five years.
- Activates internal alarms and hazard communication systems to notify all facility personnel of an emergency.
- Mobilizes the IRT and directs its actions.
- Identifies the character, exact source, amount, and extent of the release, as well as other items needed for notification.
- Performs internal response reporting and ensures external reporting occurs in the event of a spill.
- Establishes and maintains a Response Operations Center (ROC) to act as the central messaging, receiving, and distributing center during a spill.
- Assesses the possible hazards to human health and the environment due to the release, including both direct and indirect effects.
- Assesses the substance released and implements prompt actions to contain and remove it.
- Keeps local health officials informed of the situation.
- Uses authority to immediately access NJARNG funding to initiate cleanup activities.
- Directs cleanup activities for small spills.
- Emergency Coordinator must be a full-time person at the facility.
- Activates internal alarms and hazard communication systems to notify all facility personnel of an emergency.
- Notifies all response personnel, as needed.
- Identifies the character, exact source, amount, and extent of the release, as well as other items needed for notification.
- Performs internal response reporting and ensures external reporting occurs in the event of a spill.
- Assesses the possible hazards to human health and the environment due to the release, including both direct and indirect effects.
- Assesses the substance released and implements prompt actions to contain and remove it.
- Directs cleanup activities for small spills.
- Submits the Incident Report Form to the NJARNG CFMO-EMB within 24 hours of the spill.
- Maintains incident log.
- Evaluates spill reports and directs and coordinates control and cleanup efforts at the scene of a spill.



Installation Response Team (IRT)

A spill response team should be established at each facility. The team should respond to and mitigate incidental spills. The team should be made up of NJARNG personnel trained to first responder operations level as specified in 29 CFR 1910.

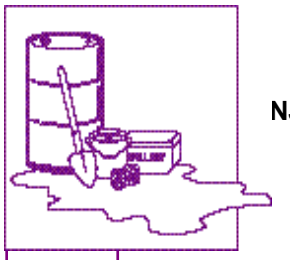
Most local fire departments will respond to all emergency spills. If required, the local fire department assumes control of the situation and performs containment procedures. Mitigation is performed by NJARNG personnel or by a private contractor.

CFMO-EMB

- Publishes procedures needed for implementing the SPCP.
- Coordinates all required training and ensures that all required personnel receive training.
- Assists Department of Labor (DOL) with programming and budgeting for equipment required for hazardous substance spill prevention, countermeasures, and controls.
- Evaluates system changes to determine if they affect the SPCP.
- Coordinates with the UECO to review the plan at least once every three years.
- Establishes spill prevention and control procedures.
- Serves as liaison to federal, state, and local regulatory agencies regarding waste management issues.
- If the spill is reportable, ensures that the Installation On-Scene Coordinator (IOSC) reports the spill to NJDEP within 15 minutes and submits the *Spill Incident Report Form* within 24 hours of the spill (see SPCP).
- Makes required notifications and reports to state and federal agencies within 24 hours: for example, the NRC, EPA, and Local Emergency Planning Committee.
- Forward spill reports to the PAO and NJARNG Emergency Operations Center (EOC).
- CFMO-EMB will coordinate, if required, with designated commercial spill response/clean-up companies for spill containment and clean-up actions.
- Uses authority to immediately access NJARNG funding to initiate cleanup activities.

Maintenance Shop/Armory/Unit

- Ensures that adequate training is conducted.
- Ensures that environmental protection/pollution abatement procedures are implemented in their areas of responsibility.
- Designates additional project officers; monitors these officers as needed to ensure they continually inspect the work areas under their control and follow effective pollution abatement procedures.
- Ensures that site-specific spill contingency plans are posted in prominent locations at potential spill sites.
- Ensures that employees know where spill response equipment is in each work area.



- Instructs employees to only clean up a spill if they have training, sufficient equipment, and specific written instructions.
- Is familiar with the SPCP.
- Maintains all records related to the SPCP.
- Coordinates all required training with CFMO-EMB.
- Ensures personnel are familiar with their SPCP response actions and site-specific information contained within the SPCP.
- Assigns an IOSC and alternate from full-time support personnel.
- Programs and budgets for materials and equipment required for hazardous substance spill prevention, countermeasures, and controls.
- Evaluates system changes to determine if they affect the SPCP.
- Conducts inspections.
- Periodically reviews the SPCP.
- Establishes and implements spill prevention and control procedures.
- Coordinates with the CFMO-EMB to review this plan at least once every 3 years.

CFMO-FMB

- Ensures that Armorers complete Spill Incident Reports and sends to EMB.

CFMO-CMB

- Ensures that construction projects have copies of facility SPCP's during work efforts.
- Familiarize the Project manager about SPCP requirements and spill response procedures.
- Notify EMB immediately if a spill occurs during a construction project.

CFMO-RPB

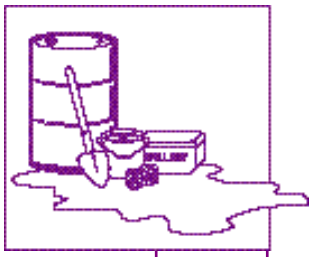
- Ensures that tenants are aware of a site's SPCP and its requirements.
- Notify EMB if a spill occurs at a property at which we hold a lease.
- Notify EMB if a spill occurs at a property that hosts tenants.

The following branches are exempt from responsibilities regarding hazardous material management:

- TAG
- CFMO-PPB

D. Procedures

NJARNG personnel without the specific training which meets Occupational Safety and Health Administration emergency response requirements of 29 CFR 1910.120 are not qualified to actively take part in "emergency" containment and cleanup activities. However, personnel will make required notifications and may construct dikes/barriers downstream of spill flow at a safe distance to prevent discharges into storm water drains, lakes, streams, etc. (passive response). NJARNG personnel are qualified to fully respond to "incidental releases" of hazardous substances where substances can be quickly absorbed, neutralized, or otherwise



controlled at the time of release. Incidental releases are those where there are no actual or potential safety or health hazards (fire, explosion, chemical exposure, etc.) from hazardous substance spills/leaks.

All mobile refuelers should be equipped with a Standard Operating Procedure (SOP) that details spill response procedures in the event of a spill during training or while in transit. Personnel should familiarize themselves with this SOP and its spill response procedures. In addition, when a mobile refueler is parked onsite, it must be operated in accordance with National Guard Bureau - Army Environmental (NGB-ARE's) Mobile Fuel Tanker (MFT) Policy memorandum, dated 8 September 2020 and the NGB-ARE's MFT oil spill prevention and contingency plan (OSPCP) typically kept in the glove box.

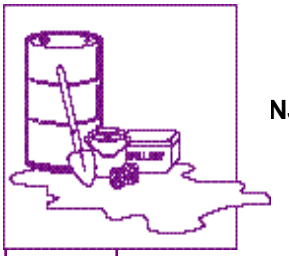
General Spill Response Procedures

These general spill response procedures are not meant to replace other SPCP procedures. All personnel should familiarize themselves with the plan and spill response procedures. Refer to the facility SPCP for specific spill response procedures for potential spill sites.

Upon discovering a spill, you must first determine if the release is incidental or an emergency. Then, follow the appropriate response sheet. For guidance in making this determination, see the table below.

Table 10-1. Incidental Release Vs. Emergency Release

Incidental Release	Emergency Release
Incidental releases are small spills of routinely used substances that do not pose a significant safety or health hazard, such as fire or explosion, or a risk to a water source, and that can be handled using spill kits located in the immediate area. NJARNG personnel may clean up incidental releases that do not present any obvious health risks (fire, explosion, inhalation, etc.). Follow the Incidental Release Procedures following the next page.	Emergency releases are spills of unknown substances or spills that cannot be absorbed or otherwise controlled at the time of the release by personnel in the immediate release area. These include spills that pose a significant safety or health hazard such as fire or explosion, or that reach a water source. NJARNG personnel are not trained and should not clean up large spills. Follow the Emergency Release Procedures on the next page.



EMERGENCY RELEASE PROCEDURES

If the spill is **LARGE** or **HAS OBVIOUS HEALTH THREATS** (fire, explosion, vapor, inhalation, etc.), then

Step 1. Evacuate the area.

Step 2. Immediately notify the Emergency Coordinator:

Emergency Coordinator: _____

Alternate: _____

Step 3. Notify the local fire department and provide the following information:

- Name
- Spill location
- Injured personnel and nature of injury
- Type and amount of material spilled
- Estimated rate at which material is spilling
- Time spill started

Step 4. When the fire department arrives, relinquish control to the Senior Fire Official (SFO), who becomes the IOSC. Have the SPCP available.

Step 5. After the fire department contains the spill, the Emergency Coordinator is authorized to call one of the contracted spill remediation companies to remove the spill and contaminated material, if necessary.

Step 6. Contact the CFMO-EMB at 609-530-7135, 7134, 6917, 6884, 7136, or 6971 during regular business hours.

**New Jersey Law requires that most discharges of hazardous materials be immediately reported to the NJDEP HOTLINE 1-877-927-6337.*

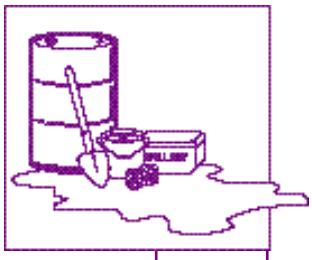
INCIDENTAL RELEASE PROCEDURES

If the spill is **SMALL** and **HAS NO OBVIOUS HEALTH THREATS** (fire, explosion, vapor, inhalation, etc.), then

Step 1. Notify the Emergency Coordinator.

Emergency Coordinator:

Alternate:



Step 2. Put on at least the following personal protective equipment (PPE):

- Gloves
- Safety glasses
- Apron
- Rubber boots

NOTE	Always check the SDS to determine if more PPE is required.

Step 3. Stop the spill:

- Approach the spill with the wind at your back
- Turn off all sources of ignition (vehicle motors, electric devices, etc.)
- Move other materials that may pose hazards away from the incident area without placing yourself or others at risk to injury
- Stop the flow of spilled material by uprighting containers or plugging holes in containers
- If necessary, place leaking containers into compatible larger containers

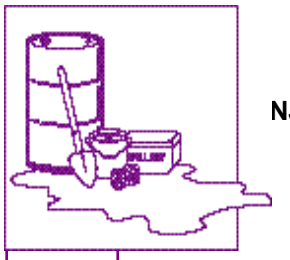
Step 4. Obtain absorbent material from the nearest spill kit and place a berm of absorbent material (socks, pads, mats, etc.) around the edge of the spill to keep it from spreading.

Step 5. Localize the spilled material into the smallest area possible.

Step 6. Absorb the remainder of the spill with additional absorbent material (e.g., dry sweep, soil, or any other compatible material).

Step 7. Dispose of used absorbent in accordance with the Chapter 5 of this guide.

Step 8. Complete a *Spill Incident Report Form* and forward to CFMO-EMB.



Determine whether the spill is small or large and whether you can respond to it.

Small Spill	Large Spill
Can respond to with available response equipment and personnel resources without endangering welfare of personnel or endangering the environment.	Cannot respond to without endangering the welfare of personnel or endangering the environment.
NJARNG personnel can clean up small spills that do not present any obvious health risks (fire, explosion, inhalation, etc.). Follow the Small Spill Procedures on the next page.	NJARNG personnel are not trained and should not clean up large spills. Follow the Large Spill Procedures below.

Additional details on how to respond to certain spills are outlined in each facility's SPCP in Chapter 2.

Spill Notification

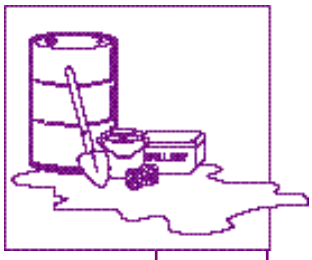
The IOSC is responsible for notifying the local fire department and the CFMO-EMB in the event of an emergency release. In addition, the IOSC must complete the *Spill Incident Report Form* (see SPCP) and must submit the form to CFMO-EMB within 24 hours of all releases. Refer to the facility specific SPCP for emergency contact information and specific spill notification procedures.

Reviews and Revisions

IOSC Review

The IOSC will review the SPCP at annually and update the plan as necessary. IOSC reviews are limited to:

- Facility changes that alter the potential for spills or change the spill prevention and response procedures, methods, and equipment. Examples of these types of changes include the following:
  - Addition of new HAZMAT/POL storage buildings
  - Major changes to positioning of mobile refuelers
  - Installation of new aboveground storage tanks
  - Fueling activity changes (addition of onsite fueling, or cessation of onsite fueling)
- Changes in the assignment of the IOSC, the IRT, or in the contents of the spill response equipment list. The IOSC will use the *Record of Changes* form in the SPCP to document any revisions to the SPCP.



CFMO-EMB Reviews and Revisions

CFMO-EMB will coordinate with the IOSC to review this SPCP and amend as required. The review must include a detailed inspection of oil and hazardous substance sites and verification of all data generated during the initial SPCP development. CFMO-EMB is able to self-certify NJARNG's SPCP's without a Professional Engineer (PE) because all facilities, outside of JBMDL, meet the self-certification criteria. The criteria to meet self-certification is:

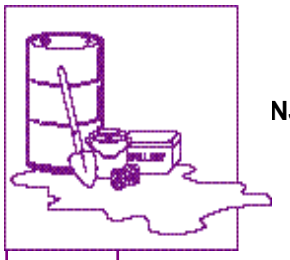
- The aggregate aboveground oil storage capacity of the facility is 10,000 U.S. gallons or less.
- The facility has had no single discharge as described in §112.l(b) exceeding 1,000 U.S. gallons and no two discharges as described in 112.l(b) each exceeding 42 U.S. gallons within any twelve month period in the three years prior to the SPCC Plan self-certification date, or since becoming subject to 40 CFR part 112 if the facility has been in operation for less than three years (not including oil discharges as described in §112.l(b) that are the result of natural disasters, acts of war, or terrorism).
- There is no individual · oil storage container at the facility with an aboveground capacity greater than 5,000 U.S. gallons.

It is the IOSC's responsibility to notify CFMO-EMB of any significant changes annually. Other circumstances that may warrant an SPCP review and update are listed below:

- When either federal regulations or NJ regulations change significantly, affecting the applicability and effectiveness of this SPCP.
- When facility changes increase the potential for spills or change the spill prevention and response procedures, methods, and equipment.
- When the SPCP fails or proves to be ineffective in preventing or responding to a spill.
- At the request of the EPA or NJDEP.
- When changes occur in the assignment of the IOSC or in the contents of the spill response equipment list.
- After pertinent federal or state legislation is enacted or amended or DOD or NJARNG policy changes, especially changes in reportable spill quantities.
- After pertinent national, regional, or state contingency plans are modified.
- After any changes in adjacent land and water use that would affect spill prevention and response.

Inspections

The IOSC is responsible for conducting inspections at the facility. Refer to the facility SPCP for additional information. This inspection program has been implemented to ensure that spills or other releases can be identified in a timely manner. The following checklists may be found in your spill plan.



AST/UST INSPECTION CHECKLIST (PERFORMED WEEKLY)

Check ASTs and USTs weekly. Use this checklist as a guide for completing your inspection. You will need a new and blank checklist to conduct each inspection, so it is recommended to copy the checklist multiple times prior to initial use to have for future inspections.

When finished, sign and date the form in the space provided. ***Should you note a deficiency, send a copy of the inspection form to the CFMO-EMB.***

Check Tanks and Tank-to-Piping Connections:

Apparent drip marks?	Yes _____	No _____
Apparent discoloration?	Yes _____	No _____
Any visible corrosion?	Yes _____	No _____
Apparent localized dead vegetation?	Yes _____	No _____
Puddles containing material?	Yes _____	No _____

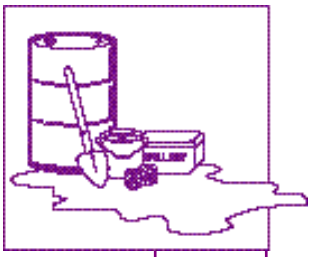
Check Piping:

Visible droplets of stored material?	Yes _____	No _____
Apparent discoloration?	Yes _____	No _____
Visible corrosion?	Yes _____	No _____
Pipe bowing between supports?	Yes _____	No _____
Evidence of stored material on valves or seals?	Yes _____	No _____
Localized dead vegetation?	Yes _____	No _____

Check Secondary Containment (For ASTs Only):

Relief valve closed?	Yes _____	No _____
Cracks or other penetrations apparent?	Yes _____	No _____
Visible seepage at joints?	Yes _____	No _____
Excessive ponded water?*	Yes _____	No _____
Product residue in secondary containment?	Yes _____	No _____

DATE	INSPECTOR'S INITIALS	DEFICIENCIES?	DATE CORRECTED
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____



SECONDARY CONTAINMENT INSPECTION CHECKLIST

Check secondary containment at the mobile refueler parking pad weekly. Use this checklist as a guide for completing your inspection. When finished, sign and date the form in the space provided. ***Should you note a deficiency, send a copy of the inspection form to the CFMO-EMB.***

Check Localized Secondary Containment(s):

1. Excessive ponded water?** Yes _____ No _____
2. Depressions or cracks on the containment surface? Yes _____ No _____
3. Outside of the containment discolored? Yes _____ No _____
4. Stored material visible in the containment? Yes _____ No _____
5. Drainage control closed? Yes _____ No _____
6. Any parked motor vehicles leaking? Yes _____ No _____
7. Any sign of distressed or overgrown vegetation? Yes _____ No _____

***Complete the Rainwater Release Inspection Log before discharging excessive ponded water.*

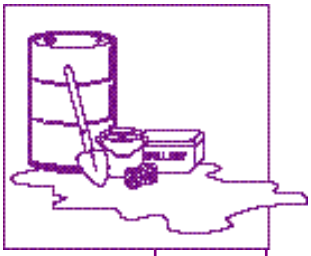
DATE	INSPECTOR'S INITIALS	DEFICIENCIES	DATE CORRECTED

RAINWATER RELEASE INSPECTION LOG

Copy and complete this form before discharging rainwater from secondary containment

Containment Area	Water quality/ Visible Contamination *	Name of person who determined the water quality	When the release began	When the release ended
	• Sheen? • Color? • Other (explain)?			
	• Sheen? • Color? • Other (explain)?			
	• Sheen? • Color? • Other (explain)?			
	• Sheen? • Color? • Other (explain)?			

** If Yes, Contact the CFMO-EMB for further direction. DO NOT DISCHARGE STORM WATER!!*



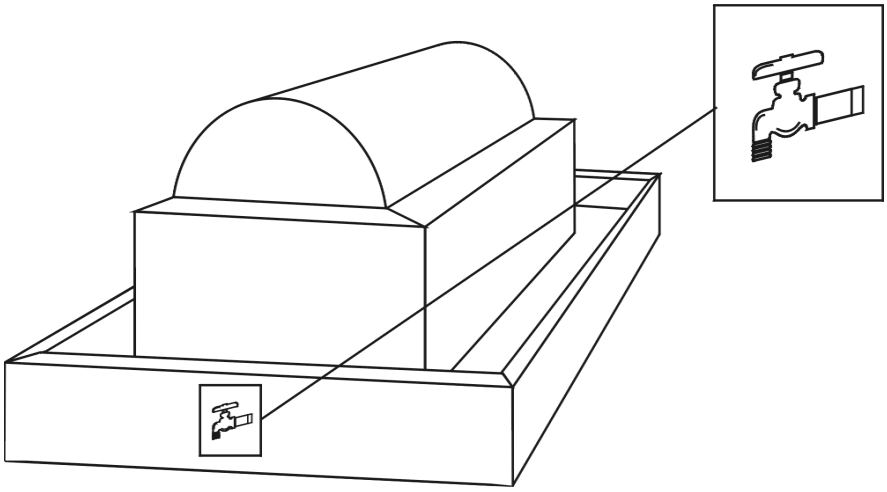
RAINWATER DISCHARGE SOP
(Page 1 of 2)

Rainwater will accumulate in outdoor uncovered secondary containment. All personnel will use the following SOP to inspect drain valves weekly. Check secondary containment after ***any*** rain event.

Weekly Inspection

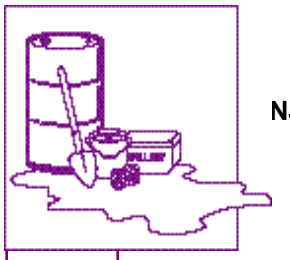
Debris can clog drain valves. Every Friday, check that drain valves are clear of debris and are closed:

1. Remove grates and sweep up debris.
2. Place debris in 55-gallon drums.
3. Dispose of debris as contaminated soil.
4. Replace grating.
5. Check that drain valves are ***CLOSED*** (turn right).



After Any Rain Event

1. Check secondary containment for a visible sheen on the surface of the water, indicating residual spilled fuel product.
2. If there is a visible sheen, remove grating and place absorbent pads on the water surface to remove spilled product.
3. Clean up spilled product.
4. Dispose of oily rags.
5. Open the drain valve (turn left) and remove accumulated water.
6. Close the drain valve (turn right) and replace the grate.
7. Complete the Rainwater Release Inspection Log.



RAINWATER DISCHARGE SOP
(Page 2 of 2)

If there are any questions about the quality of the water present, the UECO, at his/her option, will either:

- Arrange for offsite transport for proper treatment and disposal
- Allow the water to evaporate and, if appropriate, take corrective action to clean up the residual contamination
- Analytically test a water sample for suspect pollutants to determine if the water meets the requirements of the National Pollution Discharge Elimination System Storm Water Permit, if applicable

Only personnel who have received training to determine the water quality can discharge water from containment areas, and then only upon the direct order of the UECO.

Maintain a record that reflects the following information:

- An explanation of why excess precipitation needed to be released
- The name of the person who determined the water quality and what method he/she used
- When the release was initiated
- When the release was terminated
- Approximate volume of water that was discharged

E. Training

All appropriate Maintenance Shop, Armory, and Unit personnel shall attend the General Environmental Awareness training annually. In addition, all personnel starting a supervisory position receive initial training within 6 months (2 weeks recommended).

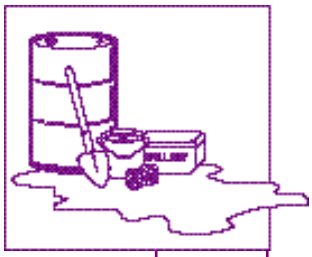
All personnel working with oil and HAZMAT must attend training at least once a year or:

- After any significant revisions to the training program or the SPCP
- After a spill response in which training deficiencies were noted

More information about training requirements can be seen in the Introduction chapter on pages I-4 through I-6.

Spill Plan Training

Spill plan training consists of an internal briefing on the contents of the plan, and an internally conducted spill response exercise. The UECO/Facility IOSC conducts this training at least once a year. The CFMO-EMB is responsible for conducting “train the trainer” training for the IOSC. This training will include an overview of the SPCP, MFT policy, and reporting requirements. The IOSC will use the information from this training session to train the facility IRT during the Discharge Prevention Briefings discussed below. Ideally, IOSC training will be conducted annually.



The IOSC conducts discharge prevention briefings for oil handling personnel at least once per year to ensure adequate understanding of the SPCP. The briefings must highlight and describe known discharges or failures, malfunctioning components, and any recently developed precautionary measures. This training includes spill response exercises. These exercises are mock spill drills designed to practice the most likely spill scenarios. For example, a spill exercise gives personnel assigned to the IRT a chance to practice how long it takes to begin and complete response procedures, including deploying spill equipment, such as drain covers or portable booms. A spill response exercise should be performed at least once a year.

Responder Training

Personnel assigned to the IRT, IOSC and other personnel assigned supervisory positions receive *First Responder Operations Level* training within 6 months of their hire date or of being appointed to the IRT (2 weeks recommended). The training covers the following topics:

Preventing Spills

- The purpose and requirements of good housekeeping.
- Using and maintaining all alarms and monitoring equipment.
- Conducting a visual inspection.

Personnel Safety

- Health effects resulting from exposure to oil or HAZMAT.
- First aid procedures following exposure to oil or HAZMAT.
- Protective equipment, requirements, and procedures.
- Notification and evacuation procedures.

Responding to Spills

- Initial spill notification procedures.
- Immediate spill response actions.
- Combustibility of spill material and potential for flashback along vapor trails.
- Applicable fire fighting procedures and special hazards of combustion products.
- Reactivity of spill material with common materials, including water.

General Information

- Location of posted site-specific spill contingency plans, if applicable.
- Using the SPCP.
- DOT packaging and transportation requirements for hazardous material (including hazardous waste).

Table 10-2 below outlines training requirements for personnel who participate in, or are expected to participate in, emergency response.

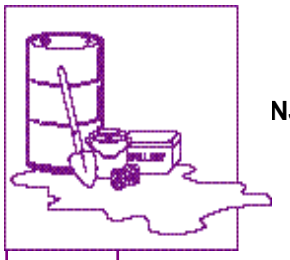
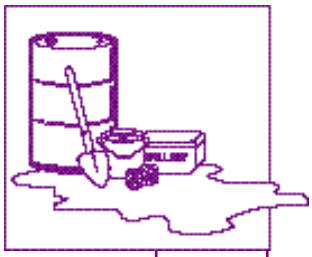


Table 10-2. Responder Training

Responder Level	Definition	Length/ Frequency	Required Training Item
First Responder Awareness Level	Witness or discover a release of hazardous materials and notify proper individuals.	Length not specific; must cover required items. Annual refresher required.	• Understand what hazardous substances are • Understand the risks associated with hazardous substances in an incident • Know how to recognize the presence of the hazardous substance • Understand their role in the response plan
First Responder Operations Level	Respond to a release of HAZMAT in a defensive manner, without trying to stop the spill. Contain the spill from a safe distance.	At least eight hours, including the required training items listed here. Annual refresher required.	• Know basic hazard and risk assessment techniques • Know how to select and use proper PPE • Understand basic hazardous materials terms • Know how to perform basic control, containment, and/or confinement operations with the capabilities of the resources and PPE available • Know how to implement basic decontamination procedures • Understand relevant standard operating procedures and termination procedures
Hazardous Materials Technician	Respond to a release of HAZMAT for the purpose of stopping the release. Assume a more aggressive role, approaching the point of release to plug, patch, or otherwise stop the release.	At least 24 hours, equal to the First Responder Operations Level Training level plus the required training items listed here. Annual refresher required.	• Know how to implement the emergency response plan • Know the classification, identification, and verification of known and unknown materials by using field survey instruments and equipment • Understand hazard and risk assessment techniques • Be able to perform basic control, containment, and/or confinement operations with the capabilities of the resources and PPE available • Understand and implement decontamination procedures • Understand basic chemical and toxicological terminology and behavior
Hazardous Materials Specialist	Responsibilities parallel those of the HAZMAT Technician; however, they have a more directed or specific knowledge of the substances they may be called upon to contain. Would also act as the site liaison with federal, state, and local authorities.	At least 24 hours, equal to the First Responder Operations Level Training level plus the required training items listed here. Annual refresher required.	• Know how to implement the local emergency response plan • Understand classification, identification, and verification of known and unknown materials by using advanced survey instruments and equipment • Know of the state emergency response plan • Be able to select and use proper specialized chemical PPE provided to the hazardous material specialist • Understand in-depth hazard and risk techniques • Be able to perform specialized control,



Responder Level	Definition	Length/ Frequency	Required Training Item
			containment, and/or confinement operations within the capabilities of the resources and PPE available • Be able to develop a site safety and control plan • Understand chemical, radiological, and toxicological terminology and behavior
On-Scene Incident Commander	Will assume control of the incident scene beyond the First Responder Awareness Level.	At least 24 hours, equal to the First Responder Operations Level Training level plus the required training items listed here. Annual refresher required.	• Know and be able to implement the site incident command system • Know how to implement the site emergency response plan • Know and understand the hazards and risks associated with working in chemical PPE • Be able to select and use proper specialized chemical PPE provided to the hazardous material specialist • Know how to implement the local emergency response plan • Know of the state emergency response plan and of the Federal Regional Response Team • Know and understand the importance of decontamination procedures

F. Recordkeeping

Training certificates must be retained indefinitely when placed in personnel folders. Retain the following forms or documents for at least 3 years in your facility files:

- Spill Plans (SPCPs, SPCCPs, ISCPs, etc.)
- Spill Drills (invitations to local emergency responders)
- IRT Updates
- Spill Response Training
- Self-inspection Checklists

Chapter 11
Remediation

This chapter discusses the New Jersey Army National Guard's (NJARNG) goals, policies/procedures, and compliance tools that support its Remediation Program. For any correspondence related to Remediation, refer to page I-7 of the Introduction of the Desktop Guide.

A. Program Overview

The NJARNG Cleanup and Restoration Program protects human health, restores the environment, and ensures sustainable community relationships in support of Army National Guard (ARNG) soldier training and readiness. Through conducting Environmental Conditions of Property (ECOP) investigations, environmental conditions will be determined to be present or absent at a site. Additional measures are required to ensure the safety of the environment and human health.

There are different types of ECOP investigations which have different purposes:

- Environmental Site Assessments (ESAs)
  - Phase I Assessments
  - Phase II Assessments
- Preconstruction Site Selection (PSS)
- Environmental Baseline Survey (EBS)
- Transaction Screening Analysis (TSA)
- Report of Availability (ROA Section C)

ESAs are used to document the existing environmental condition of the property that demonstrates All Appropriate Inquiries (AAI). An ESA is performed for acquisition actions when the property is not federally owned and consists of a phase I Investigation and sometimes a Phase II Investigation if warranted. Phase I Assessments identify Recognized Environmental Conditions (REC's) on a property for liability purposes. Phase II Assessments allow for a better understanding of the potential environmental concerns associated with a property.

A Preconstruction Site Selection (PSS) minimizes risk to builders and future occupants of military facilities and to avoid unforeseen cleanup costs and delays by identifying, and possibly remediating, contamination prior to construction.

An EBS is essentially a combination of assessments (Phase I, Phase II) that establish due diligence for Federal acquisitions or non-federal actions where no prior due diligence has been documented as a baseline. An EBS is conducted in accordance with NGB's ECOP Handbook, 2011 and identifies Areas of Concern (AOC) throughout the property. The AOC's are further identified into Area Types 1-7, listed below:

- **Area Type 1** – An area or parcel of real property where no release, or disposal of hazardous substances or petroleum products or their derivatives has occurred (including no migration of these substances from adjacent properties).
- **Area Type 2** – An area or parcel of real property where only the release or disposal of petroleum products or their derivatives has occurred.
- **Area Type 3** – An area or parcel of real property where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred, but at concentrations that do not require a removal or remedial action.
- **Area Type 4** – An area or parcel of real property where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred, and all remedial actions necessary to protect human health and the environment have been taken.
- **Area Type 5** – An area or parcel of real property where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred and removal or remedial actions, or both, are under way, but all required response actions have not yet been identified.
- **Area Type 6** – An area or parcel of real property where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred, but required response actions have not yet been initiated.
- **Area Type 7** – An area or parcel of real property that is unevaluated or requires additional evaluation.

For disposal actions, EBS's can be used to ensure that the prospective owner is made aware of environmental conditions associated with the property and that the Federal or State agency is not held liable for contamination caused by actions that occur after the transfer takes place. An EBS documents the condition of the land at the time of transferring ownership of property to ensure:

- The Federal or State agency is aware of the environmental conditions associated with the property prior to taking control of the property.
- The Federal or State agency accepting control is not help liable for contamination caused by activities that occurred prior to the transferring taking place.
- The Federal or State agency accepting control does not incur liability or financial responsibility for contamination caused by another Federal agency.

Report of Availability (ROA) Section C are standalone documents for disposal action of Federal-owned properties, out grants, and leases. They are used for low-risk actions that do not require additional ECOP documentation.

TSA Screening is a tool used for military construction (MILCON) and Real Estate actions that are low-risk, such as updating existing office space within a building. A TSA can lead to an EBS if potential environmental concerns are identified during the TSA process.

References

- NGB ECOP Handbook, June 2011
- Standard Classification of Environmental Condition of Property Area Types for Defense Base Closure and Realignment Facilities (ASTM D5746-98 (2016))
- Standard Practice for Conducting Environmental Baseline Surveys (ASTM D6008-96 (2014))
- Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM E1527-13)
- Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process for Forestland or Rural Property (E2247-16)
- Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process (ASTM E1903-11)
- Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (ASTM E1528-14)
- Department Oversight of the Remediation of Contaminated Sites (NJAC 7:26C)
- Technical Requirements for Site Remediation (NJAC 7:26E)
- Army Regulation (AR) 200-1 chapter 15-5
- Army Regulation (AR) 200-1 chapter 15-6
- NGB Policy, All States Log Number (I94-0061) Internal Compliance Assessment System (ICAS), 3 March 1994
- Army Facilities Management (AR 420-1)
- Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges (NG Pam 420-15)
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 USC 9601)

B. Compliance Thresholds

According to AR 200-1 Chapter 15-5, it is Army policy to prepare an ECOP to determine the environmental conditions of properties being considered for acquisition, out-grants, and proposals. Furthermore, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) requires the Army to perform certain actions to assess the environmental condition of property (ECOP) prior to entering into designated real property transactions.

The Army will assess, determine, and document the environmental condition of transferable property in an ECOP Report. The ECOP Report will summarize historical, cultural, and environmental conditions and include references to publicly available and related reports, studies and permits. ARNG must conduct ECOP investigations for all Federal real property

transactions and MILCON projects. Sites are observed to identify potential or actual sources of contamination and ensure that the proper steps are being taken to reduce environmental or human exposure to contaminants.

The IMCOM/ACOM/ASCC/DRU/NGB-ARNG is responsible for certifying the site categorization. Sites are classified into the three following categories:

- Category I: There is no reason to expect contamination will be encountered during the construction
- Category II: There is no known contamination, there remains some potential that contamination may be encountered during construction
- Category III: The site is known to be contaminated or there is strong suspicion contamination will be encountered during construction.

If an ECOP investigation finds spills or contaminants, the area must be cleaned and reported to the NJDEP. This process will be facilitated through CFMO-EMB or their contracted entities responsible for that project or site. AR 200-1 and AR 420-1 specifically requires that a Property Condition Assessment (PCA) is performed prior to all MILCON projects to identify potential sources of munitions of explosive concerns (MEC), chemical warfare agents, hazardous substances, and petroleum products.

Underground Storage Tanks (USTs), Aboveground Storage Tanks (ASTs), and Former Indoor Firing Ranges (FIFRs) are all potential sources of contamination. Spills may also occur at the site, causing contamination to occur. The site's Spill Plan provides response actions to be taken if the need arises. Additional information regarding tank management can be found in Chapter 14 of this guide. More information regarding spill plans can be found in Chapter 10 of this guide. More information on FIFRs and lead can be found in Chapter 15.

Monitoring wells should be protected and maintained to prevent triggering NJAC 7:9D "Well Construction and Maintenance" compliance actions. If monitoring wells are determined to no longer serve their purpose, they should be decommissioned. This decommissioning process will be facilitated through CFMO-EMB. If monitoring wells are damaged, a report should be sent to CFMO-EMB so that they can arrange for the repair or replacement of the well.

C. Responsibilities

TAG

- Assigns responsibility to CFMO regarding environmental accountability of State real property used by the ARNG and MILCON actions.

Cleanup and Restoration Division

- Provides Defense Environmental Restoration Program (DERP) cleanup instruction/oversight to states.
- Coordinates Environmental Liabilities training.

- Supports the decentralized executing of Installation Restoration Program (IRP).
- Provides support to states and territories and to ARNG staff with regards to Army cleanup programs.
- Supports the decentralized execution of Compliance-related Cleanup program.
- Conducts assessments of the potential for environmental contamination migrating off operational ranges and range complexes.
- Develops and provides guidance and assistance with policy interpretations.
- Provides technical and subject matter expertise.
- Provides Contracting Officer's Responsibility (COR) duties on acquisition contracts where required.
- Allocates funding from NGB to USACE.
- Assures that ARNG interests are addressed in Army policy and interacts with the Deputy Assistant Secretary of the Army (DASA) and the Office of the Assistant Chief of Staff for Installation Management (OACSIM).

ARNG Directorate

- Reviews and approves the ARNG ECOP process and documents.
- Coordinates the ECOP process with Headquarters, Department of the Army, as necessary and appropriate.

HQDA

- Becomes involved in the ARNG ECOP process only if Army property is involved in the real property transaction or MILCON project.

CFMO-EMB

- Ensures compliance with both ECOP and National Environmental Protection Act (NEPA) requirements associated with any Federal real property transaction or MILCON action with which state ARNG is involved.
- Ensures environmental accountability of State real estate and real property used by the ARNG and MILCON actions.
- Works with the state ARNG Environmental Program Manager (EPM) as assigned to ensure the state ARNG's implementation of the ARNG ECOP requirements.
- Ensures ECOP document completion and approval per NGR 415-5 and other applicable regulations.
- Reviews and approves ARNG ECOP documents per NGR 415-5.
- Consults with NGB Judge Advocate (Legal) Branch (NGB-JA), if necessary, for a professional legal opinion.
- Works with USACE consultant on NJARNG cleanup sites.
- Hires and manages environmental consultants and remediation contractors.
- Reviews remediation project documents to include work plans and reports.

CFMO-FMB

- Provides ECOP investigators and contractors access to the property.
- Reports any sign of leakage from USTs or ASTs to CFMO-EMB.
- Notifies EMB of any construction/renovation work including any digging activity.

CFMO-RPB

- Notify EMB of any potential property acquisitions, lease renewals, permit renewals, license renewals, expirations, terminations, or property disposals.
- Notify Tenants and/or stakeholders of ECOP work.
- Manages all NJDMAVA building leases and provides information to tenants as necessary.
- Uses ECOP reports to make educated and informed decisions when purchasing or acquiring new property.
- Manages PRIDE database records and closes out FIFRs.

CFMO-PPB

- Notify EMB of upcoming or potential MILCON projects to prepare a PSS for the proposed construction area.

CFMO-CMB

- Ensures that engineering design firms are aware of Areas of Concerns onsite and, if needed, conduct surveys to identify and/or address those areas that are within a construction area.
- Notifies EMB of any construction/renovation work including any digging activity
- Provides technical support to the CFMO-EMB regarding building construction/demolition

Maintenance Shop/Armory/Unit

- Protects monitoring wells and reports any damages to CFMO-EMB.
- Provides ECOP investigators and contractors access to the property.
- Reports any signs of leakage from USTs or ASTs to CFMO-EMB.
- Cooperates with CFMO-EMB on remediation projects at sites.
- Submits work order requests as needed.

D. Procedures

Monitoring wells are used to observe contaminant concentrations in groundwater. Monitoring wells should be protected on site and not disturbed. Monitoring wells are present at the following sites as of May 2023:

• Bordentown	• Hammonton	• Menlo Park	• Picatinny	• Somerset	• Westfield
• Cape May	• Jersey City	• Morristown	• Pitman	• Vineland	• Woodbury
• Cherry Hill	• Lawrenceville	• Newton	• Princeton	• Washington	
• Dover	• Lodi	• Paramus	• Sea Girt	• West Orange	

If contamination or spills are found through an ECOP investigation, cleanup activities will need to be completed. Such activities may include soil excavation, groundwater monitoring, groundwater sampling, and soil sampling. CFMO-EMB or a contractor hired by the NJDMAVA is responsible for obtaining any permits related to site cleanup, reporting any spills or leaks to the NJDEP, and coordinating cleanup activities.

Former Indoor Firing Range Remediation

As of May 2023, former indoor firing ranges are present in twenty NJARNG facilities. All of the FIFRs have been fully remediated and are closed in PRIDE with the exception of the Jersey City armory FIFR. The firing range remediation projects followed the guidance outlined in the NG Pam 420-15, which was necessary in order to obtain the closure memos issued by the ARNG industrial hygiene office.

Lead in construction standards and lead safe work practices are required while performing any renovation or construction in FIFRs. Signage has been posted outside of indoor firing ranges that explain that the range has been fully remediated as per NG Pam 420-15, and that all surfaces of the range are sampled annually. The sign also indicates that any construction work must be approved by CFMO-EMB. An example sign is shown below. Additional information regarding FIFRs and Lead can be found in Chapter 15 of this guide.

Figure 11-1. The Freehold Former Indoor Firing Range Sign

Freehold Former Indoor Firing Range

The Freehold Armory Former Indoor Firing Range has been fully remediated and repurposed as per the NG Pam 420-15.

All surfaces of the former indoor firing range are sampled for lead regularly. CFMO must approve all construction work, including minor repairs that disturb the paint or encapsulant barrier, which must abide by all applicable OSHA standards including Lead in Construction and Lead Safe Work Practices. Contact the NJDMAVA - CFMO - Environmental Management Bureau with questions or concerns.

Posted: _____

E. Training

CFMO-EMB completes regular OSHA training. General Environmental Awareness training, Spill Drill training, and Unit Environmental Compliance Officer training shall be attended by appropriate Maintenance Shop, Armory, and Unit personnel annually. Any questions regarding remediation can be sent to CFMO-EMB. More information about training requirements can be seen in the Introduction chapter on pages I-4 through I-6.

F. Recordkeeping

All records are kept indefinitely as part of the CFMO-EMB data management. ECOP reports and related documents can be requested through CFMO-EMB.

Chapter 12
Geographic Information Systems

This chapter discusses the New Jersey Army National Guard (NJARNG)'s policies/goals, procedures, and compliance tools that support its Geographic Information System (GIS) Program. For any correspondence regarding GIS, refer to page I-7 of the Introduction of the Desktop Guide.

A. Program Overview

This chapter discusses the GIS program at NJDMAVA. GIS is a computer system that is capable of assembling, storing, manipulating, and displaying geographically referenced information. It can be an extremely resourceful tool that allows DMAVA employees to collect and use spatial information at all NJARNG sites. The information that DMAVA's GIS captures mainly pertains to natural and cultural resources, Real Property assets, built infrastructure, vegetation habitat, parcels, and future construction considerations. Not only is GIS a useful tool for the department, it is also a requirement for all states to collect and submit GIS data annually to the National Guard Bureau (NGB) to support the Department of Defense's Common Installation Picture Program (CIP).

Three organizations, NJDMAVA, Rowan University, and New Jersey Office of Information and Technology (NJOIT) manage the GIS program for NJDMAVA through a master user agreement. Rowan University collects, manages, and edits infrastructure layers as identified in the Geospatial Layer and Attribute Database (GLAD), which is an overarching guide to the NGB GIS data model. Infrastructure data consists of buildings, roads, gates, fences, sidewalks, utility lines, meters, etc. Environmental Management Bureau (EMB) of NJDMAVA manages the environmental layers that include natural and cultural resources, vegetation, wetlands, endangered/invasive species locations, electrical transformers, and storage tanks. NJOIT's role is taking NJDMAVA data (both infrastructure and environmental) and hosting it on ArcGIS Online for the departments use. NJOIT provides GIS support to various government agencies.

References

- Coordinating Geographic Data Acquisition and Access (EO 12906)
- National Imagery and Mapping Agency (DoD Directive 5105.6)
- Real Property Development Planning (NGR 210-20)
- Army Sustainability Range Program (AR 350-19)
- Installation Geospatial Information and Services (AR 115-13)
- Armory Viewer User Guide

B. Compliance Thresholds

GIS is a tool for the collection, display, and analysis of spatial data. It can integrate information spatially from disparate sources to provide master planners with a more complete picture of NJARNG facilities and installations. GIS data shall be developed in accordance with the Army's policy for GIS and kept in the Spatial Data Standards for Facilities, Infrastructure, and Environment (SDSFIE) V4.0 database schema. Periodically, the SDSFIE

schema is revised and NJDMAVA will migrate the new database schema in accordance with any NGB migration plans. The SDSFIE schema ensures that databases from every state can be collected and analyzed in one single format for aggregation into a nationwide data set, managed by the DOD. Only a small subset of layers in the SDSFIE is required to be collected under the CIP. The CFMO-EMB will work to obtain GIS data and maintain GIS data records. Such records can be obtained through contacting CFMO-EMB or by viewing the New Jersey Department of Military and Veterans Affairs (NJDMAVA) Armory Web Viewer.

Only authorized maintainers from Rowan University and Environmental GIS point of contact will closely maintain the original Production database for CIP and NGB use. Working data should be separate from Production data, which is used for viewing only to prevent accidentally deletion of data and additional errors. Data that is no longer relevant, such as a facility that has been disposed of, shall be saved in an "archived" database/folder.

C. Responsibilities

TAG

- Ensure GIS data is submitted annually to NGB.

CFMO

- Actively partners with other functional areas (e.g. environmental, Integrated Training Area Management, logistics, etc.) to create a multi-purpose and multi-user GIS capability

CFMO-EMB

- Updates GIS data as necessary
- Administrates the NJDMAVA Armory Viewer
- Uploads GIS information to the Armory Viewer
- Contracts outside entities to obtain GIS data for layers CFMO-EMB is responsible for.
- Identify and correct schema errors within database
- Submit Environmental data to Rowan University for annual Common Installation Picture (CIP) submission
- Attend Mid-Atlantic Urban and Regional Information Systems Association.
- Attend GIS Coordinator's Roundtable hosted by NJOIT.

CFMO-CMB

- Utilize the Armory Viewer for various construction projects such as, locating buildings, sizing parking lots, etc.

CFMO-PPB

- Planning and Programming Bureau is responsible for updating the Real Property Development Plan (RPDP) and utilizes GIS data to plan for future projects. The RPDP also includes environmental constraint GIS data that may prohibit future development.

CFMO-FMB

- Utilize the Armory Viewer for facility maintenance projects such as sizing rooms for re-tiling/carpet, identifying rooms, boiler repairs, etc.

CFMO-RPB

- Real Property Bureau maintains a database called Planning Resource for Infrastructure Development (PRIDE), also known as the Real Property Inventory (RPI). The RPI maintains this database of assets to obtain sustainment dollars from NGB to maintain, upgrade, or recommend for disposal. A huge part of this inventory relies on GIS to capture all of these assets spatially to validate their existence. Every asset in the RPI needs to be captured in GIS and linked with a unique number that is assigned to every asset across the state. The CFMO-RPB are frequent users of the Armory Viewer to cross reference real property assets with pride.
- Utilizes LBAMS, state of NJ database, to track real property assets. The CFMO-RPB uses GIS to determine the coordinates of said assets for entry into LBAMS.
-

Maintenance Shop/Armory/Unit

- Coordinates with CFMO-EMB and contractors to set up site visits.
- Notifies CFMO-EMB, if necessary, about changes to structures, buildings, and land use.

D. NJDMAVA Armory Viewer Procedures

The NJDMAVA Armory Viewer is an online web application that is hosted on ESRI's servers and can be accessed through ArcGIS.com. The application is set up to provide NJDMAVA personnel across all departments the ability to view and use the spatial data GIS collects for their daily job duties. Potential users need to gain access from administrators who will set up their account with a username and password. Personnel can log in with the organization's URL to access their account. This account can be used to access the NJDMAVA Armory Viewer and the Armory Viewer User Guide. The User Guide provides additional information regarding the operation of the Armory Viewer. The following are the basic steps to access installation specific information.

1. Accessing the Application

- https://njdmava.maps.arcgis.com/apps/webappviewer/index.html?id=c08ca685251f4d72a4595accd9bc6688

- If you are not logged in, you will be redirected to the sign in page. Enter the credentials provided to you in an email from ESRI. If you cannot find that email or are having difficulty logging in, contact the GIS specialists at CFMO-EMB.

2. Map Navigation

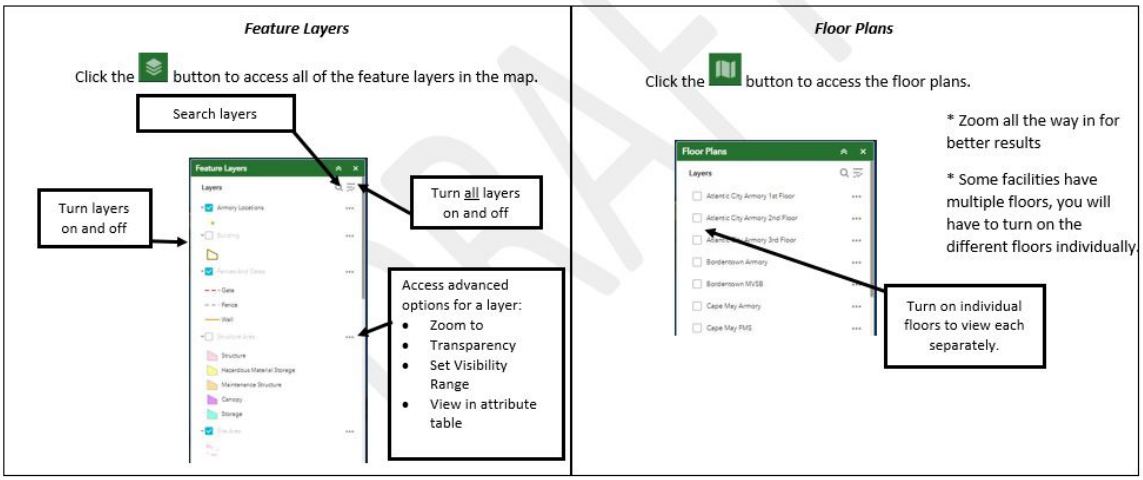
Zoom 

Use the buttons to zoom in and out
Alternate methods include:
Mouse scroll wheel, shift + click to zoom in, ctrl + shift + click to zoom out

My Location *Zoom to your current location – **Must be turned off in order to navigate elsewhere on the map***

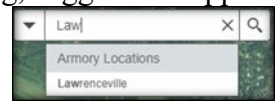
Home Extent *Zoom to the full extent of the map*

3. Layer Navigation



4. Finding your Armory

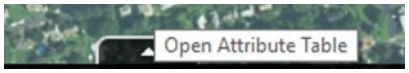
- Use the search bar in the upper left-hand corner of the app to search for your armory.
- Once you begin typing, suggestions appear below the search box.



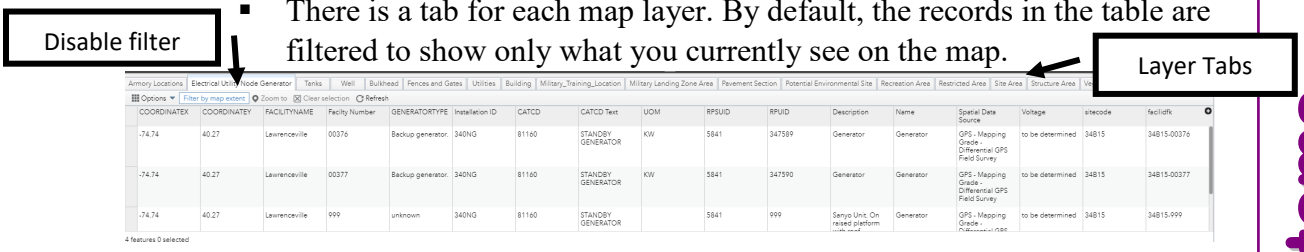
5. Obtaining Information About Features

- Identifying Features:
  - Click on a feature to view detailed information about it

- Using the Attribute Table
  - To view information about all the features in table format, click the small tab at the bottom center of the screen.

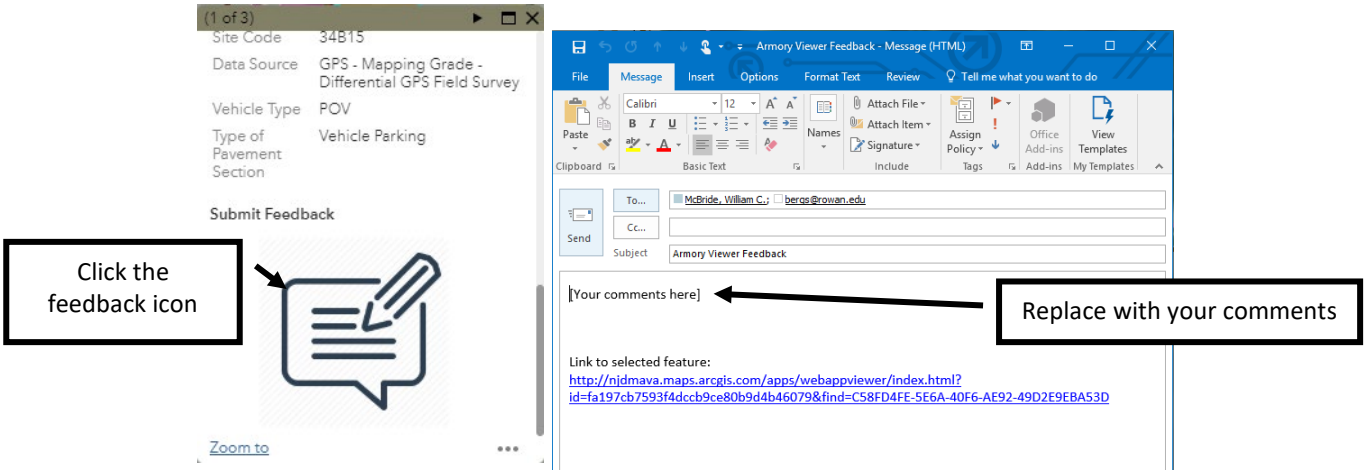


  - There is a tab for each map layer. By default, the records in the table are filtered to show only what you currently see on the map.



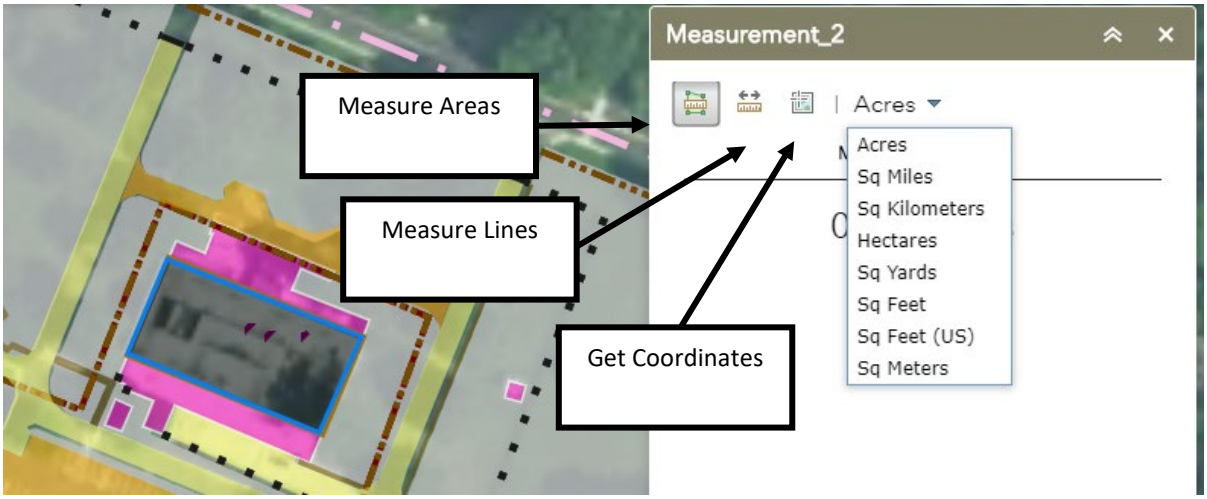
6. Providing Feedback on Features

- Scroll to the bottom of the pop-up to submit feedback on a feature.
- Once you click on the feedback icon a pre-populated email will open. Enter your comments about the feature at the top. The link in the email will zoom directly to the feature on which you provide feedback. The email will be sent to representatives of CFMO-EMB and Rowan University.



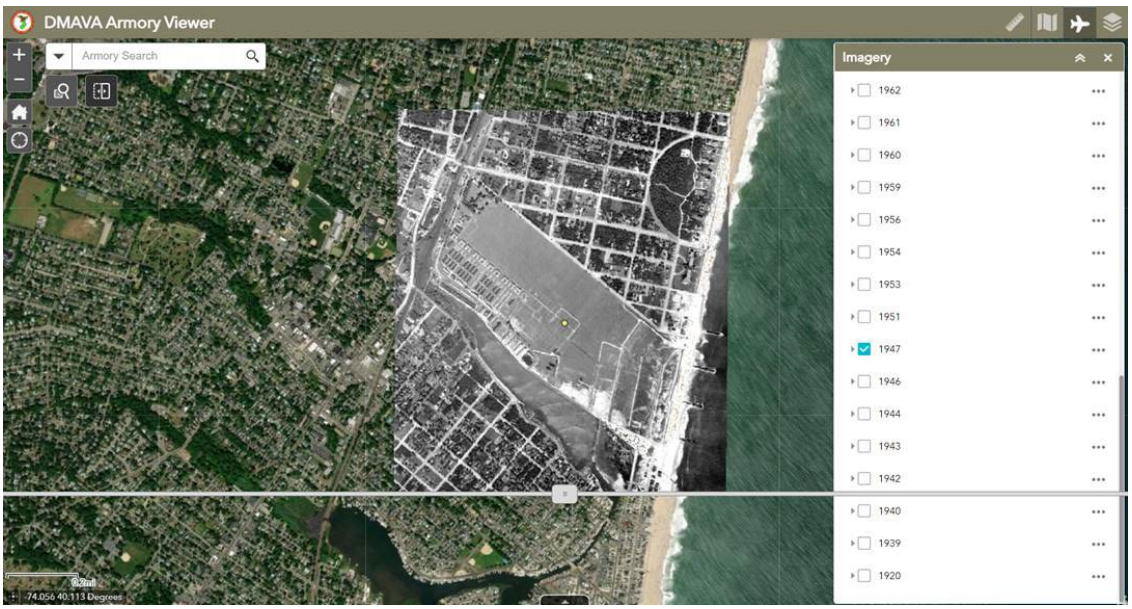
7. Measuring Distances, Areas, and Obtaining Location Information

- Click the  button to make measurements and obtain location information.
- Click on the tool you would like to use to activate it and then click on the map. If measuring a line or area, you must double click to end your measurement.
- Use the drop-down menu to change the unit of measure, if desired.



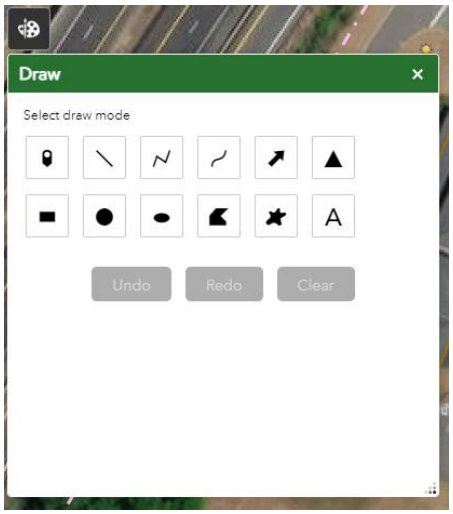
Accessing historical aerial imagery

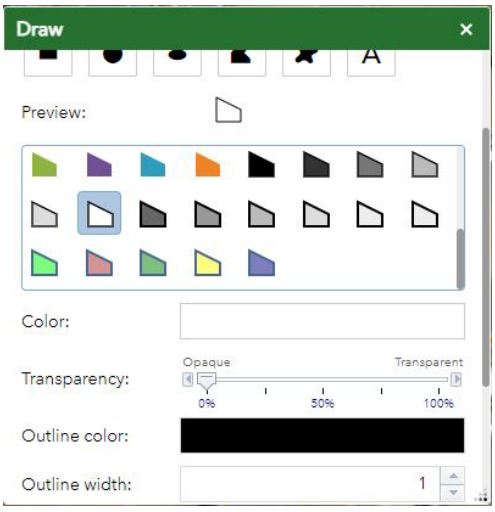
- Use the airplane icon at the top right of the application to access any available historical imagery. The swipe widget below the search bar can then be used to swipe the imagery on and off over the basemap. Use the imagery index below to look up which years are available.



8. Using the Draw Tool

Click the button to draw graphics on your current view of the map. Then Select a drawing shape/function from the window pane:



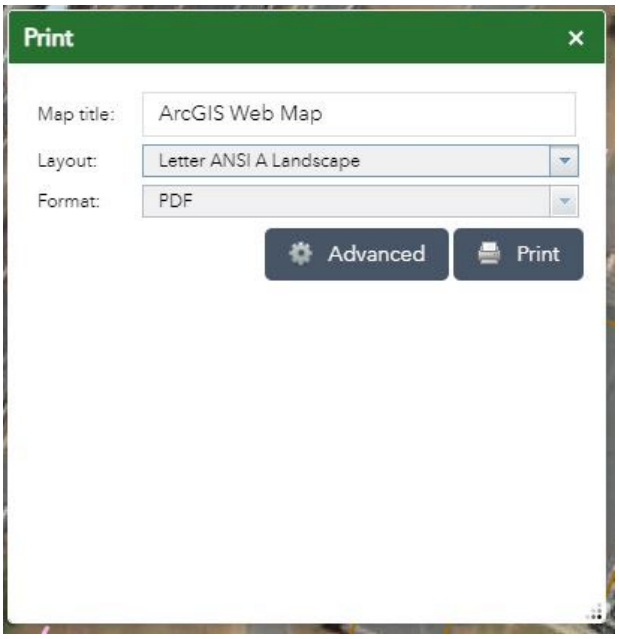


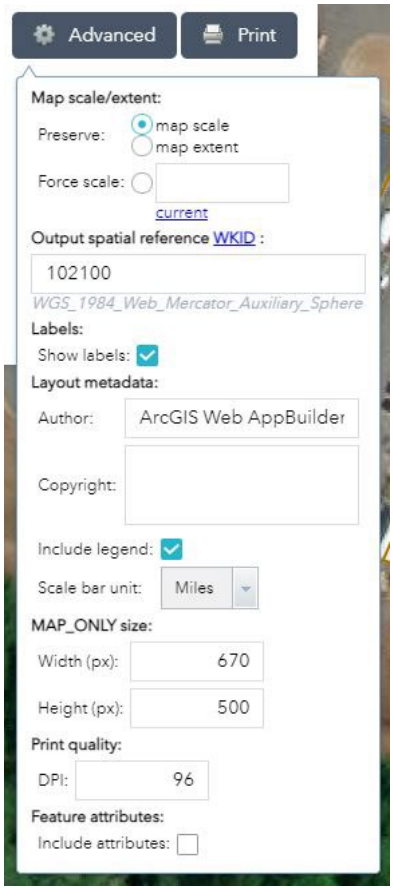
After a function is selected, use your mouse to draw arrows, shapes, or even type text onto your map. The color, transparency, and size can all be edited:

9. Using the Print Function

Click the button to print a map into a pdf or physical copy.
The pane where open up and give you the option to name, pick a layout/size, and format.

The advanced option gives you the opportunity to include a legend, scale and attribute data:





Final PDF Map Example:

E. Training

The CFMO-EMB provides training on the Armory Viewer on an as needed basis. More advanced GIS training is available through ESRI's publicly available courses on their training website (https://www.esri.com/training/). The training modules can be accessed by anyone with an ArcGIS Online account. Some courses are free to take, while others that are more advanced require payment. Staff from CFMO-EMB and Rowan University create and maintain GIS data and attend GIS training classes hosted by NGB annually.

F. Recordkeeping

GIS records will be kept in a digital format on a shared network drive in the form of maps, figures, projects, shapefiles, databases, downloaded state data, and consultant data.

Chapter 13
Solid Waste Recycling Management

This chapter outlines responsibilities, policies, methods, and procedures for collection and disposal of recyclable items. According to NJAC 7:26A, products are required to be recycled whenever possible. For any correspondence with the Solid Waste Manager, refer to page I-7 of the Introduction of the Desktop Guide.

A. Program Overview

The "New Jersey Statewide Mandatory Source Separation and Recycling Act" (Recycling Act) and its related amendments, made recycling mandatory for all residents, commercial entities, and institutions in this State. Further, recycling in all State Office locations was mandated by Executive Order No. 34. The New Jersey Army National Guard (NJARNG) Recycling Program reduces the dependence on non-renewable natural resources, raw materials, and the amount of space required for landfills. The environmental goals of the Army's solid waste management program are to protect public health and the environment by increasing solid waste diversion, minimizing the generation of solid wastes, and increasing the program's economic benefit by investing in pollution prevention initiatives and better managing costs associated with disposal and diversion.

The Qualified Recycling Program (QRP) is a U.S. military installation facility-managed and run recycling program aimed at pollution prevention and minimizing environmental impacts (i.e. recovering recyclable materials from solid waste disposal streams). The Installation Management Command (IMCOM) will ensure the implementation of a QRP, where Life Cycle Cost (LCC) effective. Installations having several recycling programs will incorporate them into a single garrison QRP. Activities operating under special funding categories, such as commissaries, post exchanges, and working capital or industrial funds, may have a separate recycling program or donate their recyclable materials to the installation QRP. In the QRP, the garrison commander establishes:

- Procedures for segregating, collecting, and selling specific authorized materials intended to be recycled.
- Methods for maintaining fiscal accountability of funds received from the sale of recycled materials and the disbursal of these funds.
- A process to review all projects and activities funded from the proceeds of the sale of recycled materials.

The net proceeds from the sale of these recyclable materials are then deposited into the United States Property & Fiscal Officer (USP&FO) QRP account.

References

- New Jersey Statewide Mandatory Source Separation and Recycling Act (N.J.S.A. 13:1E-99.11 et. Seq)
- Solid Waste Management Act (NJSA 48:13E-1)

- Solid Waste Utility Control Act (NJSA 48:13A-1 to -7)
- Processing of Damage Claims Pursuant to the Sanitary Landfill Facility Closure and Contingency Fund Act (NJAC 7:1I)
- Army Facilities Management (AR 420-1)
- Solid and Hazardous Waste Management Draft (AR 420-47)
- Standards for Universal Waste Management (40 CFR 273)
- Commercial Mobile Services (47 CFR 20.3)
- New Jersey Executive Order No. 34, 1991
- Federal Acquisition, Recycling, and Waste Prevention (EO 12873)
- Subtitle D, the Resource Conservation and Recovery Act (RCRA) (42 USC 6941–6949)
- Defense Logistics Agency, Qualified Recycling Program
- NJDMAVA Final Recycling Plan, 2006
- USAEHA, Developing an Integrated Solid Waste Management Plan, A Guide for Army Installations (Technical Guide No. 197)
- SOP for Recycling at all NJARNG Facilities, 2003

B. Compliance Thresholds

Recyclable products that are generated and accumulated in NJARNG facilities must be recycled through the Defense Reutilization Marketing Office (DRMO), a New Jersey state recycling program, or a county or local recycling program approved by CFMO-EMB. All material should be recycled, if possible. Some recyclable materials include:

- Cardboard boxes
- Plastic
- Paper products
- Glass
- Universal Wastes: Recyclable batteries, used fluorescent lights, mercury-containing thermostats, pesticides, consumer electronics, oil-based paints, AC units, tires, and ballasts.
- Scrap metals (aluminum, ferrous metal, etc.)
- Printer cartridges
- Organic material/composting

Universal Wastes (UWs) are a special category of hazardous wastes. They usually are generated in a wide variety of shops or activities, do not pose severe risks to the environment or human health, and can be recycled. Please refer to Chapter 5 of this guide for additional information on UWs, as well as Chapter 15 for additional information on recycling Fluorescent Bulbs and Ballasts.

C. Responsibilities

Environmental Quality Control Committee

- Approves and votes on distribution of QRP program funds for program coordination and Morale Welfare and Recreation (MWR) Requests and Pollution Prevention projects.

CFMO-EMB

- Assists in coordinating container procurement.
- Conducts periodic inspections of solid waste collection receptacles for improper disposal practices.
- Annually reports estimated quantities and types of wastes to National Guard Bureau (NGB) through SWARWEB.
- Briefs Environmental Quality Control Committee (EQCC) on recycling activities and QRP requests.
- Maintains records of Recycling program QRP. Environmental Management Bureau (EMB) will collect funds received from the turn-in of recyclable material and maintain an auditable record of receipts and distributions of funds associated with the costs of operations, maintenance and overhead for processing recyclable materials at the installation as an Internal Control tool.

CFMO-FMB

Armorer:

- Ensures that all personnel within the facility, both full-time and part-time personnel, and those using the facility for any length of time, are aware of the requirement to recycle and comply with this guide.
- Ensures recycling signage is utilized and visible at their facility.
- Occasionally inspect on-site recycle receptacles for compliance. If Armorer finds instanced of non-compliance, reiterate recycling requirements to onsite personnel.
- Ensures that all recycle dumpsters are managed properly as per the site-specific waste company's SOP and limits contamination fees from improper recycling such as plastic bags, wood, scrap metal etc. inside the dumpster.
- Ensures recycling signage is utilized and visible at their facility.

CFMO-CMB

- Project managers must ensure that contractors and vendors complete all tasks associated with solid and hazardous waste management as written in contracts.

Maintenance Shop/Armory/Unit

- Implements and requires all personnel to participate in the NJARNG Recycling Program.
- Establishes organizational operating instructions as appropriate to implement the NJARNG Recycling Program.

- Appoints a recycling monitor for recycling efforts at the facility and provide the name and phone number of the monitor to CFMO-EMB.
- Ensures that the recycling monitor performs duties associated with the NJARNG Recycling Program in a manner that will increase recycling efforts throughout the facility.
- Ensures that the procedures described in Section D of this chapter are implemented at the facility.
- May request limited QRP funds for MWR activities. The requester will submit a memorandum to the EQCC thru Chief of Staff (CofS) on letterhead and include amount requested, purpose for the funds, justification for request, and point of contact (POC) information. The committee will vote on usage of funds for the good of the organization based on the amount of funding available.
- Unit Environmental Compliance Officer (UECO): Becomes familiar with local municipal and county recycling programs, recycling requirements, and local landfill restrictions.
- UECO: Reviews the site-specific recycling plan.
- UECO: Conducts period inspection of solid waste collection receptacles for improper disposal practices.
- Submits work order requests as needed.
- Field Maintenance Shop (FMS) and Combined Support Maintenance Shop (CSMS) Shops are required to submit monthly recycling reports if recycling activities are above and beyond comingled recycling pick up by waste management.

The following branches are exempt from responsibilities regarding solid waste management:

- TAG
- CFMO-RPB
- CFMO-PPB

D. Procedures

The procedures outlined in this section guide a facility through the basic steps of the solid waste recycling program established within the NJARNG.

Solid Waste

Solid waste and recyclables must be segregated from wastes that are prohibited from the general trash. Items that are prohibited in general trash (refuse/trash dumpsters) include but are not limited to:

- Aluminum Cans
- Consumer electronics
- Tires
- Any Oil-Based Paint
- Non-Alkaline Batteries
- Scrap Metals
- Pesticides
- Hazardous Materials
- Fluorescent Bulbs
- Plastic Bottles
- Used Antifreeze
- Full/Partially Full Aerosol Cans
- Solvent
- Contaminated Soil/Dry Sweep
- Liquid LATEX Paint
- Ammunition Related Items
- Hazardous Waste
- Used Oil
- Petroleum, Oil, and Lubricant Products
- Used Absorbents
- Used Filters (Fuel or Oil)

General Procedures

- Ensure all personnel within the facility, both full time and part time personnel, and those using the facility for any length of time must be aware of the requirement to recycle and comply with the Recycling Plan.
- Designate areas within the facility for the collection and accumulation of recyclable material and keep area clean and neat.
- Obtain collection containers from the CFMO-EMB or the county or municipal coordinator and schedule for pick-up of collected recyclable material.
- Ensure that recyclable material is not taken to or collected by a private contractor or scrap dealer without first contacting CFMO-EMB for procedures and written approval. Monies generated from recycling should be deposited in the USP&FO QRP Program fund.
- Conduct periodic inspections throughout the facility to ensure compliance with this guide and notify the chain-of-command and CFMO-EMB when recycling efforts need to be improved.
- Notify CFMO-EMB when deviations from this plan are required or should any problems in implementing the NJARNG Recycling Program occur at the facility.

Specific Recyclable Materials Handling Procedures

- **Cardboard Boxes**: All cardboard boxes should be broken down. Some facilities will have to take the cardboard periodically to the county or municipal facility while other facilities will have local collection through a recycler including single stream recycling dumpsters.
- **Plastic**: Each facility will have to check with the municipal or county coordinator to determine what plastics are being recycled in the community. Types of plastics include:
  - PET (Polyethylene Terephthalate)
  - HDPE (High-Density Polyethylene)
  - PVC (Polyvinyl Chloride)
  - LDPE (Low-Density Polyethylene)
  - PP (Polypropylene)
  - PS (Polystyrene)
  - Polycarbonate, BPA, and other Plastics
- **Paper Products**:
  - Mixed paper, such as post-it notes, newspaper inserts, and lined colored paper, may be recycled. Carbon paper is not recyclable
  - White paper, such as bond, copy, regulations (bindings removed), should be recycled. Paper that includes “For Official Use Only” and paper that is subject to the “Privacy Act” should be placed in boxes (taped closed) or shredded, then recycled.
  - Newspapers, including magazines, must be recycled.
  - Junk mail may be recycled.

- **Glass**: Each facility will have to check with the local township or county coordinator to determine if glass is recycled in the community.
  - If glass is recycled, it does not have to be separated by color into separate containers.
- **Fluorescent Light Tubes**: Each facility is required to collect and recycle spent bulbs or lamps. Contact the facility Armorer or CFMO-EMB for recycle boxes for specific lamps.
  - Effective January 1, 2000, spent fluorescent light tubes, mercury vapor and sodium lamps must be returned to the State Supply Warehouse and not placed with solid waste.
  - Incandescent light bulbs are discarded as general refuse.
  - LED bulbs are considered electronic waste and must be disposed of as such.

Listed below on Table 13-1 are the four locations within the state of New Jersey that take fluorescent bulbs for recycling. However, NJDMAVA will incur a cost to dispose at these locations. Prepaid fluorescent tube boxes are available from the State Supply. Contact the ID-OEC should you require a box.

Table 13-1. Fluorescent Light Bulb Recycling Locations

Collection Facility	Telephone Number
Burlington County Office of Solid Waste Management Florence Township, NJ	(609) 499-1001
Morris County Municipal Utilities Authority Dover, NJ	(973) 285-8390
Union County Utilities Authority Rahway, NJ	(732) 382-9400
Advanced Environmental Recycling Corp. Flanders, NJ	(973) 691-3908

- **Scrap Metals**: Metal and mixed metal include metal that is generated at the facility (CSMS, OMS, or Armory), such as broken metal cabinets, furniture, auto parts, vehicle parts, shelving, piping, fencing, etc.
  - Metals should be separated according to type such as brass, copper, aluminum, iron, etc.
  - If Metal and mixed metal is picked up by, or taken to, a local scrap dealer, prior approval must be obtained from CFMO-EMB.
  - Under no circumstance will any individual or contractor take title or possession of any state or federal property without providing compensation. Actions such as these will be considered theft of government property. All proceeds from recycling efforts must be given to USP&FO for deposit into the QRP fund.

  - Metal and Mixed Metal may also be taken to DRMO with a turn-in document available from USP&FO. A copy of this document must be forwarded to CFMO-EMB after material has been taken to DRMO.
  - Any amount of recyclable items taken to DRMO must be communicated to CFMO-EMB for annual reporting purposes. Follow turn-in procedures and accounting requirements outlined in the NJARNG Recycling Plan.
- **Recyclable Spent Batteries**: Handled as universal waste. Follow the universal waste regulations in accordance with 40 CFR 273. Additional information on battery disposal is provided below:
  - All facilities can dispose of alkaline batteries as general refuse.
  - Lead acid batteries are to be treated as recyclable items.
    - Lead acid batteries will be contained on wooden pallets in an upright position, provided they are not leaking.
    - Lead acid batteries that are leaking or are missing fill caps must be drained into a plastic container and laid on their sides on wooden pallets.
    - Battery acid can only be drained into polyethylene (plastic) containers.
  - Expired Hawker batteries should be sent for testing to the Consolidated Logistics Training Facility (CLTF).
  - No more than 10-15 lead acid batteries should be stored onsite. Excess batteries should can be sent to the USP&FO or the CLTF.
    - Contact CFMO-EMB in order to coordinate recycling efforts with a local scrap company.
  - Small rechargeable batteries such as nickel-cadmium should be recycled using NJDMAVA buckets.
    - Contact CFMO-EMB for recycle battery buckets.
  - Lithium sulfur dioxide batteries (radios) should be discharged through the self-discharge circuit and recycled in NJDMAVA buckets.
    - Contact CFMO-EMB for recycle battery buckets.
- **Printer Cartridges**: Printer cartridges will be recycled. Most types of print cartridges, including inkjet cartridges and toner cartridges, can be recycled.
  - Anyone that wishes to obtain a new printer cartridge for his or her printer will have to bring the old cartridge to the print shop or State Supply Warehouse for disposal prior to obtaining a new cartridge.
  - Most other cartridges (such as Hewlett Packard and Epson) may be returned once you have opened the new container; they include a shipping label for their return.
  - Any questions should be directed to CFMO-EMB at (609) 530-7134.
- **Pallet recycling**: Wood pallets that are broken can be repaired and reused. Check with local pallet companies about reuse opportunities. Many wood pallet recycling companies also repair and reuse old pallets.
  - Such companies can be found on the NJDEP's database of Class B recycling centers on NJDEP's website.
  - Any questions should be directed to CFMO-EMB at (609) 530-7134.

- **Electronic Waste (E-Waste)**: "Covered electronic device" means a desktop or personal computer, computer monitor, portable computer, desktop printer, desktop fax machine, or television sold to a consumer. A "covered electronic device" shall not include any of the following:
  - An electronic device that is a part of a motor vehicle or any component part of a motor vehicle assembled by, or for, a vehicle manufacturer or franchised dealer, including replacement parts for use in a motor vehicle.
  - An electronic device that is functionally or physically a part of a larger piece of equipment designed and intended for use in an industrial, commercial, or medical setting, including diagnostic, monitoring, or control equipment.
  - An electronic device that is contained within a clothes washer, clothes dryer, refrigerator, refrigerator and freezer, microwave oven, conventional oven or range, dishwasher, room air conditioner, dehumidifier, or air purifier.
  - Any handheld device used to access commercial mobile data service or commercial mobile radio service as such services are defined pursuant to 47 CFR 20.3.
  - Contact CFMO-EMB for E-waste disposal services.

E. Training

All appropriate Maintenance Shop, Armory, and Unit personnel shall attend the General Environmental Awareness training annually. Training is not required for CFMO-EMB, CFMO-PPB, CFMO-FMB, CFMO-CMB, and CFMO-RPB. More information about training requirements can be seen in the Introduction chapter on pages I-4 through I-6.

F. Recordkeeping

EMB will retain all solid waste/recycling records for at least three years. Personnel should communicate all recycling activities with CFMO-EMB for annual reporting to NGB.

NEW JERSEY ARMY NATIONAL GUARD MONTHLY RECYCLING REPORT

Email this form to Sarah Helbe (sarah.helbe@dmava.nj.gov)

Fax (609) 530-6880

Location: _____ **(Armory, OMS, CSMS, AASF)**

Month_____ **County:** _____

Product Recycled (Type)	Weight (Actual or Est.)	Where Recycled Location	Proceeds Received (All)
White Paper			
Newspaper			
Aluminum Cans			
Tin Cans			
Glass			
Cardboard			
Plastic			
Scrap Metal			
Batteries			
Tires			

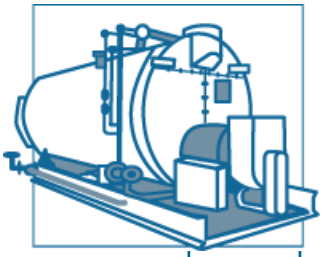
Submit the following form **as needed** for any recycling efforts above and beyond regular scheduled recycling dumpster pick-ups.

FACILITY POC (Print): _____

PHONE NUMBER: (_____)_____

SIGNATURE: _____ **DATE:** _____

Chapter 14
Storage Tank Management



This chapter establishes the procedures and guidance for managing aboveground storage tanks (ASTs), underground storage tanks (USTs) and associated monitoring systems at NJARNG facilities. For any correspondence with the Storage Tank Manager, refer to page I-7 of the Introduction of the Desktop Guide.

A. Program Overview

All USTs at NJARNG facilities are being removed and replaced with ASTs. USTs are difficult to monitor for leaks, which could lead to soil and groundwater contamination. ASTs are inspected regularly and have a secondary containment system in place to prevent any leaking fuel from entering the soil or groundwater.

References

- Spill Compensation and Control Act, (NJSA 58:10-23)
- Underground Storage of Hazardous Substances (UST) Act (NJSA 58:10A-21)
- Underground Storage of Gas, Petroleum Products, etc. (NJSA 58:10-35.1 to -35.4)
- Underground Storage Tanks (NJSA 58:10A-21 to -37)
- Environmental Protection and Enhancement (AR 200-1)
- Oil Pollution Prevention (40 CFR 112)
- Underground Storage Tanks (40 CFR 280)
- EPA Regulation on Discharge of Oil (40 CFR 110)
- Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements (EO 12856)

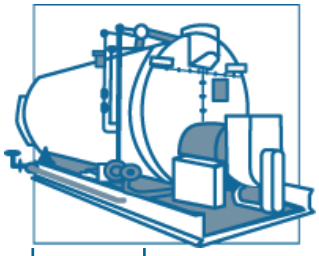
B. Compliance Thresholds

Any facility that has either ASTs or USTs containing hazardous substances will most likely be subject to some federal, state, or local regulation. NJARNG facilities with storage tanks present should adhere to the requirements set forth in the referenced documents in Section A of this chapter. Any questions or concerns regarding compliance with such documents should be directed toward the Storage Tank Manager within CFMO-EMB.

C. Responsibilities

CFMO-EMB

- Ensures that adequate training is provided.
- Ensures that environmental protection/pollution abatement procedures are implemented in their areas of responsibility.
- Contract and coordinate UST and AST inspection and repairs where required.
- Coordinates and pays all NJDEP registration fees.
- Has a representative receive and maintain a Type A/B operator certification for all USTs.



CFMO-CMB

- Maintain specs and plans of newly installed tanks from projects.

CFMO-PPB

- Assist in the Planning Resource for Infrastructure Development (PRIDE) inventory for removal and install of tanks.

CFMO-FMB

- Have on-site Armorers assist CFMO-EMB and shop personnel with tank system monitoring.

CFMO-RPB

- Provide contacts for non-DMAVA personnel on-site.

Maintenance Shop/Armory/Unit

- Maintains all records related to this document.
- Conducts weekly AST and UST inspections.
- Conducts weekly inspections of the drain valves.
- Investigates tank secondary containment after each rain event.
- Submits work order requests as needed.

Shop Chief:

- Establishes and implements spill prevention and control procedures.

The following branches are exempt from responsibilities regarding storage tank management:

- TAG

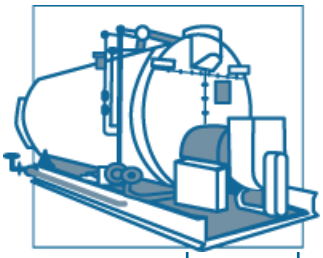
D. Procedures

This section identifies specific procedures you will use to support the policies/goals storage tank management. These procedures are associated with specific checklists, logs, or other compliance tools. These step-by-step procedures are easy-to-follow, and support compliance with federal, state, and local requirements.

This section contains the following compliance tools:

- AST/UST Inspection Checklist
- Rainwater Discharge Standard Operating Procedure (SOP)

In addition to the inspections identified above, all UST systems equipped with cathodic protection systems shall be inspected for proper operation within 6 months of installation and at least every 3 years thereafter by an individual certified in accordance with NJAC 7:14B-13. Inspections must be performed by a Cathodic Protection Tester or Cathodic



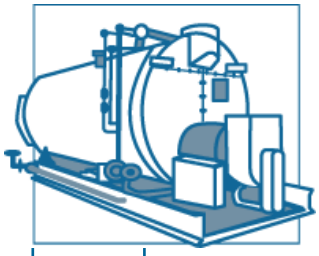
Protection Specialist certified pursuant to NJAC 7:14B-13. These inspections will be scheduled by CFMO-EMB.

AST/UST INSPECTION CHECKLIST
(PERFORMED WEEKLY)
(Page 1 of 2)

Check ASTs and USTs weekly. Use this checklist as a guide for completing your inspection. You will need a new and blank checklist to conduct each inspection, so it is recommended to copy the checklist multiple times prior to initial use to have for future inspections. When finished, sign and date the form in the space provided. ***Should you note a deficiency, send a copy of the inspection form to the CFMO-EMB.***

Check Tanks and Tank-to-Piping Connections:		
Apparent drip marks?	Yes _____	No _____
Apparent discoloration?	Yes _____	No _____
Any visible corrosion? (Pitting?)	Yes _____	No _____
Apparent localized distressed/dead vegetation?	Yes _____	No _____
Puddles containing material?	Yes _____	No _____
Check Piping:		
Visible droplets of stored material?	Yes _____	No _____
Apparent discoloration?	Yes _____	No _____
Visible corrosion?	Yes _____	No _____
Pipe bowing between supports?	Yes _____	No _____
Evidence of stored material on valves or seals?	Yes _____	No _____
Localized dead vegetation?	Yes _____	No _____
Check Secondary Containment (For ASTs Only):		
Relief valve closed?	Yes _____	No _____
Cracks or other penetrations apparent?	Yes _____	No _____
Visible seepage at joints?	Yes _____	No _____
Excessive ponded water? *	Yes _____	No _____
Product residue in secondary containment?	Yes _____	No _____

* *Use the Rainwater Discharge SOP for instructions on discharging ponded water. Note: Vegetation overgrowth may be a problem near ASTs. This overgrowth must be removed without the use of pesticides.*



AST/UST INSPECTION CHECKLIST (PERFORMED WEEKLY) (Page 2 of 2)

Perform visual inspection of UST spill catchment basins before and after each delivery and a visual inspection of; dispenser sumps and piping sumps to keep them clean of product, water and debris.

Check Spill Catchment Basin (For USTs Only):		
Evidence of cracks?	Yes _____	No _____
Any holes?	Yes _____	No _____
Any loose fittings?	Yes _____	No _____
Any accumulation of debris or liquid?	Yes _____	No _____
Any other deficiency, which may compromise the integrity of the spill containment equipment?	Yes _____	No _____

All UST systems equipped with cathodic protection systems shall be inspected for proper operation within 6 months of installation and at least every 3 years thereafter by an individual certified in accordance with NJAC 7:14B-13.

Cathodic Protection (For USTs Only):		
Has the cathodic inspection system been initially inspected within 6 months of installation?	Yes _____	No _____
Has the cathodic inspection system been inspected at least every 3 years thereafter?	Yes _____	No _____

DATE	INSPECTOR'S INITIALS	DEFICIENCIES?	DATE CORRECTED
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
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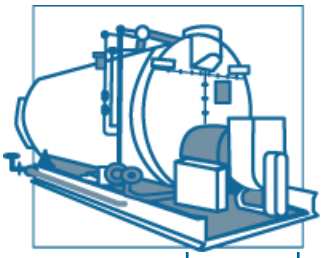


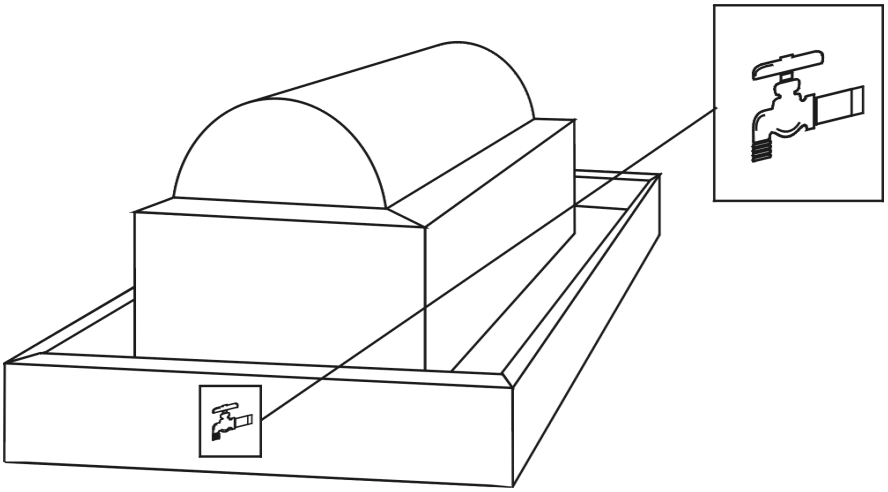
RAINWATER DISCHARGE SOP
(Page 1 of 2)

Rainwater will accumulate in outdoor uncovered secondary containment. All personnel will use the following Standard Operating Procedures to inspect drain valves weekly. Check secondary containment after ***any*** rain event.

Weekly Inspection

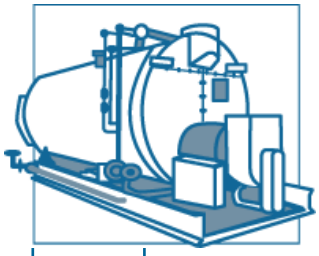
Debris can clog drain valves. Once a week, check that drain valves are clear of debris and are closed:

1. Remove grates and sweep up debris.
2. Place debris in 55-gallon drums.
3. Dispose of debris as contaminated soil.
4. Replace grating.
5. Check that drain valves are ***CLOSED*** (turn right).



After Any Rain Event

- Check secondary containment for a visible sheen on the surface of the water, indicating residual spilled fuel product.
- If there is a visible sheen, remove grating and place absorbent pads on the water surface to remove spilled product.
- Clean up spilled product.
- Properly dispose of oily rags.
- Open the drain valve (turn left) and remove accumulated water.
- Close the drain valve (turn right) and replace the grate.
- Complete the Rainwater Release Inspection Log.



RAINWATER DISCHARGE SOP
(Page 2 of 2)

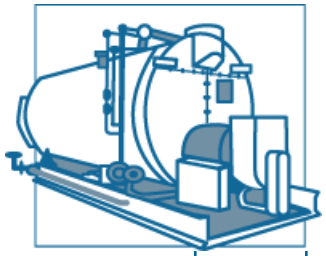
If there are any questions about the quality of the water present, the Army Operative (AO)/UECO, they can contact CFMO-EMB regarding:

- Offsite transport for proper treatment and disposal.
- Allowing the water to evaporate and, if appropriate, take corrective action to clean up the residual contamination.
- Have a water sample analyzed for suspect pollutants.

Only personnel who have received training to determine the water quality can discharge water from containment areas, and then only upon the direct order of the AO/UECO.

Maintain a record that reflects the following information:

- An explanation of why excess precipitation needed to be released.
- The name of the person who determined the water quality and what method he/she used.
- When the release was initiated.
- When the release was terminated.
- Approximate volume of water that was discharged.



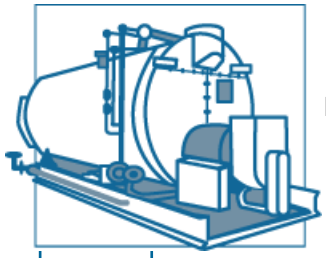
Joint Base Maguire-Dix-Lakehurst (JB MDL)

For ASTs that are greater than 2,000-gallons, the following checklist shall be completed monthly and submitted to CFMO-EMB and kept with facility files.

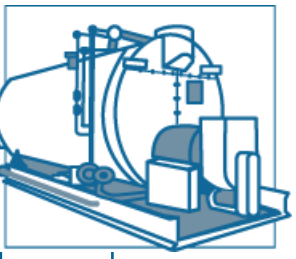
STI SP001 Monthly Inspection Checklist
General Inspection Information Inspection Date: _____ Prior Inspection Date: _____ Retain until date: _____ Inspector Name (print): _____ Title: _____ Inspector's Signature: _____ Regulatory facility name and ID Number (if applicable): _____

Inspection Guidance:

- This checklist is intended as a model. Locally developed checklists are acceptable if they are substantially equivalent (as applicable). Inspections of multiple tanks may be captures on one form if the tanks are substantially the same.
- For equipment not included in this Standard, follow the manufacturer recommended inspection/testing schedules and procedures.
- The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a Certified Inspector. It shall be performed by an owner's inspector per paragraph 4.1.2 of the standard.
- Upon discovery of water in the primary tank, secondary containment area, interstice, or spill container, remove promptly or take other corrective action. Inspect the liquid for regulated products of other contaminants and dispose of properly.
- Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a Certified Inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.
- Retain the completed checklists for at least 36 months.
- **After severe weather (snow, ice, windstorms) or maintenance (such as coating) that could affect the operation of critical components (normal and emergency vents, valves), an inspection of these components is required as soon as the equipment is safely accessible after the event.**



ITEM	STATUS	Comments / Date Corrected
Tank and Piping		
Is the tank exterior (roof, shell, heads, bottom, connections, fitting, valves, etc.) free of visible leaks? Note: *If "No," identify tank and describe leak and actions taken*	❑ Yes ❑ No	
Is the tank liquid level gauge legible and in good working condition?	❑ Yes ❑ No ❑ N/A	
Is the area around the tank (concrete surfaces, ground, containment, etc.) free of visible signs of leakage?	❑ Yes ❑ No	
Is the primary tank free of water or has another preventative measure been taken? Note: *Refer to paragraphs 6.10 and 6.11 of the Standard for alternatives for Category 1 tanks. N/A is only appropriate for these alternatives*	❑ Yes ❑ No ❑ N/A	
For double-wall or double bottom tanks or CE-ASTs, is interstitial monitoring equipment (where applicable) in good working condition?	❑ Yes ❑ No ❑ N/A	
For double-wall tanks or double bottom tanks or CE-ASTs, is interstice free of liquid? Remove the liquid if it is found. If tank product if found, investigate possible leak.	❑ Yes ❑ No ❑ N/A	
Equipment on Tank		
If overfill equipment has a "test" button, does it activate the audible horn or light to confirm operation? If battery operated, replace battery if needed.	❑ Yes ❑ No ❑ N/A	
Is overfill prevention equipment in good working condition? If it I equipped with a mechanical test mechanism, actuate the mechanism to confirm operation.	❑ Yes ❑ No ❑ N/A	
Is the spill container (spill bucket) empty, free if visible leaks and in good working condition?	❑ Yes ❑ No ❑ N/A	
Are piping connections to the tank (valves, fittings, pumps, etc.) free of visible leaks? Note: *If "No," identify location and describe leak.*	❑ Yes ❑ No	
Do the ladders/platforms/walkways appear to be secure with no sign of severe corrosion or damage?	❑ Yes ❑ No ❑ N/A	



Containment (Diking/Impounding)		
Is the containment free of excess liquid, debris, cracks, corrosion, erosion, fire hazards, and other integrity issues?	❑ Yes ❑ No ❑ N/A	
Are dike drain valves closed and in good working condition?	❑ Yes ❑ No ❑ N/A	
Are containment egress pathways clear and any gates/doors operable?	❑ Yes ❑ No ❑ N/A	
Concrete Exterior AST (CE-AST)		
Inspect all sides for cracks in concrete. Are there any cracks in the concrete exterior larger than 1/16”?	❑ Yes ❑ No ❑ N/A	
Inspect concrete exterior body of the tank for cleanliness, need of coating, or rusting where applicable. Tank exterior in acceptable condition?	❑ Yes ❑ No ❑ N/A	
Visual inspect all tank top openings including nipples manways, tank top overfill containers, and leak detection tubes. Is the sealant between all tank top openings and concrete intact and in good condition?	❑ Yes ❑ No ❑ N/A	
Other Conditions		
Is the system free of any other conditions that need to be addressed for continued safe operation?	❑ Yes ❑ No	

Waste Oil ASTs/USTs, Heating Oil ASTs/USTs Monitoring Instructions and Checklists

The purpose of spill and overfill protection equipment is to eliminate the potential for a release during operations. The equipment must be in working order, used properly to provide adequate protection from spills, and overfills.

Spill Containment is required to contain the contents of a tank (vessel) when the filling is stopped. No specific size is required. Liquid left in the spill containment after the filling is completed may be drained directly into the tank or it may be emptied by some means and disposed of properly. Spill prevention and overfill protection are good UST system management.

Even the best spill and overfill protection equipment can become faulty over time if not properly operated and maintained. Improper maintenance of the spill containment or monitors can contribute to significant contamination of soil and groundwater.

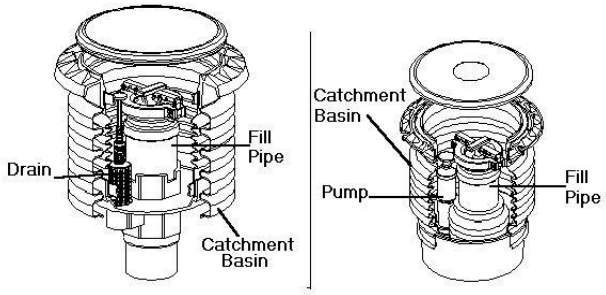
The following pages focus on how you can routinely make sure your spill and overfill equipment monitors are operating effectively.

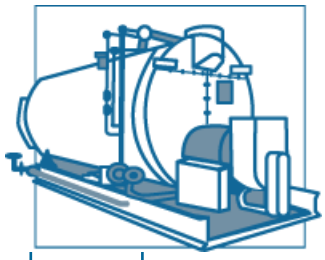
What Are the Basics of Spill Protection?

Spill Protection: Installed at the fill pipe to contain the drips and spills of used/heating oil that can occur when the operator is filling the tank during operations.

Your ASTs/USTs for heating oil and used oil must have catchment basins and secondary containment installed at the fill pipe to contain spills that may occur as a result of fuel deliveries.

The catchment basin is most likely an oil water separator with secondary containment and a collection tank, also with secondary containment. To contain a spill, the containment and tanks interstitial space must be liquid tight and is monitored with a high-level gauge alarm and interstitial monitoring probes.





What Are the Basics of Overfill Protection?

Overfill Protection: Equipment is installed on the UST that is designed to stop alert the operator to reduce product flow or alert the operator during fill operations before the tank becomes full and begins releasing heating oil into the environment.

Overfill protection is *required* on all UST systems, even when only small amounts are added to the tank at any one time.

Your ASTs/USTs must have overfill protection installed to help prevent the overfilling of tanks. Two types of overfill protection devices are commonly used:

- Automatic Shutoff Devices
- Overfill Alarms

An overfill alarm is the only device appropriate for waste oil. Overfill Protection is part of good UST system management.

How Can You Help Avoid Overfills?

To protect our facilities, you and the delivery person must make every effort to avoid overfilling your AST/UST.

Use A Checklist on Correct Filling Practices

If correct filling practices are used, you will not exceed the AST/UST's capacity. Overfills are caused when the delivery person makes a mistake, such as ignoring an overfill alarm.

Use Signs & Alert Your Delivery Person

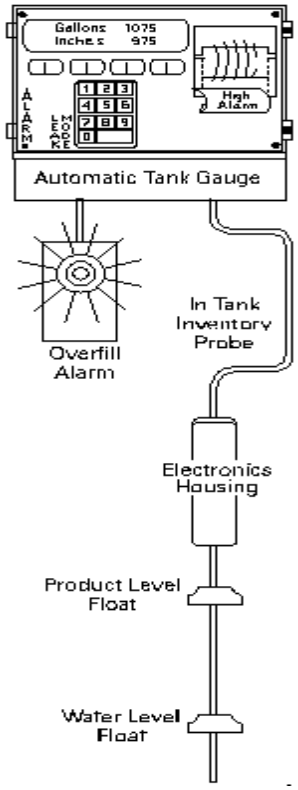
The delivery person should know what type of overfill device is present on each tank at your facility and what action will occur if the overfill device is triggered — such as a visual and/or audible alarm.

Educate and alert your personnel and delivery person by placing a sign near your fill pipes, in plain view of the operators or delivery person.

How Your Electronic Overfill Alarm Operates

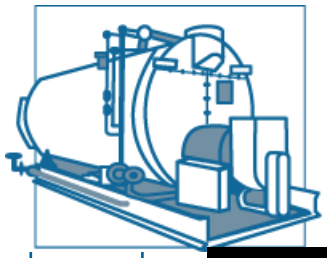
This type of overfill device activates an audible and/or visual warning to delivery personnel when the tank is 90% full. **The alarm must be located so that it can be seen and/or heard by the operator.** Once the electronic overfill alarm sounds, the operator must stop the flow of oil to the tank and notify CFMO-EMB.

Electronic overfill alarm devices have no mechanism to shut off or restrict flow. Therefore, by continuing to operate the system will still allow product to flow into the tank if the tank is not yet full.



Basic O&M for Overfill Alarms

- A qualified UST contractor periodically checks your electronic overfill alarm to make sure that it is functioning properly and that the alarm activates when the fuel reaches 90% of the tank capacity or is within one minute of being overfilled.
- Ensure that the alarm can be heard and/or seen from where the tank is filled.
- Make sure that the electronic device and probes are operating properly.
- You have signs posted that the operator or delivery person can see which alert the operator or delivery person to the type of overfill warning devices and alarms in use at your facility.



Monitors and Overfill Checklist Complete Monthly	
Catch Basins	❑ Periodically check your catch basins to remove any debris. ❑ Periodically check to see if your containment is liquid tight. ❑ Have a qualified UST contractor inspect your spill bucket for signs of wear, cracks, or holes. Based on this inspection, the contractor may suggest a test to determine if the spill bucket is tight or needs repair or replacement. Attach maintenance records to this checklist
Overfill or High-Level Alarms	❑ A qualified UST contractor periodically checks your electronic overfill alarm to make sure that it is functioning properly and that the alarm activates when the fuel reaches 90% of the tank capacity or is within one minute of being overfilled: ❑ Ensure that the alarm can be heard and/or seen from where the tank is filled. ❑ Make sure that the electronic devices and probes are operating properly. Monthly perform tests from tank monitoring console.
Leak Detection	❑ A qualified UST contractor periodically checks your electronic or visual leak detection device alarm to make sure it is functioning properly, and the alarm activates when the interstitial space accumulates liquids.

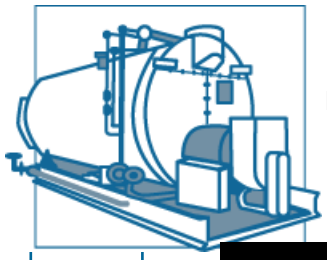
What Are Your Responsibilities for Correct Filling Practices?

As an owner or operator, you are responsible for ensuring that releases due to spilling or overfilling do not occur.

As part of this responsibility, you must:

- Ensure that the amount of product to be delivered will fit into the available empty space in the tank.
- Ensure that the transfer operation is monitored constantly to prevent overfilling and spilling.

One way to help ensure the above requirements are met is to follow and complete the checklists on the next two pages. These checklists describe necessary activities that must be completed for all tank-monitoring systems (ASTs/USTs) each month.

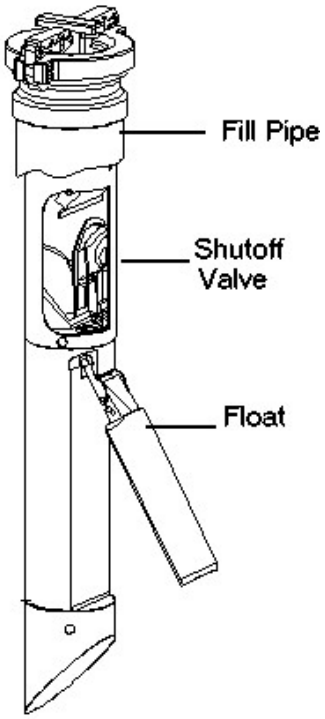


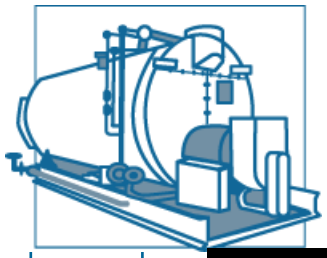
High Level & Leak Monitor Checklist	
During Normal Operations ASTs/USTs	❑ Review and understand the spill response procedures. ❑ Verify that your containment area or spaces are empty and will contain spills. ❑ Perform test on each monitor at least monthly and document on checklist.
What to Do While Your AST is Being Filled	❑ Keep fill ports locked until the fuel delivery person requests access. ❑ Have an accurate tank capacity chart available for the fuel delivery person. ❑ The fuel delivery person makes all hook-ups. The person responsible for monitoring the delivery should remain attentive and observe the entire fuel delivery, be prepared to stop the flow of fuel from the truck to the AST at any time, and respond to any unusual condition, leak, or spill which may occur during delivery. ❑ Have response supplies readily available for use in case a spill or overfill should occur (see Installation Spill Plan). ❑ Provide safety barriers around the fueling zone. ❑ Make sure there is adequate lighting around the fill/fueling zone.
What to do when Alarm Light is lit	❑ Contact CFMO-EMB so a qualified technician can either repair the problem or have the tank pumped out. Document action taken on checklist.

What Should You Do to Operate and Maintain Your Automatic Shutoff Device?

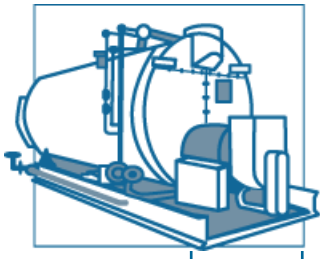
The automatic shutoff device is a mechanical device installed in line with the drop tube within the fill pipe riser. It slows down and then stops the delivery when the product has reached a certain level in the tank. It should be positioned so that the float arm is not obstructed and can move through its full range of motion.

When installed and maintained properly, the shutoff valve will shut off the flow of fuel to the UST at 95% of the tank's capacity or before the fittings at the top of the tank are exposed to fuel. **You should not use an automatic shutoff device for overfill protection if your UST receives pressurized deliveries.**

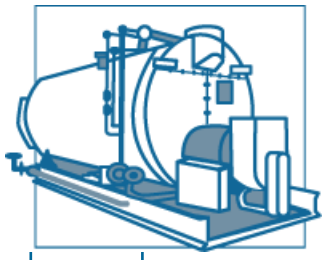




Spill and Overfill O&M Checklist Complete Monthly	
Spill Bucket	❑ **Keep your spill bucket empty of liquids.** Some spill buckets are equipped with a drainage valve, which allows you to drain accumulated fuel into to your UST. Others can be equipped with a manual pump so fuel can be put into your UST by pumping it through the fill pipe. However, keep in mind that when you pump out or drain your spill bucket into your UST, any water and debris may also enter the UST. If a spill bucket is not equipped with a drain valve or pump, then any accumulated fuel or water must be removed manually and disposed of properly. ❑ **Periodically check your spill bucket to remove any debris.** Debris could include soil, stones, or trash. ❑ **Periodically check to see if your spill bucket is liquid tight.** Have a qualified UST contractor inspect your spill bucket for signs of wear, cracks, or holes. Based on this inspection, the contractor may suggest a test to determine if the spill bucket is tight or needs repair or replacement.
Automatic Shutoff Devices	❑ A qualified UST contractor should periodically check to make sure that the automatic shutoff device is functioning properly, and that the device will shut off fuel flowing into the tank at 95% of the tank capacity or before the fittings at the top of the tank are exposed to fuel. ❑ Make sure the float operates properly. ❑ Make sure that there are no obstructions in the fill pipe that would keep the floating mechanism from working. **You should have signs posted that the delivery person can easily see and that alert the delivery person to the overfill warning devices and alarms in use at your facility.**
Overfill Alarms	❑ A qualified UST contractor periodically checks your electronic overfill alarm to make sure that it is functioning properly and that the alarm activates when the fuel reaches 90% of the tank capacity or is within one minute of being overfilled. ❑ Ensure that the alarm can be heard and/or seen from where the tank is fueled. ❑ Make sure that the electronic devices and probes are operating properly.



Correct Filling Checklist	
To Do Before Filling Your USTs	❑ Post clear signs that alert delivery persons to the overfill devices and alarms in use at your facility. ❑ Make and record accurate readings for product and water in the tank before fuel delivery. ❑ Order only the quantity of fuel that will fit into 95% of the tank. **REMEMBER, the formula for determining the maximum amount of heating oil to order is:** (Tank capacity in gallons X 95%) — Product currently in tank = Maximum amount of fuel to order **Example: (**10,000-gal X 0.95) — 2,000 gal = 7,500-gal maximum amount to order ❑ Ensure fuel delivery personnel know the type of overfill device present at the tank and what actions to perform if it activates. For example, use sample sign noted earlier. ❑ Review and understand the spill response procedures. ❑ Verify that your spill bucket is empty, clean, and will contain spills.
What to Do While Your USTs Are Being Filled	❑ Keep fill ports locked until the fuel delivery person requests access. ❑ Have an accurate tank capacity chart available for the fuel delivery person. ❑ The fuel delivery person makes all hook-ups. The person responsible for monitoring the delivery should remain attentive and observe the entire fuel delivery, be prepared to stop the flow of fuel from the truck to the UST at any time, and respond to any unusual condition, leak, or spill which may occur during delivery. ❑ Have response supplies readily available for use in case a spill or overfill should occur (see Installation Spill Plan). ❑ Provide safety barriers around the fueling zone. ❑ Make sure there is adequate lighting around the fueling zone.
What to Do After Filling Your USTs	❑ Following complete delivery, the fuel delivery person is responsible for disconnecting all hook-ups. ❑ Return spill response kit and safety barriers to proper storage locations. ❑ Make and record accurate readings for product and water in the tank after fuel delivery. ❑ Verify the amount of fuel received. ❑ Make sure fill ports are properly secured. ❑ Ensure the spill bucket is free of product and clean up any small spills.



E. Training

General Environmental Awareness training shall be attended by appropriate CFMO-CMB, CFMO-PPB, CFMO-FMB, CFMO-RPB, Maintenance Shop, Armory, and Unit personnel annually. In addition, SPCC training is required for appropriate CFMO-FMB, Maintenance Shop, Armory, and Unit personnel. The Storage Tank Manager from the CFMO-EMB is required to obtain and maintain A/B certification. More information about training requirements can be seen in the Introduction chapter on pages I-4 through I-6.

Train designated individuals to conduct the required tank and containment inspections. SPCP training will explain in detail to the designated individual what tasks need to be completed. This training is organized by CFMO-EMB on an annual basis.

Use the inspection checklists and logs contained in this chapter to conduct and document the suggested inspections. Designated individuals should have the authority and knowledge to perform the following actions regarding the inspection program:

- Implement the suggested inspections.
- Evaluate and assess hazards.
- Recommend corrective or remedial actions.

F. Recordkeeping

Retain the following forms or documents for at least 3 years in your facility files or contact CFMO-EMB for them:

- Recent compliance with release detection requirements.
- Results of the site investigation conducted at permanent closure.
- Inspection and repair documents provided by NJDEP licensed contractor.
- AST/UST inspection Checklists.
- Rainwater discharge records.
- Cathodic protection inspection records (for USTs).
- Current Registration Certificate for UST (if there is/are USTs on site).

Some installations may not have all the above documents. CFMO-EMB can be contacted for further information regarding which documents apply to your facility.

Chapter 15
Toxic Substances Management

This chapter discusses the NJARNG's policies/goals, procedures, and compliance tools that support its Toxic Substances Management Program. For any correspondence with the Toxic Substances Manager, refer to page I-7 of the Introduction of the Desktop Guide.

A. Program Overview

The Toxic Substances Management Program consists of the following:

- Radon, see Chapter 1
- Asbestos, see Chapter 2
- Polychlorinated biphenyls (PCBs)
  - Transformers
  - Fluorescent Light ballasts
- Lead
  - Lead-based paint (many structures built before 1978 have paint that contains lead; exposure to lead chips and dust can cause serious health problems).
  - Lead dust from weapons cleaning and weapons qualification training in armories and maintenance shops.
- Mold
- Mercury

References

- Toxic Pollutant Effluent Standards (40 CFR Part 129)
- Toxic Chemical Release Reporting: Community Right-to-Know (40 CFR 372)
- Toxic Substances Control Act Regulations (40 CFR 700)
- Lead-based paint poisoning prevention in certain residential structures (40 CFR 745)
- Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions (40 CFR 761)
- OSHA Lead in Construction Standard (29 C.F.R. 1926.62)
- DoD Policy to Implement the EPA's Military Munitions Rule, 1 July 1998
- Toxic Catastrophe Prevention Act (NJSA 13:1K-19 to -35)
- Worker and Community Right to Know Act (NJSA 34:5A)
- Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges (NG PAM 420-15)
- Radon Operations and Maintenance Plan
- New Jersey Department of Health Mold Advisory Bulletin, 2001
- US Army Public Health Center 'Industrial Hygiene Public Health Mold Assessment Guide' (Technical Guide 278)
- OSHA Preventing Mold-Related Problems in the Indoor Workplace
- The United States Environmental Protection Agency 'Mold', 2023
- Defense Centers for Public Health- Aberdeen, Mold and Indoor Air Quality
- Unified Facilities Guide, Mold Remediation, Section 02 85 00

B. Compliance Thresholds

PCBs

Transformers

A PCB transformer is a transformer that contains PCB concentrations greater than or equal to 50 ppm. PCB transformers must be marked with the appropriate warning signs in accordance with 40 CFR 761.40. If a transformer is present at a site, personnel should contact CFMO-EMB prior to handling the transformer to determine if it may contain PCBs.

Fluorescent Light Ballasts

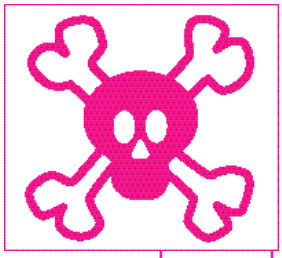
The Toxic Substances Control Act (TSCA) management requirements for fluorescent light ballasts depends on condition and PCB concentrations in the potting material. See Table 15-1 below for guidance.

Table 15-1. TSCA Management Requirements for Fluorescent Light Ballasts

PCB Capacitor	PCB Concentration	Management	Reference
"No PCBs" label	NA	Not regulated under TSCA.	NA
None	< 50 ppm	Not regulated under TSCA.	NA
Intact and non-leaking or none	≥ 50 ppm	Is a PCB bulk product waste. No labeling is required. Manifesting is required for disposal in accordance with 40 CFR 761.62(a); is not required under 40 CFR 761.62(b); may be required under 40 CFR 761.62(c).	40 CFR 761.50(b)(2)(ii) and 761.62(a) through (c)
Intact and non-leaking	< 50 ppm	No labeling or manifesting required.	40 CFR 761.50(b)(2)(i) and 761.60(b)(2)(ii)
Leaking	< 50 ppm or ≥ 50 ppm	Disposal as PCB bulk product waste. No labeling is required. Manifesting is required for disposal in accordance with 40 CFR 761.62(a); may be required under 40 CFR 761.62(c).	40 CFR 761.62(a) or (c)

Lead

The majority of NJARNG facilities were constructed prior to 1978, so any renovations or alterations to these structures may disturb lead-based paint. On any surface that is tested and found to contain lead equal to or in excess of 1.0 milligram per square centimeter (XRF



reading) or equal to or in excess of 0.5% by weight, a licensed contractor should be hired to conduct remediation, abatement, and/or encapsulation.

Lead dust could also be present in facilities due to former indoor firing range activities, field equipment, weapons cleaning, and leaded gasoline emissions. The EPA and HUD have reduced the residential lead clearance criteria for floor surfaces from 40ug/ft2 to 10ug/ft2. The most current NGB guidance states that as it pertains to ARNG facilities, a 40ug/ft2 standard for non-occupational settings and a 200ug/ft2 standard for occupational settings apply for lead clearance testing.

At any NJARNG owned property, NJDMAVA or NJANRG personnel should not conduct any renovation, construction, or demolition without contacting CFMO-EMB for information on possible lead-based paint on structures. No weekend projects are permitted by soldiers or other personnel without contacting CFMO-EMB first.

Mold

If moisture (high humidity, leaking pipes and/or roofs, and/or poorly configured HVAC systems), food, and temperature is present, mold growth will occur. The single best way to prevent mold growth is to control moisture such as but not limited to maintaining the building envelope, repairing broken pipes, immediately cleaning up water leaks, and maintaining a functioning HVAC system that can control humidity and discharge condensate during the cooling season.

Mold is one major factor that influences Indoor Air Quality (IAQ). IAQ is defined as the air quality within and around buildings and structures, especially as it related to the health and comfort of building occupants. Mold may present some health concerns to building occupants, but there are no state, federal, DoD, and/or DA regulations for mold sampling, remediation, or removal. However, several guidance documents and websites have been published including:

- The New Jersey Health Department provides some guidance in the form of their Mold Advisory Bulletin. They also maintain a list of consultants who can assist in the evaluation of mold contamination and in mold remediation work. https://www.nj.gov/health/ceohs/documents/mold/mold_bulletin.pdf
- The United States Occupational Safety and Health Administration Preventing Mold-Related Problems in the Indoor Workplace guidance document. https://www.osha.gov/sites/default/files/publications/preventing_mold.pdf
- The United States Environmental Protection Agency mold website. https://www.epa.gov/mold
- The US Army Public Health Center published Technical Guide 278, Industrial Hygiene Public Health Mold Assessment Guide. https://phc.amedd.army.mil/PHC%20Resource%20Library/TG278.pdf

- The Defense Center for Public Health – Aberdeen, Mold and Indoor Air Wuality website. https://phc.amedd.army.mil/topics/workplacehealth/ih/Pages/Indoor-Air-Quality-Mold.aspx
- The Unified Facilities Guide Specifications for Mold Remediation, Section 02 85 00 https://www.wbdg.org/FFC/DOD/UFGS/UFGS%2002%2085%2000.pdf

Also, the species composition and/or presence of mold may change within the building depending on the day and weather. If there is a mold issue, a mold assessment must be conducted to identify the source of the water intrusion prior to the mold being remediated. Mold will not be remediated without first identifying and addressing the moisture source. However, per several of the above listed guidance documents and websites, if mold is visible, sampling is unnecessary.

Mercury

Mercury may be present in older thermostats and other pressure sensors and fluorescent bulbs. Mercury is a dangerous neurotoxin. It does not break down in the environment and it bioaccumulates in the tissues of fish, which are then consumed by people. Metallic mercury is liquid at room temperature but can easily evaporate from liquid to a vapor. Mercury vapor is colorless and odorless.

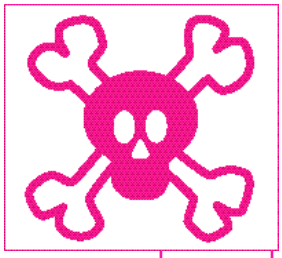
A mercury-added thermostat is a product or device that uses a mercury switch to sense and control room temperature through communication with heating, ventilating, or air-conditioning equipment. Mercury thermostats can be a major source of mercury contamination in the environment. Each mercury thermostat contains about 3 grams of mercury.

Tubular and compact fluorescent bulbs may contain mercury. Fluorescent bulbs contain mostly mercury vapor but can contain small amounts of liquid mercury. Green-tipped fluorescent lamps contain lower amounts of mercury than regular fluorescent lamps. These lamps are called green-tipped because they are usually marked with a green tip or labeled as "low mercury."

C. Responsibilities

CFMO-EMB

- Responsible for periodic revisions of the design engineering, generic environmental scope of work.
- Hires and manages environmental consultants and remediation contractors.
- Responds to work orders for any requests to conduct mold assessments and/or remediation.
- Reviews copies of all toxic substances surveys, abatement work plans, and abatement/remediation reports prepared by the design engineering/consulting firms.
- Purchases fluorescent light bulb recycling kits and PCB ballast recycling pails.



CFMO-CMB

- Provides technical support to the CFMO-EMB regarding building construction and drawings.
- Advises the CFMO-EMB of all known building renovations/ modifications so that the disturbance of toxic substances is avoided.
- Provides written notification to all contractors where toxic substances is present to avoid accidental disturbances.
- Ensures that design engineering firms conduct toxic substances surveys that follows the environmental scope of work during the design and/or remodeling of NJANRG facilities and infrastructure.
- Ensures that all planned construction work areas that require toxic substances abatement are included to the greatest extent possible.
- Provides copies of all toxic substances surveys, abatement work plans, and abatement reports to the CFMO-EMB for their review and comment.
- Coordinates annual environmental awareness training with CMB personnel.

CFMO-FMB

- Advises the CFMO-EMB of all known building renovations/ modifications so that the disturbance of toxic substances is avoided.
- Provides written notification to all contractors where toxic substances is present to avoid accidental disturbances.
- Ensures that all planned construction work areas that require toxic substances abatement are included to the greatest extent possible.
- Submits work orders to CFMO-EMB to request mold assessment surveys and remediation.
- Provides facility access to contractors and maintains cleanliness of the property.
- Posts signage where necessary.
- Coordinates annual environmental awareness training with FMB personnel.

CFMO-RPB

- Manages all NJDMAVA building leases and provides information to tenants as necessary.
- Manages PRIDE database records and closes out FIFRs.

NJARNG Safety Office

- Ensures annual industrial hygiene surveys are completed at applicable facilities and oversees the NGB contractor.
- Ensures proper weapons cleaning procedures are followed.
- Posts signage notifying personnel of known contamination.

Maintenance Shop/Armory/Unit

- Ensures a toxic substances survey is performed in any area that renovations are scheduled.
- Ensures facility personnel are familiar with hazards associated with toxic substances.
- Ensures CFMO-EMB is notified if toxic substances are stored on-site or are disposed of improperly.

The CFMO-PPB and TAG are exempt from responsibilities regarding toxic substances management.

D. Procedures

Transformers

For facilities with PCB transformers, Facility Managers should inspect annually to ensure that the transformers are properly monitored and labeled.

Fluorescent Light Tubes and Ballasts

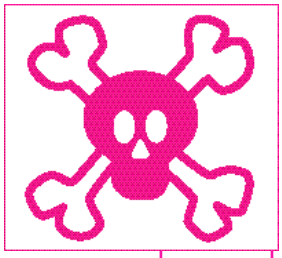
For facilities with PCB light ballasts, Facility Managers should inspect the ballasts to ensure they are properly marked and labeled and, if necessary, tested.

PCB-containing ballasts become a concern if they are leaking or they will be removed and disposed of as hazardous waste. The entire lighting fixture does not need special handling and disposal as long as the ballast is not leaking. The non-leaking ballasts can be removed and recycled or disposed of properly. Sudden rupture of PCB-containing FLBs may pose health hazards to occupants and is difficult and costly to clean up.

If leaking suspected PCB containing ballasts are identified, please turn off the lift and notify CFMO-EMB.

While it is legal to dispose of green-tipped fluorescent light bulbs as municipal solid waste, they are likely to break during handling or placement in garbage trucks, thereby releasing mercury to the environment. It is recommended they be recycled, or managed as either universal or hazardous waste, to avoid worker exposure to mercury.

For self-help relighting projects, CFMO-FMB will contact CFMO-EMB to obtain fluorescent light bulb recycling kits and PCB ballast recycling pails. For major renovations, CFMO-CMB will ensure that design engineering firms conduct toxic substances surveys that follows the environmental scope of work during the design and/or remodeling of NJANRG facilities and infrastructure.



If a fluorescent light tube breaks:

- Keep the area well ventilated.
- Wear latex gloves.
- Carefully scoop up glass fragments and powder using stiff paper or cardboard.
- Use sticky tape, such as duct tape, to pick up any remaining small glass fragments and powder.
- Wipe the area clean with damp paper towels or disposable wet wipes.
- Place cleanup debris and used paper/cardboard/tape/wipes in a sealable container or plastic bag.
- DO NOT use a vacuum.
- Place sealed container /bag in used fluorescent lamp recycling container. Wash your hands with soap and water.

For additional information, please refer to the US EPA 'Cleaning Up a Broken CFL' Guidance Document at: https://www.epa.gov/mercury/cleaning-broken-cfl or reference to Chapter 5, 'Handling and Containerizing Broken Fluorescent Lamps'.

Lead-Based Paint

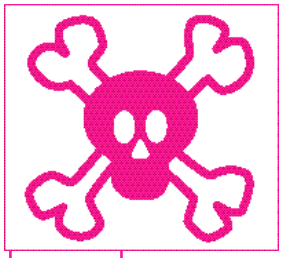
Lead-based paint is a major source of lead poisoning for children and can also affect adults. In children, lead poisoning can cause irreversible brain damage and can impair mental functioning. It can also hinder fetal development even at extremely low levels of lead. In adults, it can cause irritability, poor muscle coordination, and nerve damage to the sense organs and nerves controlling the body. Lead poisoning may also effect reproduction (such as a decreased sperm count). It may also increase blood pressure.

Children may be exposed to lead through consuming paint chips. It is not the most common way that consumers, in general, are exposed to lead. Ingesting and inhaling lead dust that is created as lead-based paint "chalks," chips, or peels from deteriorated surfaces can expose consumers to lead. Walking on small paint chips found on the floor, or opening and closing a painted window frame, can also create lead dust. Other sources of lead include deposits that may be present in homes after years of use of leaded gasoline and from industrial sources like smelting. Consumers can also generate lead dust by sanding lead-based paint or by scraping or heating lead-based paint.

Lead dust can settle on floors, walls, and furniture. Under these conditions, children can ingest lead dust from hand-to-mouth contact. Settled lead dust can reenter the air through dry sweeping, the movement of people, etc.

The following guidelines are established with regards to lead-based paint operations:

- If the facility was constructed prior to 1978, verify if lead-based paint is present in the scheduled renovation area prior to the commencement to work. Contact the CFMO-EMB at 609-530-7135 and the state Safety Officer for the NJARNG.



- Conduct briefings for facility personnel prior to the start of renovations covering the safety precautions for lead-based paint.
- Any lead survey must be done by a New Jersey licensed inspector/risk assessor.
- Any renovation impacting lead-based paint surfaces must follow OSHA Lead in Construction standards and lead safe work practices.

Lead Safe Work Practices

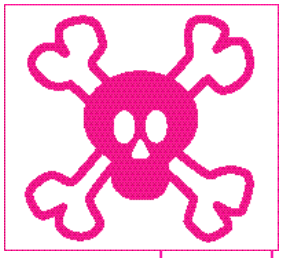
The EPA's Renovation, Repair and Painting Rule requires that firms performing renovation, repair, and painting projects that disturb lead-based paint be certified by the EPA, use certified renovators who are trained by EPA-approved training providers, and follow lead-safe work practices. Lead safe working practices should be performed when possible. Lead safe working practices can include, but are not limited to:

- Removing all objects in the work area or covering said objects with plastic sheeting or other disposable impermeable material.
- Closing and covering all forced air HVAC ducts in the work area with plastic sheeting or other disposable impermeable material.
- Closing and sealing all windows and doors in the work area.
- Covering the floor surface in the work area with taped-down plastic sheeting or other disposable impermeable material.
- Closing all doors and windows within 20 feet of an outdoor renovation.
- Taking additional precautions in containing the designated work area to ensure that dust and debris from migrating from designated work areas to adjacent areas.
- Wet scraping deteriorated painted surfaces.
- Utilization of a vacuum equipped with a HEPA filter.
- All personnel, tools, and other items must be free of dust and debris when leaving the work area.

Some fundamental and easily implemented work practices are: good housekeeping, use of appropriate personal hygiene practices, periodic inspection and maintenance, use of proper procedures to perform a task, establishing supervision to ensure that the proper procedures are followed, and use of administrative controls.

Good housekeeping involves a regular schedule of cleaning activities to remove accumulations of lead dust and lead-containing debris. All workplace surfaces must be maintained as free as practicable of accumulations of lead dust. Where feasible, lead-containing debris and contaminated items accumulated for disposal should be wet-misted before handling. Such materials must be collected and put into sealed impermeable bags or other closed impermeable containers. Bags and containers must be labeled to indicate that they contain lead-containing waste.

Personal hygiene is also an important element in any program to protect personnel from exposure to lead dust. Employees must wash their hands and faces prior to eating, drinking,



using tobacco products, or applying cosmetics. Workers must change into clean clothing before leaving the worksite.

Periodic inspection, maintenance, and supervision are other important work practice controls. Regular inspections can detect abnormal conditions so that timely maintenance can be performed. Proper supervision ensures that appropriate work practices are followed. The OSHA construction standard for lead also requires that a competent person perform regular inspections of job sites, materials, and equipment.

Weapons Cleaning

Weapons cleaning should only be performed in the designated area(s) for a given facility. Personnel must follow the ARNG standard operating procedures for weapons cleaning activities. Soldiers should be cautious not to cross contaminate adjacent areas through the use of designated tables, sticky mats, plastic sheeting, etc. Weapons must not enter food preparation or food storage areas. Wash water generated through weapons cleaning should be properly managed and disposed of. Facilities that use floor scrubbers for standard maintenance should contact CFMO-EMB to determine if the waste water should be containerized and sampled.

Aqueous Fill Forming Foam

Aqueous Fill Forming Foam (AFFF) is a fire suppressant that is used to extinguish flammable liquid fires. AFFF could contain perfluorooctane sulfonate (PFOS) and perfluorooctonoic acid (PFOA). The management of AFFF is pertinent for the safety of human health and the environment.

Mold

In proposed construction projects at NJARNG facilities, it is often included in the contract that the engineering firms performing design service will also do an indoor air quality assessment. This will alert the NJDMAVA project manager and contractor if there is any mold present, and to incorporate the addressing of any issues from the assessment in their scope of work or to oversee any work done to resolve any issues.

For any self help projects and/or reports of mold related issues, CFMO-FMB will submit work orders to CFMO-EMB to request mold assessment surveys and remediation.

E. Training

General Environmental Awareness training shall be attended by appropriate CFMO-CMB, CFMO-FMB, Maintenance Shop, Armory, and Unit personnel annually. The applicable safety officer is responsible for any training of staff and safety procedures while working with toxic substances.

F. Recordkeeping

Documents dealing with toxic substances, including waste manifests, shall be maintained indefinitely at the facility.

G. Personal Protective Equipment

Workers shall wear the appropriate PPE as outlined in 29 CFR 1926.62. This equipment should include respirators, disposable coveralls, gloves, and boots.

Chapter 16
Wastewater Management

This chapter discusses New Jersey Army National Guard (NJARNG) policies/goals, procedures, and compliance tools used to support its Wastewater Management Program and includes regulations, responsibilities, and compliance requirements associated with wastewater discharges. For any correspondence regarding Wastewater Management, refer to page I-7 of the Introduction of the Desktop Guide.

A. Program Overview

The Army's wastewater and stormwater management goals are to reduce the pollutant loadings in point source and non-point source discharges and to ensure efficient water reuse. Other program requirements include:

- Obtain and comply with NPDES and/or State discharge permits, to include all required plans.
- Ensure that discharges from industrial activities to Federally Owned Treatment Works (FOTWs) and Publicly Owned Treatment Works (POTWs) comply with the substantive pretreatment requirements applicable to POTWs under the Clean Water Act (CWA).
- Develop pretreatment programs as required to ensure FOTWs meet NPDES permit requirements and to improve opportunities for reuse of wastewater effluent and sewage sludge.
- Develop and implement a stormwater management plan for a regulated Municipal Separate Stormwater Sewer System (MS4) as required in accordance with the installation's general permit.
- Develop and implement a Stormwater Pollution Prevention Plan(s) (SWPPP) as required, in accordance with the installation's industrial, construction, or Municipal Separate Storm Sewer (MS4) storm water permit(s).
- Develop and implement a spill prevention, control, and countermeasures plan (SPCCP), as required. (LD: CWA Section 311(j), 40 CFR 112.3)
- Coordinate proposed military activities involving the discharge of fill material into waters of the United States, including wetlands, with, and if necessary, secure a permit from the local U.S. Army Corps of Engineers (USACE) district and appropriate State agency.
- Ensure that operators of wastewater (including industrial) treatment plants and wastewater collection systems have necessary training and certification.
- Use analytical laboratories that are certified per applicable Federal, State, local or host nation (HN) requirements, as appropriate.
- Follow State approved plans and local permit requirements for non-point source water pollution control where applicable.

AR 200-1 requires that personnel comply with all requirements, substantive and procedural, for control and abatement of water pollution, as outlined in the Clean Water Act (CWA). The CWA governs the control of water pollution in the nation.

In addition to the CWA, the following laws and regulations apply to this chapter:

- The Federal Facility Compliance Act (FFCA). This act, dated 6 October 1992, amends the Solid Waste Disposal Act (SWDA) and addresses requirements for Federally-Owned Treatment Works (FOTW).
- EO 12088, Federal Compliance with Pollution Standards. This EO, dated 13 October 1978, requires federally owned and operated treatment works to comply with applicable federal, state, and local water pollution control standards.
- NJSA. 58:10A et seq., New Jersey Water Pollution Control Act. The purpose of the Water Pollution Control regulations is to restore, enhance, and maintain the chemical, physical, and biological integrity of the state's waters.
- New Jersey's Soil Erosion and Sediment Control Act (SESCA), Chapter 251, Public Law 1975 includes the review of site plans for virtually all land disturbances associated with residential and commercial development, land grading, utility and public facility construction, gravel pits, mining operations and landfills.
- NJAC 7:14A-1.1 et seq., New Jersey Pollutant Discharge Elimination System (NJPDES) Regulations. These regulations set forth the rules concerning implementation and operation of the NJPDES permit program and the Treatment Works Approval (TWA) program.

Wastewater discharges can include any of the following:

- Storm water runoff from operational or industrial areas to a stream or water body
- Storm water runoff from construction activities to a stream or water body
- Sanitary or industrial wastewater discharge to a publicly owned treatment works (POTW) or an FOTW or other non-agency-specific treatment facility
- Industrial wastewater or storm water discharged to an industrial waste impoundment or lagoon.
- Sanitary or industrial wastewater discharge directly to a receiving stream

References

- Water Pollution Control Act (NJSA 58:10A-1 to -60)
- Water Pollution Control Act, Supplement (NJSA 58:10A-15 to -20)
- New Jersey Soil Erosion and Sediment Control Act (NJSA 4:24-39)
- Ocean Sludge Dumping Elimination Act (NJSA 58:10A-44 to -46)
- Ocean Dumping Enforcement Act (NJSA 58:10A-47 to -51)
- Clean Ocean Education Act (NJSA 58:10A-52 to -55)
- Realty Improvement Sewerage and Facilities Act (NJSA 58:11-23 to -48)
- New Jersey Infrastructure Trust Act (NJSA 58:11B-1 to -27)
- New Jersey Wastewater Treatment Privatization Act (NJSA 58:27-1 to 18)
- Permits for Discharges of Dredged or Fill Material into Waters of the United States (33 CFR 323)
- Operation and Maintenance of Army Corps of Engineers Civil Works Projects Involving the Discharge of Dredged or Fill Material into Waters of The U.S. or Ocean Waters (35 CFR 335)

- Clean Water Act (40 CFR 104-108, 110-117, 122-140, 230-233, 401-471, and 501-503)
- National Primary Drinking Water Regulations (40 CFR 141)
- National Secondary Drinking Water Regulations (40 CFR 143)
- National Primary Drinking Water Regulations - Certified Laboratories (40 CFR 141.28)
- National Pollutant Discharge Elimination System (40 CFR 122 through 124)
- Water Pollution Control Act (40 CFR 401)
- The Public Health and Welfare - National Drinking Water Regulations (42 USC 300g-8)
- Control and Abatement of Pollution by Army Watercraft (TB 55–1900–206–14)
- Sanitary Control and Surveillance of Water Supplies at Fixed Installations (Technical Bulletin MED 576)
- Occupational and Environmental Health: Sanitary Control and Surveillance of Field Water Supplies (Technical Bulletin MED 577)
- Operation and Maintenance of Domestic and Industrial Wastewater Systems (Technical Manuel 5-665)
- Domestic Wastewater Collection and Treatment (Technical Manuel 5-814)
- Swimming Pools and Bathing Facilities (Technical Bulletin MED 575)
- Stormwater Management Plan, May 2000
- Protection of Wetlands (EO 11990)
- Floodplains Management (EO 11988)

B. Compliance Thresholds

There are policies regarding wastewater and stormwater that NJARNG facilities must comply with:

- Facilities' policy concerning use of wastewater collection/treatment systems that are owned and operated by public or private entities when economically feasible and when security is not compromised.
- All requirements, substantive and procedural, for control and abatement of water pollution, as outlined in the CWA that require Army compliance.
- Control or eliminate sources of pollutants and contaminants to protect water bodies and groundwater.
- Employ abatement measures for non-point source runoff from construction, facility operations, and land management activities.
- Encourage reuse or recycling of wastewater, sewage sludge, wash rack sediment, greases or oils, and other wastes whenever economically feasible and environmentally beneficial.

Construction and Mining Activities Storm Water General Permit

The Construction and Mining Activities Storm Water General Permit authorizes point source discharges from certain construction and mining activities. Regulated entities are required to develop a soil erosion and sediment plan aimed at eliminating the flow of contaminated rainwater into streams and rivers.

Pollutants commonly associated with construction sites:

- Sediment
- Solid and sanitary wastes
- Phosphorus
- Nitrogen
- Pesticides
- Oil and grease
- Concrete truck washout
- Construction chemicals
- Construction debris

Construction activities that disturb 5 acres of land or more must obtain a Construction General Permit (NJ0088323) for storm water discharges.

The Municipal Stormwater Regulation Program was developed in response to the U. S. Environmental Protection Agency's (USEPA) Phase II rules published in December 1999. The Department issued the final NJPDES stormwater rules on February 2, 2004, along with four NJPDES general permits. These permits authorize stormwater discharges from Tier A and Tier B municipalities, as well as Public Complexes, and Highway Agencies that discharge stormwater from municipal separate storm sewers systems (MS4s) and have been renewed on a routine basis.

The Tier A permit authorizes stormwater discharges from most municipalities in New Jersey. Public Complexes include certain large public colleges, prisons, hospital complexes, and military bases. Highway Agencies include county, state, interstate, or federal government agencies that operate highways and other thoroughfares. This general permit authorizes point source discharges from certain construction activities. Regulated entities are required to develop a soil erosion and sediment control plan aimed at eliminating the flow of contaminated rainwater into streams and rivers.

On October 1, 2009, DEP launched the Stormwater Construction E-Permitting System. With the implementation of this system, the State Soil Conservation District offices no longer accept Stormwater Construction General Permit Request for Authorization (RFA) forms. All RFAs shall be submitted electronically using the NJDEP Online portal.

Soil Erosion and Sediment Control Act Project Permit

The New Jersey County Soil Conservation Districts are charged with implementing the Soil Erosion and Sediment Control Act (SESCA) to control and reduce erosion and sedimentation on construction sites. In addition to the 5-acre compliance threshold for triggering a storm water permit, there is also a 5,000 square feet compliance threshold for projects triggering a permit under this SESCA. Under 4:24-41 of the SESCA, a project means a disturbance of more than 5,000 square feet of the surface area of land for the:

- Accommodation of construction for which the State Uniform Construction Code would require a construction permit (except that the construction of a single-family dwelling unit is not considered a "project" unless it is part of a proposed subdivision, site plan, conditional use, zoning variance, planned development or construction permit application involving 2 or more such single-family dwelling units).
- Demolition of one or more structures.
- Construction of a parking lot.

- Construction of a public facility.
- Operation of any mining or quarrying activity.
- Clearing or grading of any land for other than agricultural or horticultural purposes.

Sanitary or Industrial Wastewater Discharged to a POTW or FOTW

Wastewater discharged into a "sewer system" should be sanitary wastewater, water from the latrines, showers, and kitchens, or operational wastewater, washrack water or water used for a specific operation. Operational wastewater may be subject to specific local regulations.

Wastewater Discharged directly to a Stream or Waterway

Sanitary or operational wastewater should never be discharged directly to a stream or waterway without an NPDES discharge permit issued by the NJDEP. If you should suspect that an illicit connection exists, notify CFMO-EMB immediately. An illicit connection is a type of non-storm water discharge that occurs when indoor plumbing (oil/water separators (OWSs), floor drains, trench drains, sinks, or boiler room drains) connect to the storm water sewer system rather than the sanitary sewer system.

C. Responsibilities

CFMO-RMB

- Authorizes funding and sets limits for maintenance and repair services.

CFMO-EMB

- Monitors the development of the NJDEP NJPDES Phase II program for changes that may affect NJARNG activities.
- Routinely monitors wastewater discharges and NJPDES permit compliance.
- Coordinates OWS maintenance and leak/spill clean up projects with the CFMO.
- Provides storm water pollution prevention training to personnel.
- Ensures that unit commanders are aware of the purpose and objectives for water pollution control.
- Obtains coverage under Construction General Permit NJ0088323 for construction activities where 5 acres or more will be disturbed.
- Responsible for determining whether a NJPDES permit for discharges associated with construction activity must be obtained.

CFMO-CMB

- Assist managing wastewater contracts if applicable.

CFMO-PPB

- Assist with PRIDE documentation if new wastewater system needs to be installed or have major repairs.

CFMO-FMB

- On-site armorers must inspect and notify CFMO-EMB of any issues regarding wastewater management.
- Is notified of all emergency and non-emergency OWS system maintenance problems or hazardous waste/material leaks and spills.

CFMO-RPB

- Provide any contacts for non-DMAVA employees at the site.

Maintenance Shop/Armory/Unit

- Ensures that CFMO-EMB is notified of all construction activities where one acre or more will be disturbed.
- Notifies the CFMO for all Oil and Water Separator (OWS) and grease trap maintenance problems and repairs.
- Coordinates OWS system inspection, maintenance, and operation with CFMO-EMB and personnel.
- Ensures that all personnel not present at the storm water pollution prevention workshop are briefed on the content of the workshop and best management practices that apply at your facility.
- Ensures kitchen/shop grease traps are inspected and properly maintained.
- Ensures that all training activities are conducted in a manner that prevents and controls water pollution.
- Ensures that all applicable training area rules, regulations, and policies are adhered to.
- Submits work order requests as needed.

The following branches are exempt from responsibilities regarding wastewater management:

- TAG

D. Procedures

Regarding compliance with the NJARNG Wastewater Management Program, the following items are required by most facilities:

- Perform an inspection of the kitchen grease trap as needed, if one exists, as described below. Use the inspection checklist at the end of this section to complete your inspection and follow instructions for clean-out, when necessary.
- Perform inspections of each OWS at the complex, as described below. Use the inspection checklist at the end of this section to complete your inspection.
- Ensure that personnel have received a briefing of storm water pollution prevention best management practices (refer to Section E for further information on this workshop).
- Ensure that CFMO-EMB is aware of any construction activity planned at your facility that will disturb 1 or more acres of ground.
- Ensure that personnel practice good housekeeping practices in the shop, properly utilize structural best management practices (e.g., use of release valves on mobile

refueler parking pads), utilize drip pans under leaky vehicles, and are aware of other best management practices that should be employed at your facility to minimize storm water pollution.

Grease Trap Inspection and Maintenance

- Personnel using the kitchen will inspect the grease trap as needed for grease accumulation. However, the grease trap should be checked no less than annually.
- If you should note grease build-up in the trap, follow the clean-out checklist at the end of this section. Any excess grease removed from the trap may be bagged and thrown in the dumpster.

The following facilities are subject to grease trap inspection and maintenance:

- Bordentown
- Cape May
- Cherry Hill
- Flemington
- Fort Dix
- Jersey City
- Lawrenceville
- Morristown
- Mount Holly
- Newark
- Riverdale
- Sea Girt
- Somerset
- Teaneck
- Toms River
- Washington
- West Orange
- Westfield
- Woodbury

If you should have any questions about the grease trap or suspect that it is not operating properly, notify CFMO-EMB.

OWS Maintenance

- Personnel using the wash rack will conduct routine inspections of all OWS systems located indoors and outdoors
- Routine inspections will include floor drains, sand traps, washpad drains, inside separator compartments, and gauging storage tank levels
- Inspection schedule for separators:
  - Every 30 days for major users (AASFs, CSMSs, FMSs, and UTES).
  - Every 60 days for moderate users (those FMS with 3 bays).
  - Every 90 days for minor users (those FMS with less than 2 bays).
- Indoor OWS maintenance:
  - All shop foremen will ensure periodic cleaning of indoor floor drains.
  - Sediment buckets located inside separators will be cleaned each time they are inspected (monthly).
  - If oil debris is in the sediment bucket, the debris will be handled and stored as hazardous waste in accordance with IAW established procedures found in Chapter 5 of this guide.
- Outdoor oil/water service maintenance and repair:
  - Shop foremen will manage inspection for all OWS.
- Emergency maintenance:
  - The facility representative will notify CFMO-EMB to request authorization for immediate corrective maintenance and/or repair services from a vendor for OWS systems.

GREASE TRAP INSPECTION AND CLEAN-OUT CHECKLIST (PERFORMED AS NEEDED)

Inspect the grease trap as needed for grease accumulation after each heavy use; however, the grease trap should be checked no less than annually. Follow the directions below for cleaning the grease trap if should you note that grease has accumulated in the grease trap. When finished, sign and date the form and indicate whether the grease trap was cleaned out in the space provided. ***Should you note that the grease trap is not functioning properly, send a copy of the inspection form to the CFMO-EMB.***

Cleaning Operation:

1. Run a full stream of hot water in the sink. It is preferable to have this water at 140 degrees or higher, running for a period of at least two minutes.
2. Turn off the hot water and allow the unit to cool for a period of three minutes.
3. Close the line control valve.
4. Open the automatic draw-off valve at the top of the interceptor and place a container underneath this valve. Run hot water through the interceptor at a rate of approximately two gallons per minute.
5. The unit will fill. Turn off hot water. Accumulated liquefied grease will be raised into cone and draw-off piping.
6. Allow accumulated liquefied grease to flow out of draw-off valve until clear water appears.
7. When clear water appears, shut off flow of hot water into sink, turn line control valve to open position. Close automatic draw-off valve at top of grease trap.
8. Grease trap is now ready for normal use.

DATE	INSPECTOR'S INITIALS	GREASE TRAP CLEANED?	DEFICIENCIES?	DATE CORRECTED
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

OIL/WATER SEPARATOR INSPECTION CHECKLIST (PEFORMED EVERY 30, 60, OR 90 DAYS)

Inspect each OWS for build up of sand, trash, sludge, and oil IAW the inspection schedule stated in Section D of this chapter and after heavy rainfall events. Over a period of time, the sediment, oil, grease will build up on the walls of the separator. Dirt and heavy oil may build up on the parallel plates and the build-up will reduce the unit's efficiency. In addition, the skimmer mechanism becomes "gummy." This causes partial clogging of the mechanism and the formation of a continual oil slick of increasing depth.

Follow the directions below for inspecting the OWS. Inspect each OWS at your facility every ***30 days for major users*** (AASFs, CSMSs, FMSs, and UTES), ***60 days for moderate users*** (those FMSs with 3 bays), and ***90 days for minor users*** (those FMSs with less than 2 bays). When finished, sign and date the form and indicate whether the OWS was cleaned out in the space provided. ***Should you note that the OWS is not functioning properly, send a copy of the inspection form to the CFMO-EMB***. It is recommended that the OWS be cleaned **at least once a year**. Annual cleaning consists of removing the oil build-up on surfaces of the OWS walls and coalescer plates with steam or high-pressure wash.

Location: _____ Type of OWS: _____ Age: _____

1. Determine the depth of oil in the OWS: _____ inches or centimeters
2. Inspect for excessive sediment, grease, and trash.
3. Date OWS last cleaned: _____
4. Amount of oil recovered at cleaning: _____ gallons
5. Method of disposal of recovered oil: _____
6. Determine depth of water in waste oil tank: _____ inches or centimeters
7. Has OWS outflow backed-up into drains since the last inspection: _____

Comments: _____

DATE	INSPECTOR'S INITIALS	CLEANED?	DEFICIENCIES?	DATE CORRECTED
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

E. Training

General Environmental Awareness training shall be attended by appropriate CFMO-CMB, CFMO-PPB, CFMO-FMB, CFMO-RPB, Maintenance Shop, Armory, and Unit personnel annually. More information about training requirements can be seen in the Introduction chapter on pages I-4 through I-6.

In 2000, the NJDEP decided that the NJARNG would provide a Storm Water Pollution Prevention Workshop to personnel. Shop chiefs who attended the Workshop were to brief personnel at their respective shops/locations on the content of the course. ***If you have not been briefed on this course, see your shop chief for this information. If no one at your facility attended the workshop, contact CFMO-EMB to obtain the presentation materials.***

Military Field Training

Military training activities will be planned so that all applicable training area rules and regulations are followed. Unit commanders will ensure sufficient precautions are taken to prevent the discharge of hazardous substances/wastes into surface/ground waters and wetland areas. These precautions may include:

- Avoid training in wetland areas, lakes, streams, etc., whenever possible and practical.
- Have spill absorbent and cleanup materials on hand during vehicle refueling, maintenance, and transport operations.
- Anticipate equipment and operational breakdowns that may result in water pollution.

F. Recordkeeping

Maintain all self-inspections checklists in the facility environmental records for at least 3 years. Any records of water analyses are maintained at CFMO-EMB indefinitely.

Chapter 17
Water Quality Management

This chapter discusses New Jersey Army National Guard (NJARNG) policies/goals, procedures, and compliance tools used to support its Water Quality Management Program and includes regulations, responsibilities, and compliance requirements associated with water quality. For any correspondence regarding Water Quality Management, refer to page I-7 of the Introduction of the Desktop Guide.

A. Program Overview

The NJARNG's water quality management objective is to ensure availability, conservation, and protection of water resources, as well as to obtain and comply with all required Federal, State, and local Clean Water Act (CWA), Coastal Zone Management Act (CZMA), and Safe Drinking Water Act (SDWA) regulations. Additionally, sections 201, 208 and 303 of the CWA provide a framework for water quality planning in the State of New Jersey.

Major Provisions of Federal and State Water Quality Regulations

Clean Water Act

The CWA is the primary Federal statute regulating the protection of the nation's water. The CWA aims to prevent, reduce, and eliminate pollution in the nation's water in order to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters", as described in CWA section 101(a). A stated goal of the CWA is to eliminate discharge of pollutants into navigable waters, as that term is defined in CWA § 502(7) and corresponding case law. Federal facilities have regulatory responsibilities under the CWA, including:

- Preventing water pollution
- Obtaining discharge permits
- Meeting applicable water quality standards
- Developing risk management plans
- Maintaining records

Coastal Zone Management Act

The objective of the CZMA is to protect the coastal environment from growing demands associated with residential, recreational, commercial, and industrial uses (State and Federal offshore oil and gas development). The CZMA provisions help States develop coastal management programs to manage and balance competing uses of the coastal zone. Federal Agencies must follow the Federal Consistency provisions as delineated in 15 CFR part 930. The CZMA also requires that activities within the coastal zone of any state must be consistent with the state's coastal zone management plan.

Safe Drinking Water Act- Federal

The Safe Drinking Water Act (SDWA) was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. The law was amended in 1986 and 1996 and requires many actions to protect drinking water and its sources such as rivers, lakes, reservoirs, springs, and ground water wells. SDWA does not regulate private wells which serve fewer than 25 individuals. SDWA authorizes the United States

Environmental Protection Agency (US EPA) to set national health-based standards for drinking water to protect against both naturally-occurring and man-made contaminants that may be found in drinking water. US EPA, states, and water systems then work together to make sure that these standards are met.

All public water systems must have at least 15 service connections or serve at least 25 people per day for 60 days of the year. Drinking water standards apply to water systems differently based on their type and size:

- Community Water System is a public water system that serves the same people year-round. Most residences including homes, apartments, and condominiums in cities, small towns, and mobile home parks are served by Community Water Systems.
- Non-Community Water System is a public water system that serves the public but does not serve the same people year-round. There are two types of non-community systems:
  - Non-Transient Non-Community Water Systems serve the same people more than six months per year, but not year-round, for example, a school with its own water supply is considered a non-transient system.
  - Transient Non-Community Water Systems serve the public but not the same individuals for more than six months, for example, a rest area or campground may be considered a transient water system.

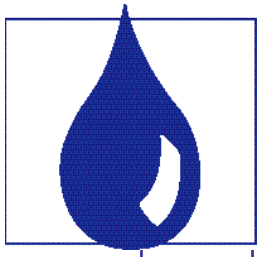
The Army must provide drinking water to fixed facilities in accordance with the requirements of the New Jersey Safe Drinking Water Act (NJSDWA) and federal Safe Drinking Water Act (SDWA). Drinking water provided for the field environment and other military-unique operations will meet the Army Surgeon General directives. Drinking water provided on Army watercraft will meet the drinking water quality standards of the SDWA. The federal SDWA includes the following major provisions:

- Primary and Secondary drinking water standards.
- Training and operator certification requirements.
- Lead contamination control act requirements.
- Public notification and consumer confidence reporting requirements.
- Water system vulnerability assessment and emergency response plan requirements.
- Certified laboratory requirements.

Safe Drinking Water Act-State

The New Jersey Water Supply Administration administers the NJSDWA and strives to meet the following objectives:

- To ensure that drinking water supply systems meet the federal and New Jersey Safe Drinking Water Standards.
- To ensure that surface and ground water diversions do not exceed the sustainable yield of available water resources.



- To protect the ground water resources of the state through proper well drilling activities and well head protection.
- To help protect the surface and ground water sources of the state through development and implementation of New Jersey's source water assessment plan and watershed planning and management strategies.
- To administer the Drinking Water State Revolving Fund and other funds to finance the costs of drinking water infrastructure improvements needed to achieve or maintain compliance with the SDWA, and to implement other drinking water initiatives.
- To ensure the proper construction, operation, and management of drinking water supply systems.
- To help identify water supply needs and issues and develop plans for their resolution.
- To ensure the proper response to water supply drought emergencies.

Subsurface and Percolating Waters Act

The Well Permitting and Regulations Section of the Bureau of Water Allocation is responsible for the permitting of all categories of wells (such as potable, industrial, monitoring, irrigation etc.), providing technical assistance on well construction to well drillers and local health departments, and administering compliance programs relating to the locating and sealing of abandoned wells. This section licenses and regulates all well drillers and pump installers in New Jersey.

Water Supply Management Act

The Water Resources Management section of the Bureau of Water Allocation operates under the New Jersey Water Supply Management Act and regulates all ground and surface water diversions in New Jersey that are in excess of 100,000 gallons of water per day. This includes water diverted for public water supply, industrial processing and cooling, irrigation, sand and gravel operations, remediation, and power generation. The regulation could take the form of a permit, certification, registration, or permit-by-rule.

References

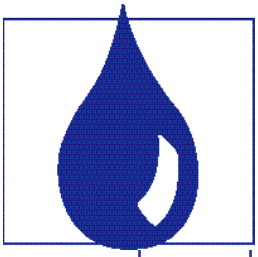
- New Jersey Safe Drinking Water Act (NJSA 58:12A-1 et seq., as amended) Regulations (NJAC 7:10)
- Sewerage and Facilities Act (NJSA 58:11-23 et seq.)
- Subsurface and Percolating Waters Act (NJSA 58:4A-4.1 et seq.) Regulations (NJAC 7:9-9.1)
- Realty Improvement Sewerage and Facilities Act (NJSA 58:11-23 et seq.)
- Water Supply Management Act (NJSA 58:1A-1 et seq.) Regulations (NJAC 7:19-1 and 7:20A-1)
- Licensing of Water Supply and Waste Water Operators (NJSA 58:11-64 to 58:11-73)
- Interconnections Between Approved Public Potable Water Supplies and Unapproved Water Supplies (NJSA 58:11-9.1 to 58:11-9.11)
- Coastal Area Facility Review Act (NJSA 13:19-1)

- Freshwater Wetlands Protection Act (NJSA 13:9B-2)
- New Jersey Supply Authority Act (NJSA 58:1B-1 to -25)
- Payments to State for Waters Diverted (NJSA 58:2-1 to -5)
- Dams and Reservoirs (NJSA 58:4-1 to -10)
- Subsurface and Percolating Waters (NJSA 58:4A-4.1 to -28)
- Clean Ocean Act (NJSA 58:10-23.25 to -23.34)
- Petroleum Pipelines Across Fresh Water Streams (NJSA 58:10-24 to -35)
- Facilities and Services of Small Water Companies (NJSA 58:11-59 to -63)
- Water Quality Planning Act (NJSA 58:11A-1 to -16)
- Safe Drinking Water Act (NJSA 58:12A-1 to -25)
- State Flood Control Facilities Act (NJSA 58:16A-1 to -17)
- Flood Hazard Area Control Act (NJSA 58:16A-50 to -101)
- Additional Water Supply Site Reservations (NJSA 58:12B-1 to -19)
- New Jersey Water Supply Law, 1958, (NJSA 58:22-1 to -19)
- Shellfish and Shellfish Beds (NJSA 58:24-1 to -10)
- New Jersey Water Supply Privatization Act (NJSA 58:26-1 to -18)
- Water Pollution Control Act (40 CFR 401)
- Marine Protection, Research, and Sanctuaries Act (40 CFR 220-229)
- Coastal Zone Management Act (15 CFR 923, 930)
- Clean Water Act (section 101a, 40 CFR 104-108, 110-117, 122-140, 230-233, 401-471, and 501-503)
- Energy Policy Act of 1992 (48 CFR 970.3670)
- Safe Drinking Water Act (SDWA) Regulations (40 CFR 141 through 143)
- Guidance for Providing Safe Drinking Water at Army Installations, USAEC (Technical Guide No. 179)
- Maintenance and Operation of Water Supply Treatment and Distribution Systems (Technical Manual No.5-660)
- Water Supply: Source, Treatment, and Distribution Systems (Technical Manual No.5-813)

B. Compliance Thresholds

The NJARNG must comply with applicable Federal, State and local laws and regulations regarding water resources management and permitting. They will identify and implement pollution prevention initiatives and participate with regional authorities in the development and implementation of water resource initiatives and plans.

If your facility provides drinking water, then you are subject to the regulations described above and must monitor your drinking water well following the procedures outlined in Section D of this chapter. This includes sampling and analysis for bacteria and nitrates.
If your facility receives drinking water from a Publicly Owned Treatment Works (POTW) then you are not subject to either the federal or state SDWA. Facilities that meet the following criteria are not required to comply with the requirements of the SDWA since they are not public water systems:



- The system consists only of distribution and storage facilities and does not have any collection and treatment facilities.
- The facility gets all its water from a public water system that is owned and operated by another party.
- The facility does not sell water to any party.

C. Responsibilities

CFMO-EMB

- Collects water samples and reports test results.
- Supervises the well water monitoring program statewide.
- Prepares and submits reports.
- Notifies installations and appropriate government agencies of any water contamination and aids with remedial action.
- Develops, distributes, and implements a water conservation plan and ensures that water conservation measures are installed in federal buildings.
- Surveys all NJARNG facilities to identify potential water conservation measures.
- May delegate water sampling to installation personnel who have been instructed in proper sampling procedures.

CFMO-CMB

- Ensure plans and specs of piping exist and are maintained.

CFMO-FMB Regional Supervisors

- Coordinates water disinfection at the installations with assistance from installation personnel and CFMO-EMB.

CFMO-RPB

- Provide contacts for non-DMAVA employees.

Maintenance Shop/Armory/Unit

- Submits work order requests as needed.
- Provides access to buildings for water sampling.

The following branches are exempt from responsibilities regarding water quality management:

- TAG
- CFMO-PPB

D. Procedures

Regarding compliance with the NJARNG Water Quality Management Program, the procedures may vary. However, any changes in drinking water quality at your facility should be reported to the local water supplier and CFMO-EMB for corrective action. The following items would be required by CFMO-EMB and CFMO-RMB in the event a drinking water well was installed.

Well Water Monitoring

- Well water collection and analysis must be conducted quarterly for bacteria, and annually for nitrates or any other analyses needed by DEP.
- If contamination is found, additional water testing is required.
- CFMO-EMB will collect water samples from each well and deliver them to certified laboratories.
- CFMO-EMB notifies the installation point of contact of laboratory analysis results and advises to secure potable water supplies until further notice if samples are noncompliant with local, state, or federal standards.

Domestic Wells and Public Non-Community Wells

Domestic wells are private drinking water wells for residents, and public non-community wells are operated by state government and are not intended to supply the public with potable water. The following sites are subject to quarterly well water monitoring:

- Lakehurst Consolidated Logistics Training Facility
- Old Unit Training and Equipment Site (UTES) at Ft Dix
- Flemington

Well Disinfection and Additional Sampling

CFMO-EMB and CFMO-FMB will coordinate the disinfection and additional sampling as directed by the DEP.

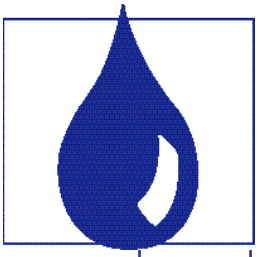
Notifications

- CFMO-EMB prepares and submits water quality reports to New Jersey Department of Environmental Protection (NJDEP), county health departments, and other officials as necessary.
- Facility managers will post public notices throughout the buildings in the event contamination is found that the well water supply is unsafe to drink and, therefore, secured from use (CFMO-EMB and CFMO-FMB will provide assistance).

Additional Information

The following sites had their water fountains and other sinks tested in 2019, and such documents can be requested through the CFMO-EMB:

- Atlantic City
- Bordentown
- Cape May
- Cherry Hill
- Dover
- Flemington
- Fort Dix
- Freehold
- Hackettstown
- Hammonton
- Jersey City
- Lakehurst
- Lawrenceville
- Lodi
- Morristown
- Mount Holly
- Newark
- Picatinny
- Princeton
- Riverdale
- Sea Girt
- Somerset
- Teaneck
- Toms River
- Vineland
- Washington
- West Orange
- Westfield
- Woodbridge
- Woodbury
- Woodstown



E. Training

General Environmental Awareness training shall be attended by appropriate CFMO-CMB, CFMO-FMB, Maintenance Shop, Armory, and Unit personnel annually. Training is not required for CFMO-EMB, CFMO-PPB, and CFMO-RPB. More information about training requirements can be seen in the Introduction chapter on pages I-4 through I-6.

F. Recordkeeping

Records of all drinking water analyses are maintained at CFMO-EMB indefinitely.

Chapter 18
Environmental Justice

This chapter discusses the New Jersey Army National Guard (NJARNG)'s policies/goals, procedures, and compliance tools that support its Environmental Justice (EJ) Program. For any correspondence regarding EJ, refer to page I-7 of the Introduction of the Desktop Guide.

A. Background/Program Overview

The NJARNG Environmental Justice (EJ) Program supports disadvantaged communities against the imbalanced decisions regarding environmental conditions such as public health outcomes, asthma, cancer, and developmental problems. Specifically, it is a mission of NJDMAVA to provide trained and prepared rapid responses to a wide range of civil and military operations, while providing exemplary services to citizens and Veterans of New Jersey.

The Environmental Protection Agency (EPA) defines EJ as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies." EPA's goal is to provide an environment where all people enjoy the same degree of protection from environmental and health hazards and equal access to the decision-making process to maintain a healthy environment in which to live, learn, and work.

EPA's environmental justice mandate extends to all the Agency's work, including:

- Setting standards
- Permitting facilities
- Awarding grants
- Issuing licenses
- Regulations
- Reviewing proposed actions by the federal agencies.

The following are principles for furthering Environmental Justice:

- Cultivate awareness consistently: The Executive Branch must be aware of how their programs or activities are culturally relevant, as well as whether they may contribute to disproportionate environmental and public health stressors or a lack or absence of environmental and public health benefits to a community of concern. The Executive Branch should know the composition of, build an appreciation for, and cultivate synchronization with the communities we serve. This process begins with cultivating awareness by providing workshops and training for Executive Branch employees. Through the Environmental Justice Interagency Council, DEP will facilitate workshops and trainings with experts within and outside of state government including local community environmental justice advocates.

- Empower communities to participate in decision-making processes: It is important to work cooperatively as a whole is greater than the sum of its parts. Partnerships between

communities and government must be inclusive of all and are value added. Communities of concern must be engaged so that they can speak for themselves. When state agencies are more proactive in inviting communities of concern to the table during the decision-making process, the community feels included, trust and respect are built, state agencies are more informed, businesses are stronger neighbors, and the overall outcomes are better for all.

- Plan for and embrace change: The Executive Branch needs to plan for and embrace change in its missions, programs, and activities to be able to further environmental justice. The strategies and opportunities available to each agency vary, but all agencies must find ways to make a difference for environmental justice communities by thinking creatively, proactively looking for opportunities, and using all the means at their disposal. Additionally, all agencies must strive to improve collaboration and leveraging of resources to identify and realize the many opportunities in communities of concern. Once successes are achieved, these improvements must be institutionalized. The institutionalization must be reflected in measurable goals, targets, and milestones with reductions in environmental and public health stressors and improvements in environmental and public health benefits. In addition to institutionalizing beneficial change in the implementation of programs and activities, ongoing efforts must be made to ensure that the staff of the Executive Branch, as well as the members of its boards, councils, and commissions reflect the diversity of the communities we serve.

References

- Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (EO 12898)
- Environmental Justice at New Jersey State Agencies (NJ EO 23)
- Furthering the Promise: A Guidance Document for Advancing Environmental Justice Across State Government, September 2020

B. Compliance Thresholds

Executive Order (EO) 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," focuses federal attention on the environmental and human health effects of federal actions on minority and low-income populations with the goal of achieving environmental protection for all communities. It directs federal agencies to:

- Identify and address disproportionately high and adverse human health or environmental effects of their actions on minority and low-income populations, to the greatest extent practicable and permitted by law.
- Develop a strategy for implementing environmental justice.
- Promote nondiscrimination in federal programs that affect human health and the environment, as well as provide minority and low-income communities access to public information and public participation.

New Jersey EO 23 ensures all New Jersey residents, regardless of race, ethnicity, color, national origin, or income, receive equal protection under the laws of this State, are able to live and work in a healthy and clean environment, and have equal access to clean energy resources and other public programs such as energy efficiency programs. New Jersey EO 23 outlines the goals of environmental justice being:

- State agencies will have a common understanding of environmental justice.
- State agencies will routinely consider environmental justice impacts of their programs when developing and implementing program plans, regulations, and policies.
- State agencies will work together, through an inter-agency environmental council and cross-agency workgroups, to develop and carry out targeted action plans to address environmental justice challenges and to leverage opportunities for improving conditions in environmental justice communities.
- State agencies will coordinate their activities to provide effective communication and collaboration with environmental justice communities.

In addition to these documents, the State of New Jersey published a document titled "Furthering the Promise: A Guidance Document for Advancing Environmental Justice Across State Government." This document is available via the web, or a digital copy can be obtained through contacting CFMO-EMB.

C. Responsibilities

CFMO

- Ensures compliance with environmental justice requirements associated with any project or program taking place in an overburdened community.
- Advises installations regarding projects or programs occurring in overburdened communities.

EQCC

- Advises installations on their specific environmental issues, priorities, policies, strategies, and programs in relation to environmental justice.

CFMO-EMB

- Completes an Initial Assessment in accordance with NJ EO 23.

CFMO-FMB

Armorer:

- Works with CFMO-EMB to prepare NEPA documentation and EJ analysis.

Maintenance Shop/Armory/Unit

- Works with CFMO-EMB to prepare NEPA documentation and EJ analysis.

The following branches are exempt from responsibilities regarding EJ.

- TAG
- CFMO-PPB
- CFMO-RPB

D. NJDMAVA Environmental Justice Initiatives

Council Participation

NJDMAVA is on the Environmental Justice Interagency Council (EJIC) and on the Environmental Justice Advisory Council.

New Jersey EO 23 Compliance Actions

In compliance with New Jersey EO 23, NJDMAVA is required to produce an initial environmental justice assessment. This initial assessment seeks to identify existing practices and procedures throughout the state government and shape the workshops, trainings, and collaborations that should take place in state. New Jersey EO 23 also requires the production of action plans from different agencies. These action plans will enable the Executive Branch to outline actions and set milestones to measurably improve conditions in communities of concern through their programs and activities. Upon completion of initial assessments and participating in trainings through the EJIC, all agencies will produce Executive Branch action plans. These action plans will guide the work each agency will do to implement environmental justice, setting milestones with measurable outcomes to reduce environmental and public health stressors, and increase environmental and public health benefits.

Environmental Justice and NEPA

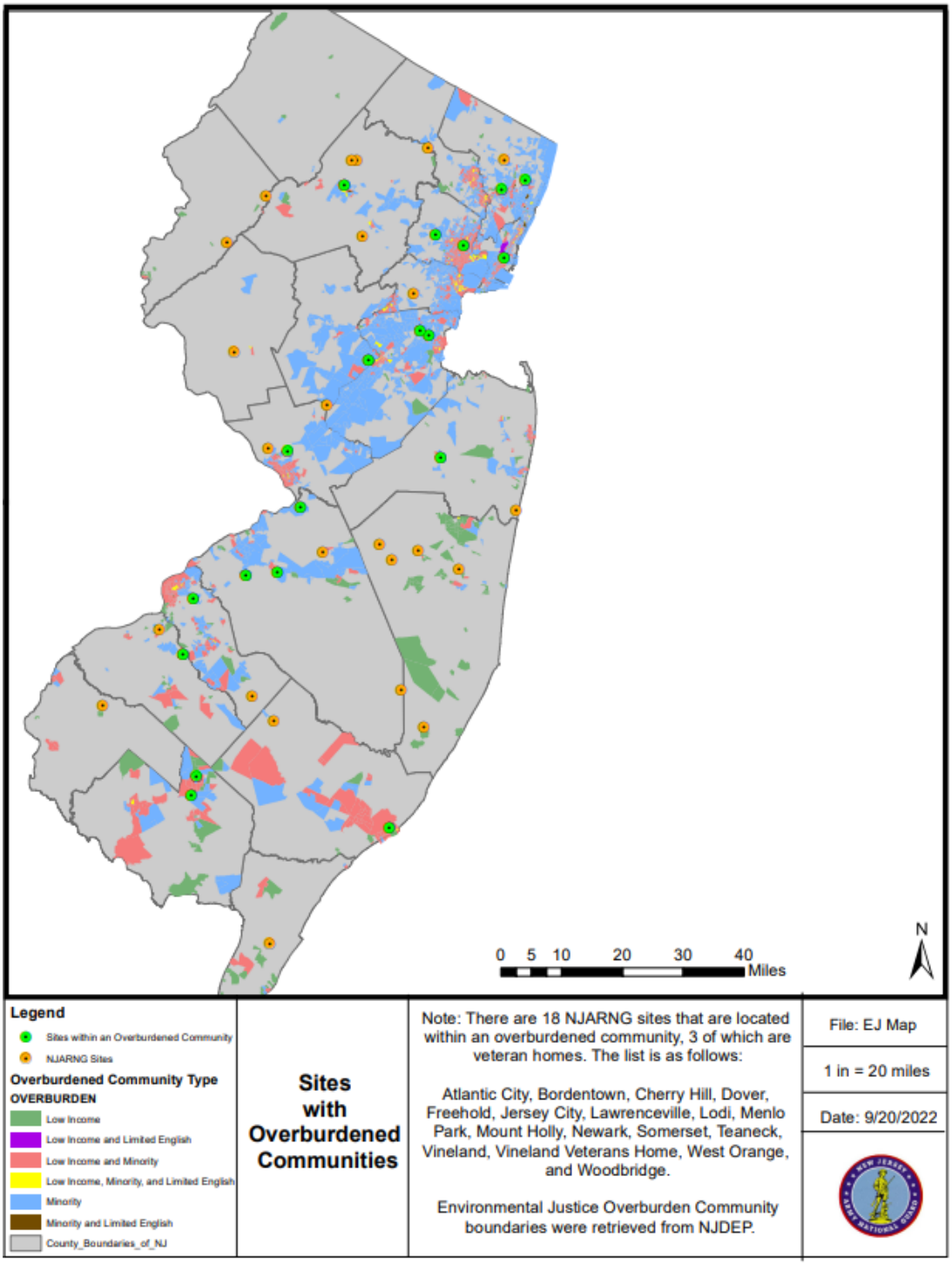
NEPA requires NJARNG decision makers to analyze the environmental effects of proposed programs, projects, and actions before initiating them. All actions must be reviewed to determine the potential for impacts to human and environmental health. The National Environmental Policy Act (NEPA) process will assist the decision maker in selecting a preferred course of action. It provides the relevant background information and subsequent analyses of the proposal's positive and negative environmental effects. As part of the NEPA documentation process, all projects and programs taking place at an installation located within an overburdened community require consultation with CFMO-EMB in the early planning stages to ensure compliance with related environmental justice requirements. CFMO-EMB will develop an impact analysis with proposed actions to help mitigate any findings if deemed necessary through initial assessment. The first iteration of this initial assessment is currently in progress as of September 2022, with an estimated completion year of 2023 as part of New Jersey EO 23.

Below is a list and map of installations that fall within overburdened communities.

Table 18-1 Installations Located in an Overburdened Community

Site Name	Overburdened Community Criteria
Atlantic City	Minority
Bordentown	Minority
Camden Armed Forces Reserve	Low Income
Cherry Hill	Minority
Dover	Minority
Elizabeth Storefront Recruiting	Low Income and Minority
Freehold	Minority
Jersey City	Low Income and Minority
Lawrenceville	Minority
Lodi	Low Income and Minority
Menlo Park	Minority
Mount Holly	Low Income and Minority
Newark	Low Income and Minority
Somerset	Low Income and Minority
Teaneck	Minority
Vineland Veterans Home	Low Income and Minority
Vineland	Low Income and Minority
West Orange	Minority
Woodbridge	Minority

Figure 18-1. A Map of Overburdened Communities and NJARNG Site Installation



E. Training

As of September 2022, there is no formal training regarding environmental justice. More information about training requirements can be seen in the Introduction chapter on pages I-4 through I-6.

F. Recordkeeping

Relevant information will be kept by CFMO-EMB for each site that is subject to environmental justice requirements. Information regarding environmental justice can be requested through CFMO-EMB. The distribution of such information can be through digital communications or through in person meetings

Appendix A
NJ Environmental Statutes, Regulations, & Guidelines and NJARNG Plans & SOPs

A. New Jersey State Environmental Statutes, Regulations, & Guidelines

This appendix lists New Jersey state environmental statutes, with the corresponding regulations listed under the applicable statute. This appendix also identifies related NJARNG plans and SOPs. Where available, hyperlinks lead to website resources.

Air Emissions/Permits

Air Pollution Control Act (1954), NJSA 26:2C-1 to -25.2

- **Air Pollution Control**, NJAC 7:27-1 to 34
- **Air Administrative Procedures and Penalties**, NJAC 7:27A
- **Sampling & Analytical Procedures**, NJAC 7:27B

Air Pollution Emergency Control Act (1967), NJSA 26:2C-26 to -36

- **Air Pollution Control**, NJAC 7:27-1 to 34
- **Subchapter 12 - Prevention & Control of Air Pollution Emergencies**

Radiation Protection Act, NJSA 26:2D-1 to -23.4

- **NJDEP Radiation Protection Element,** NJAC 7:28

Radiologic Technologist Act, NJSA 26:2D-25 to -36

- **Radiologic Technology**, NJAC 7:28-19

The Radiation Accident Response Act, NJSA 26:2D-37 to -58

- **Major Nuclear Facilities Subchapter 18.1 - Scope**, NJAC 7:28-18

Radon, NJSA 26:2D-59 to -80

- **Certification of Radon Testers and Mitigators**, NJAC 7:28-27

Asbestos Management

- **Industrial Site Recovery Act (ISRA) Rules**, NJAC 7:26B
- **Administrative Requirements for the Remediation of Contaminated Sites**, NJAC 7:26C
- **Technical Requirements for Site Remediation**, NJAC 7:26E

Cultural and Historical Resources Management

New Jersey Conservation Restriction and Historic Preservation Restriction Act, NJSA 13:8B- 1 to – 9

Conservation and Development – Parks and Recreation, NJSA 13:1B-15.100 to -15.158

- **State Park Service Code,** NJAC 7:2

New Jersey Historic Trust, NJSA 13:1B-15.111

- **Historic Preservation Grant Program,** NJAC 5:100
- **Historic Preservation Revolving Loan Program,** NJAC 5:102
- **Historic Preservation Bond Program,** NJAC 15:32

Hazardous Material Management

None

Hazardous Waste Management

Regional Low-Level Radioactive Waste Disposal Facility Siting Act, NJSA 13:1E-177

Waste Control Act, NJSA 13:1I-1

Industrial Site Recovery Act, NJSA 58:10B

- **Administrative Requirements for the Remediation of Contaminated Sites**, NJAC 7:26C
- **Technical Requirements for Site Remediation**, NJAC 7:26E
- **Hazardous Waste**, NJAC 7:26G
- **Industrial Site Recovery Act Rules**, NJAC 7:26B

Brownfield and Contaminated Site Remediation Act, NJSA 58:10B

Regulations Governing the Certification of Laboratories and Environmental Measurements, NJSA 7:18

Natural Resource Management

Soil Erosion and Sediment Control, NJSA 4:24-39 to -55

- State Soil Conservation Committee, NJAC 2:90
- Soil Erosion and Sediment Control Standards, NJAC 16:25A

Waterfront Development Act, NJSA 12:5 to -11

- **Coastal Zone Management Rules** NJAC 7:7E

Endangered Plant Species List Act, NJSA 13:1B-15.151 to -15.158

- Endangered Plant Species List, NJAC 7:5C-5.1

Open Lands Management Act, NJSA 13:1B-15.133 to -15.150

- Natural Areas and the Natural Area System Rules, NJAC 7:5A
- Green Acres Program, NJAC 7:36
- Public Open State, NJAC 7:7-9.38

Recognition of Department of Conservation and Economic Development NJSA 13:1D-1 to -19

- General Practice and Procedure, NJAC 7:1D

Construction Permits Law, NJSA 13:1D-29 to -34

- Ninety-Day Construction Permits, NJAC 7:1C

Environmental Aid Act, NJSA 13:1H-1

Aid for Urban Environmental Concerns Act, NJSA 13:1H-8 to –11

State Park and Forestry Resources Act, NJSA 13:1L-1 to -25

- State Park Service Code, NJAC 7:2
- Forestry NJAC 7:3
- Natural Areas and the Natural Area System Rules, NJAC 7:5A

National Environmental Policy Act (NEPA)

Environmental Assessment, NJ Executive Order No. 34

Noise Management

Noise Control Act of 1971, NJSA 13:1G-1 to -23

- Noise Control Regulations, NJAC 7:29

Pesticide Management

New Jersey Department of Agriculture, Pests and Diseases

Pesticide Control Act of 1971, NJSA 13:1F-1 to -18

- Pesticide Control Code, NJAC 7:30

POL Management and Spill Planning and Response

Oil and Gas Wells, NJSA 13:1M-1 to -18

New Jersey Spill Compensation and Control Act, NJSA 58:10-23.11 to 23.44

- Discharges of Petroleum & Other Hazardous Substances Rules, NJAC 7:1E
- Processing of Damage Claims Pursuant to the Spill Compensation and Control Act, NJAC 7:1J

Motor Vehicle and Traffic Regulation, NJSA 39:5B-25

- Transportation of Hazardous Materials, NJAC 16:49

Transportation of Hazardous Liquids, NJSA 58:10-46 to -50

Remediation

- Department Oversight of Remediation of Contaminated sites, NJAC 7:26C
- Technical Requirements for Site Remediation, NJAC 7:26E

Geographic Information Systems

None

Solid Waste Management (Recycling)

Processing of Damage Claims Pursuant to the Sanitary Landfill Facility Closure and Contingency Fund, NJAC 7:1I

Solid Waste Utility Control Act (NJSA 48:13A-1 to -7)

Solid Waste Management Act, NJSA 48:13E-1

- Solid Waste Regulations, NJAC 7:26A
- Solid Waste Utility Regulations**,** NJAC 7:26H

New Jersey Statewide Mandatory Source Separation and Recycling Act, (N.J.S.A. 13:1E-99.11 et. Seq)

New Jersey Executive Order No. 34, 1991

Storage Tank Management

Spill Compensation and Control Act, NJSA 58:10-23

Underground Storage of Hazardous Substances (UST) Act, NJSA 58:10A-21

- Underground Storage Tanks, NJAC 7:14B

Toxic Substances Management

Toxic Catastrophe Prevention Act, NJSA 13:1K-19 to -35

- Toxic Catastrophe Prevention Act Program, NJAC 7:31

Worker and Community Right to Know Act, NJSA 34:5A

- Worker and Community Right to Know Regulations, NJAC 7: 1G

Wastewater Management

Water Pollution Control Act, NJSA 58:10A-1

- Individual Subsurface Sewage Disposal Systems, NJAC 7:9A
- Stormwater Management, NJAC 7:8
- Surface Water Quality Standards, NJAC 7:9B
- New Jersey Pollutant Discharge Elimination System Rules, NJAC 7:14A
- Water Supply Allocation Permits, NJAC 7:19

- Ground Water Quality Standards, NJAC 7:9C
- Rules and Regulations Governing the Licensing of Water Supply and Wastewater Treatment Operators, NJAC 7:10A
- Sludge Quality Assurance**,** NJAC 7:14C
- Financial Assistance Programs for Environmental Infrastructure Facilities, NJAC 7:22
- Sewage Infrastructure Improvement Act Grants, NJAC 7:22A

Water Pollution Control Act, Supplement, NJSA 58:10A-15

New Jersey Soil Erosion and Sediment Control Act, NJSA 4:24-39

Ocean Sludge Dumping Elimination Act, NJSA 58:10A-44

Ocean Dumping Enforcement Act, NJSA 58:10A-47

Clean Ocean Education Act, NJSA 58:10A-52

Realty Improvement Sewerage and Facilities Act, NJSA 58:11-23

New Jersey Infrastructure Trust Act, NJSA 58:11B-1

- Financial Assistance Programs for Wastewater Treatment Facilities, NJAC 7:22-3.18
- Sewage Infrastructure Improvement Act Grants, NJAC 7:22A
- Environmental Assessment Requirements for State Assisted Environmental Infrastructure Facilities, NJAC 7:22-10

New Jersey Wastewater Treatment Privatization Act, NJSA 58:27-1

Water Quality Management

Coastal Area Facility Review Act, NJSA 13:19-1

- Coastal Zone Management Rules, NJAC 7:7

Freshwater Wetlands Protection Act, NJSA 13:9B-2

- Freshwater Wetlands Protection Act Rules, NJAC 7:7A

Water Supply Management Act, NJSA 58:1A-1

- Water Supply Loan Programs, NJAC 7:1A
- Water Supply Management Act Regulations, NJAC 7:19-6

New Jersey Water Supply Authority Act, NJSA 13:1B-3

- Water Pollution Control Act, NJAC 7:14
- Water Supply Allocation Permits, NJAC 7:19
- Agricultural, Aquacultural, and Horticultural Water Usage Certification, NJAC 7:20A
- Processing of Damage Claims Pursuant to the Sanitary Landfill Facility Closure and Contingency Fund, NJAC 7:1I

- New Jersey Water Supply Authority, NJAC 7:11
- Rules for the use of Water Supply Authority Property, NJAC 7:11-1.1

Waters and Water Supply – Payment in the Case of Diversion of Surface Water Supplies; exception, NJSA 58:2-1

- Procedures for determining, Assessing & Collecting Payment for Excess Water Diversion, NJAC 7:19

Reservoir, Dam Restrictions, NJSA 58:4-1

- Dam Safety Standards, NJAC 7:20
- Dam Restoration and Inland Waters Projects Loan Program, NJAC 7:24A

Subsurface and Percolating Waters Act, NJSA 58:4A-4.1 to -28

- Sealing of Abandoned Wells, NJAC 7:9-9.1
- Well Construction, Maintenance, and Sealing Rules, NJAC 7:9D

Waters and Water Supply, NJSA 58:10-24

- Surface Water Quality Standards, NJAC 7:9B
- Safe Drinking Water Act Rules, NJAC 7:10
- Flood Hazard Area Control Act Rules, NJAC 7:13
- Water Quality Management Rules, NJAC 7:15

The Realty Improvement Sewerage and Facilities Act, NJSA 58:11-23

Failure to Comply by Small Water, Sewer Companies, NJSA 58:11-59

- Small Water Company Takeover Act Regulations, NJAC 7:19-5

Water Supply and Wastewater Operators' Licensing Act, NJSA 58:11-64

- Rules and Regulations Governing the Licensing of Water Supply and Wastewater Treatment System Operators, NJAC 7:10A

Water Quality Planning Act, NJSA 58:11A-1

Interconnections Between Approved Public Potable Water Supplies and Unapproved Water Supplies, NJSA 58:11-9.1

Safe Drinking Water Act, NJSA 58:12A-1

- Water Supply Loan Programs, NJAC 7:1A
- Safe Drinking Water Act Rules, NJAC 7:10
- Water Supply Allocation Permits, NJAC 7:19

Flood Hazard Area Control Act, NJSA 58:16A-50

- Technical Requirements for Treatment Works Approval Applications, NJAC 7:23
- Flood Hazard Area Control, NJAC 7:13

New Jersey Water Supply Law, 1958, NJSA 58:22-1

Inspection of Beds and Shellfish, NJSA 58:24-1

- Shellfish Growing Water Classification, NJAC 7:12

New Jersey Water Supply Privatization Act, NJSA 58:26-1

Environmental Justice

- NJ EO 23, Environmental Justice at New Jersey State Agencies
- Furthering the Promise: A Guidance Document for Advancing Environmental Justice Across State Government, September 2020

B. NJARNG Plans and SOPs

Air Emissions/Permits

- NJARNG Ozone-Depleting Chemical Elimination Plan, December 2000
- Air Emissions Inventory and title IV Applicability, May 1996
- Air Emissions Inventory, 2006-2007
- Air Emissions Inventory, 2017
- Ozone Depleting Chemicals Survey, 2000
- Ozone Depleting Chemicals Survey, 2017
- National Radon Action Plan, 2021-2025

Asbestos Management

- NJARNG Asbestos Operation and Maintenance Plans, April 2003

Cultural and Historical Resources Management

- NJARNG Integrated Cultural Resources Management Plan, November 2002
- Historic Objects Inventory, May 1999
- Architectural inventory, April 1999

Natural Resource Management

- NJARNG Natural Resources Planning Level Survey Report, November 1999
- Sea Girt Integrated Natural Resources Management Plan 2006-2010
- 2004 Seabeach Amaranth Memorandum
- 2005 Invasive Plant Survey Report and Management Plan or 25 NJANRG Installations
- 2018 Rare Species Report
- 2019-2020 Emerald Ash Borer and Spotted Lanternfly Survey Results and Recommended Best Management Practices
- 2020-2021 Rare Species Report
- Sea Girt Integrated Natural Resources Management Plan 2018-2022
- 2007 Wetland Delineation Report
- 2016 Wetland Delineation Report

Noise Management

- NJARNG Environmental Noise Abatement Program SOP, 2000
- NJARNG Statewide Operational Noise Management Plan, 2007

Pesticide Management

- NJARNG Pest Management Plan, May 2000 (Revised 2003)
- Integrated Pest Management Plan for the NJARNG, 2019-2023

POL Management & Spill Planning and Response

- Facility-Specific Spill Prevention and Contingency Plans (SPCPs)
- NJDMAVA Department Directive No. 600.9 (Installation Spill Plan)

Solid Waste (Recycling) Management

- SOP for Recycling at all NJARNG Facilities, 2003
- NJDMAVA Final Recycling Plan, 2006

Remediation

Toxic Substances Management

Wastewater Management

- Stormwater Management Plan, May 2000

Water Quality Management

- NJDMAVA Water Fountain Inventory, 2019

Environmental Justice

None

Appendix B
Federal, DoD, and Army Regulations, Orders, & Guidance

A. Code of Federal Regulations (CFR)

Relevant CFR titles include:

- 15 CFR 923, Coastal Zone Management Act
- 24 CFR 58.35, Categorical Exclusions
- 29 CFR 1910, Occupational Safety and Health Standards
- 29 CFR 1910.120, Hazardous Waste Operations and Emergency Response
- 29 CFR 1910.95, Occupational Noise Exposure
- 29 CFR 1926.62, OSHA Lead in Construction Standard
- 32 CFR 650.164, Environmental Noise Abatement, 'Policies'
- 33 CFR 323, Permits for Discharges of Dredged or Fill Material into Waters of the United States
- 33 CFR 335, Operation and Maintenance of Army Corps of Engineers Civil Works Projects Involving the Discharge of Dredged or Fill Material into Waters of The U.S. or Ocean Waters
- 36 CFR 79, Curation of Federally Owned or Administered Archeological Collections
- 36 CFR 800, Protection of Historic Properties
- 40 CFR 50 through 87, U.S. Environmental Protection Agency Air Programs
- 40 CFR 82, Protection of Stratospheric Ozone
- 40 CFR 104-108, 110-117, 122-140, 230-233, 401-471, and 501-503, Clean Water Act
- 40 CFR 110, EPA Regulation on Discharge of Oil
- 40 CFR 112, Oil Pollution Prevention
- 40 CFR 116, Designation of Hazardous Substances
- 40 CFR 117, Determination of Reportable Quantities for Hazardous Substances.
- 40 CFR 122 through 124, National Pollutant Discharge Elimination System (NPDES)
- 40 CFR 129, Toxic Pollutant Effluent Standards
- 40 CFR 141, National Primary Drinking Water Regulations
- 40 CFR 143, National Secondary Drinking Water Regulations
- 40 CFR 195, Radon Proficiency Programs
- 40 CFR 201 through 211, Environmental Noise
- 40 CFR 220 through 229, Marine Protection, Research, and Sanctuaries Act
- 40 CFR 230 through 233, Wetland Permits
- 40 CFR 260 through 279, HW Treatment, Storage and Disposal
- 40 CFR 273, Standards for Universal Waste Management
- 40 CFR 280, Underground Storage Tanks
- 40 CFR 300, National Oil and Hazardous Substances Spill Contingency Plan
- 40 CFR 302, Designation, Reportable Quantities, and Notification (CERCLA)
- 40 CFR 350-372, Emergency Planning and Community Right-to-Know Act (EPCRA)
- 40 CFR 355, Emergency Planning and Notification
- 40 CFR 370, Hazardous Chemical Reporting: Community Right-to-Know
- 40 CFR 372, Toxic Chemical Release Reporting: Community Right-to-Know

- 40 CFR 373.3, Reporting Hazardous Substance Activity When Selling or Transferring Federal Real Property
- 40 CFR 401, Water Pollution Control Act
- 40 CFR 700, Toxic Substances Control Act Regulations
- 40 CFR 745, Lead-based paint poisoning prevention in certain residential structures
- 40 CFR 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions
- 40 CFR 1500-1508, Regulations Implementing the National Environmental Policy Act
- 42 CFR 137.288, National Historic Preservation Act
- 47 CFR 20.3, Commercial Mobile Services
- 48 CFR 970.3670, Department of Energy Management and Operating Contracts
- 50 CFR 402, Wildlife and Fisheries: Interagency Cooperation on Endangered Species

B. United State Code

- 5 USC 102, Military Departments
- 5 USC 105, Executive Agency
- 7 USC 136, Insecticides and Environmental Pesticide Control
- 33 USC 1251, Federal Water Pollution Control Act, commonly known as the Clean Water Act
- 33 USC 2701, Oil Pollution Act, 1990
- 42 USC 300g-8, The Public Health and Welfare- National Drinking Water Regulations
- 42 USC 4321, National Environmental Policy Act
- 42 USC 4901, Noise Control Act of 1972
- 42 USC 6901, Resource Conservation and Recovery Act
- 42 USC 6941–6949, Subtitle D, the Resource Conservation and Recovery Act (RCRA)
- 42 USC 9601, Comprehensive Environmental Response, and Liability Act (CERCLA)

C. Executive Orders

Relevant EOs include:

- EO 11988, Floodplains Management
- EO 11990, Protection of Wetlands
- EO 12088, Federal Compliance with Pollution Control Standards
- EO 12843, Procurement Requirements and Policies for Federal Agencies for Ozone Depleting Substances
- EO 12856, Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements
- EO 12873, Federal Acquisition, Recycling, and Waste Prevention
- EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
- EO 12906, Coordinating Geographic Data Acquisition and Access
- EO 13112, Invasive Species
- EO 13287, Preserve America

D. DoD Publications

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- DoD Instruction 4150.7, Pest Management Program, April 22, 1996
- DoD Policy to Implement the EPA's Military Munitions Rule, 1 July 1998
- DoD Directive 4715.1, Environment, Safety, and Occupational Health (ESOH)
- DoD 4715.13, DoD Operational Noise Program (2020)
- DoD Directive 5105.6, National Imagery and Mapping Agency

E. Army Publications

Army Regulations (Series 1-930)

- AR 40-5, 12 May 2020, Army Public Health Program
- AR 115-13, Installation Geospatial Information and Services
- AR 200-1, 13 December 2007, Environmental Protection and Enhancement
- AR 200-2, 23 March 1998, Environmental Analysis of Army Actions
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- AR 200-3, 28 February 1995, Natural Resources - Land, Forest, and Wildlife Management
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- AR 350-19, Army Sustainability Range Program
- AR 385-10, 24 February 2017, The Army Safety Program
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- AR 420-47, Draft, Solid and Hazardous Waste Management

Department of the Army Pamphlet (DA PAM) Series

- DA PAM 40-501, Hearing Conservation Program
- DA PAM 200-1, Environmental Protection and Enhancement
- DA PAM 200-4, Cultural Resources Management
- DA PAM 710-7, Hazardous Material Management Program

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- TB MED 575, Swimming Pools and Bathing Facilities
- TB MED 576, Sanitary Control and Surveillance of Water Supplies at Fixed Installations
- TB MED 577, Occupational and Environmental Health: Sanitary Control and Surveillance of Field Water Supplies
- TM 5-665, Operation and Maintenance of Domestic and Industrial Wastewater Systems
- TM 5-814, Domestic Wastewater Collection and Treatment
- TB 55-1900-206-14, Control and Abatement of Pollution by Army Watercraft
- TB 200-1-144, USACE Public Works, Appendix E, "Radon Control"

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- TG No.41, Personal Hearing Protection Devices
- TG No.175, Readiness thru Hearing Conservation: Guide for Unit Commanders and Supervisors
- TG No. 179, USAEC, Guidance for Providing Safe Drinking Water at Army Installations
- TG No.197, USAEHA, Developing an Integrated Solid Waste Management Plan, A Guide for Army Installations
- TG No.250, Readiness thru Conservation
- TG No.278, US Army Public Health Center 'Industrial Hygiene Public Health Mold Assessment Guide'

Technical Manuals (TMs)

- TM 5-660, Maintenance and Operation of Water Supply Treatment and Distribution Systems
- TM 5-662, Swimming Pools Operation and Maintenance
- TM 5-665, Operation and Maintenance of Domestic and Industrial Wastewater Systems
- TM 5-813, Water Supply: Source, Treatment, and Distribution Systems
- TM 5-814, Domestic Wastewater Collection and Treatment

United States Army Environmental Hygiene Agency (USAEHA) Documents

- USAEHA, Water Quality Paper No. 12, Preparation of SPCCPs
- AEHA, Information Paper No. 12, Preparation of Oil and Hazardous Substance Spills, 1990

Other Army Publications

- Policy and Guidance for Identifying, U.S. Army Environmental Program Requirements, and subsequent amendments, 15 June 1997, HQDA (DAIM-ED)
- Protocol for Conducting an Air Pollution Emission Inventory at the Department of the Army Activities, 19 May 1993, USACHPPM
- Strategic Guidance and Planning for Deleting Ozone Depleting Chemicals from U.S. Army Application, first revision, Oct 95, U.S. Army Acquisition Pollution Prevention Support Office
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- DA Memorandum "US Army Garrison Daegu Policy Letter #73 Noise Control
- Qualified Recycling Program, Defense Logistics Agency
- Mold and Indoor Air Quality, Defense Centers for Public Health- Aberdeen,
- Mold Remediation, Unified Facilities Guide, Section 02 85 00

F. NGB Regulations and Publications

- NGBR 385-15, Responsibilities and Procedures for Inspections and Evaluation of ARNG Indoor Firing Ranges
- NGBR 385-10, Army National Guard Safety and Occupational Health Program.
- NGB Policy, All States Log Number (I94-0061) Internal Compliance Assessment System (ICAS), 3 March 1994
- National Guard Bureau-Army Environmental (NGB-ARE) Army National Guard Mobile Fuel Tanker Policy, 8 September 2020
- NGB-ARE Memorandum, New Inventory of installations that Require an Integrated Natural Resources Management Plan Based on Army Criteria, 23 April 2002
- NGB-ARE Memorandum, Guidance for Environmental Documentation, 13 November 2002
- NGB NEPA Handbook, March 2002
- NG PAM 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges
- NGR 210-20 (Real Property Development Planning)
- NGB ECOP Handbook, June 2011

G. Other Publications

- Preventing Mold-Related Problems in the Indoor Workplace, OSHA
- Mold, United States Environmental Protection Agency, 2023
- Mold Advisory Bulletin, New Jersey Department of Health, 2001
- Mold, the United States Environmental Protection Agency, 2023
- ASTM D5746-98, Standard Classification of Environmental Condition of Property Area Types for Defense Base Closure and Realignment Facilities, 2016
- ASTM D6008-96, Standard Practice for Conducting Environmental Baseline Surveys, 2014
- ASTM E1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process
- ASTM E1528-14, Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process
- ASTM E1903-11, Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process
- E2247-16, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process for Forestland or Rural Property

Appendix C
Acronyms and Definitions

A. Acronyms

AAI – All Appropriate Inquiries

AASF – Army Aviation Support Facility

AC – Air Conditioning

ACHP – Advisory Council on Historic Preservation

ACM – Asbestos Containing Material

ACOM – Army Commands

ACSIM – Assistant Chief of Staff for Installation Management

ADNL – A-Weighted Day-Night Levels

AEHA – Army Environmental Hygiene Agency

AFFF – Aqueous Fill Forming Foam

AHERA – Asbestos Hazard Emergency Response Act

AMP – Asbestos Management Plan

AO – Army Operative

APM – Asbestos Program Manager

AR – Army Regulation

ARNG – Army National Guard

ASCC – Army Service Component Commands

AST – Aboveground Storage Tank

BPA - Bisphenol A

BTU – British Thermal Unit

CDD - Complete Discharge Device

CDNL – C-Weighted Day-Night Levels

CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act

CFC – Chlorofluorocarbons

CFL – Compact Fluorescent Lights

CFMO – Construction & Facilities Management Office

CFMO-CMB – Construction & Facilities Management Office- Construction Management Bureau

CFMO-EMB – Construction & Facilities Management Office- Environmental Management Bureau

CFMO-FMB – Construction & Facilities Management Office- Facilities Management Bureau

CFMO-PPB – Construction & Facilities Management Office- Planning and Programming Bureau

CFMO-RPB – Construction & Facilities Management Office- Real Properties Bureau

CFR – Code of Federal Regulations

CIP – Common Installation Picture

CLTF – Consolidated Logistics Training Facility

CofS – Chief of Staff

COR - Contracting Officer's Responsibility

CRM – Cultural Resource Manager

CSMS – Combined Support Maintenance Shop

CX – Categorial Exclusion

CWA – Clean Water Act

CZMA – Coastal Zone Management Act

DA – Department of the Army

DA PAM – Department of the Army Pamphlet

DASA – Department Assistance Secretary of the Army

DERP - Defense Environmental Restoration Program

DCR – Discharge Prevention Containment and Countermeasure

DENIX – Defense Environmental Network and Information Exchange

DMAVA – Department of Military and Veterans Affairs

DOD – Department of Defense

DOL – Department of Labor

DOT – Department of Transportation

DPCC – Discharge Prevention Containment and Countermeasure

DPMIAC – Defense Pest Management Information Analysis Center

DPTMS – Directorate of Plans, Training, Mobilization, and Security

DRMO – Defense Reutilization and Marketing Office

DRU – Direct Reporting Unit

EA – Environmental Assessment

EBS - Environmental Baseline Surveys

ECAS – Environmental Compliance Assessment System

ECOP – Environmental Condition of Property

EIS – Environmental Impact Statement

EJ – Environmental Justice

EJIC – Environmental Justice Interagency Council

EMB – Environmental Management Bureau

EMS – Environmental Management System

ENF – Enforcement Action

EPM - Environmental Program Manager

EPR – Environmental Program Requirements

EO – Executive Order

EOC – Emergency Operations Center

EPA – Environmental Protection Agency

EPCRA – Emergency Planning and Community Right to Know Act

EPR – Environmental Program Requirements

EQCC – Environmental Quality Control Committee

EQR – Environmental Quality Report

ESA – Endangered Species Act

ESOB – Environmental State Operating Budget

ESOH - Environment, Safety, and Occupational Health

FFCA – Federal Facility Compliance Act

FIFR – Former Indoor Firing Range

FMS – Field Maintenance Shop

FONSI – Finding of No Significant Impact

FOTW – Federally - Owned Treatment Works

FRP - Facility Response Plan

FTSS – Full Time Support Supervisor

GHS – Globally Harmonized System

GIS – Geographic Information System

GLAD - Geospatial Layer and Attribute Database

GP – General Permit

H2SO4 – Sulfuric Acid

HAZMAT – Hazardous Materials

HDPE – High-Density Polyethylene

HM – Hazardous Material

HMIRS – Hazardous Materials Information Resource System

HMMP – Hazardous Material Management Program

HN – Host Nation

HPO – Historic Preservation Office

HQDA – Headquarters Department of the Army

Hr - Hour

HVAC – Heating, Ventilation, and Air Conditioning

HW – Hazardous Waste

HWAA – Hazardous Waste Accumulation Area

IAW – In Accordance With

ICAS – Internal Compliance Assessment System

ICRMP – Integrated Cultural Resources Management Plan

IOSC – Installation On-Scene Coordinator

IMCOM – Installation Management Command

INRMP – Integrated Natural Resources Management Plan

IPM – Integrated Pest Management

IPMC - Integrated Pest Management Coordinator

IPMP – Integrated Pest Management Plan

IRP - Installation Restoration Program

IRT – Installation Response Team

ISCP - Integrated Spill Contingency Plan

ISO – International Organization for Standardization

ISR – Installation Status Report

ISRA – Industrial Site Recovery Act

JBMDL – Joint Base Maguire-Dix-Lakehurst

LCC – Life Cycle Cost

LDPE – Low-Density Polyethylene

LED – Light-emitting Diode

Li-SO2 – Lithium Sulfur Dioxide

LQG – Large Quantity Generator

LUPZ – Land Use Planning Zone

MEC - Munitions of Explosive Concerns

MFT – Mobile Fuel Tanker

MILCON – Military Construction

MMBTU – Million British Thermal Unit

MS4 – Municipal Separate Stormwater Sewer System

MQCSS – Material Quality Control Storage Standard

MWR – Morale Welfare and Recreation

MVAC – Motor Vehicle Air Conditioner

NAGPRA – Native American Graves Protection and Reparation Act

NEPA – National Environmental Policy Act

NFPA – National Fire Protection Association

NGB – National Guard Bureau

NGB-JA – National Guard Bureau Judge Advocate

NGBR – National Guard Bureau Regulation

NGTC – National Guard Training Center

NHPA – National Historic Preservation Act

NIBS – National Institute of Building Sciences

NJ – New Jersey

NJAC – New Jersey Administrative Code

NJARNG – New Jersey Army National Guard

NJARNG-AASF – New Jersey Army National Guard- Army Aviation Support Facility

NJARNG-SMO – New Jersey Army National Guard- Surface Maintenance Office

NCO – Non-Commission Officer

NJDEP – New Jersey Department of Environmental Protection

NJDEP BL&R – New Jersey Department of Environmental Protection, Bureau of Licensing and Registrations

NJDEP-ENSP – New Jersey Department of Environmental Protection Endangered and Nongame Species Program

NJDOA – New Jersey Department of Agriculture

NJDMAVA – New Jersey Department of Military and Veterans Affairs

NJOIT – New Jersey Office of Information and Technology

NJPDES – New Jersey Pollutant Discharge Elimination System

NJR – New Jersey Register

NJSDWA – New Jersey Safe Drinking Water Act

NPA – Northern Protection Area

NPDES – National Pollutant Discharge Elimination System

NOI – Notice of Intent

NOV – Notice of Violation

NRC – National Response Center

NRHP – National Register of Historic Places

NRM – Natural Resources Manager

NSN – National Stock Number

O&M – Operations and Maintenance

OACSIM - Office of the Assistant Chief of Staff for Installation Management

ODC – Ozone - Depleting Chemical

ODCEP – Ozone - Depleting Chemical Elimination Plan

OMS – Organizational Maintenance Shop

OPA – Oil Pollution Act

OSHA – Occupational Safety and Health Administration

OSPCP – Oil Spill Prevention and Contingency Plan

OWS – Oil/Water Separator

PACM – Potential Asbestos Containing Material

Pam – Pamphlet

PAO – Public Affairs Office

PCA – Property Condition Assessment

PCB – Polychlorinated Biphenyl

PE – Professional Engineer

PEOSHA – Public Employee's Occupation Safety and Health Administration

PET – Polyethylene Terephthalate

Pi/Cu – Pico Currie

PL – Public Law

PLS – Planning Level Survey

PMC – Pest Management Consultant

PMP – Pest Management Provider

PMQAE – Pest Management Quality Assurance Evaluator

POC – Point of Contact

POL – Petroleum, Oil, and Lubricants

POTW – Publicly - Owned Treatment Works

PP – Polypropylene

PPE – Personal Protective Equipment

PPM – Parts Per Million

PRIDE - Planning Resource for Infrastructure Development

PS – Polystyrene

PSS – Preconstruction Site Selection

PTE – Potential to Emit

PVC – Polyvinyl Chloride

QAE – Quality Assurance Evaluator

QRP – Qualified Recycling Program

QSL – Quality Status Listing

RCO – Range Control Officer

RCRA – Resource Conservation and Recovery Act

REC – Record of Environmental Consideration

ROA – Report of Availability

ROC – Response Operations Center

ROD – Record of Decision

RPDP – Real property Development Plan

RPI – Real Property Inventory

RPOM – Real Property Operation and Maintenance

RQ – Reportable Quantity

SAAO – State Army Aviation Office

SAAO-OH – Occupational Health Office

SAAO-SM – Safety Management Office

SAP – Satellite Accumulation Point

SCP – Spill Contingency Plan

SDS –Safety Data Sheet

SDSFIE - Spatial Data Standards for Facilities, Infrastructure, and Environment

SDWA – Safe Drinking Water Act

SESCA – Soil Erosion and Sediment Control Act

SHPO – State Historic Preservation Offices

SFO – Senior Fire Official

SONMP – Statewide Operational Noise Management Plan

SOP – Standard Operating Procedure

SPA – Southern Protection Area

SPCC – Spill Prevention Control and Countermeasure

SPCCP – Spill Prevention, Control and Countermeasures Plan

SPCP – Spill Prevention and Contingency Plan

SPUL - State Pesticide Use List

STEP – Status Tool for the Environmental Program

SQG – Small Quantity Generator

SWDA – Solid Waste Disposal Act

SWPPP – Stormwater Pollution Prevention Plan

TAG – The Adjutant General

TAG-JA – Legal Advisor to the Adjutant General

TCLP – Toxic Characteristic Leaching Procedure

TPQ – Threshold Planning Quantity

TSDF – Treatment, Storage and Disposal Facility

TSI – Thermal System Insulation

TWA – Treatment Works Approval

UECO – Unit Environmental Compliance Officer

US – United States

USAEC – United States Army Environmental Center

USAPHC – United States Army Public Health Command

USC – United States Code

USEPA – United States Environmental Protection Agency

USFWS – United States Fish and Wildlife Service

USP&FO – United States Property & Fiscal Officer

UST – Underground Storage Tank

UTES – Unit Training and Equipment Site

UW – Universal Waste

UXO – Unexploded Ordinances

VCR – Videocassette Recorder

VSQG – Very Small Quantity Generator

WASTE - Web Application System for Turn-in Execution

B. Definitions

Acquisition – Obtain, use, or control real property by purchase, condemnation, donation, exchange, easement, license, lease, permit, reinvestment, and recapture as defined in chapter 1-4, Estates and Methods of Acquisition (AR 405-10); or, a directed, funded effort that is designated to provide a new or improved material capability in response to a validated need (DODI 5000.2).

Activity – A unit, organization, or installation that performs a function or mission; or a group on an installation or facility assigned space for a common usage or function and held operationally accountable by an authority other than the installation commander (e.g., airfields, hospitals, arsenals, commissaries).

Air Pollutants – Includes carbon monoxide, sulfur oxides, hydrocarbons, particulate matter, nitrogen oxides, and photochemical oxidants associated in the formation of air pollution and chronic or acute health effects.

Applicable Water Quality Standards – The water quality standards:

a. Promulgated by EPA per the CWA.

b. Adopted by a state and approved by EPA per section 303 of the CWA.

Army Proponent – The lowest-level decision-maker (for example, the Army unit, element, or organization responsible for initiating or carrying out the proposed action).

Aboveground storage tank – The entire outer surface area of the tank, including the bottom, is easily visible. The tank may be located within a vault as long as the vault is not backfilled and can be entered for tank external inspections.

CERCLA Substance – A substance published on the list in 40 CFR 302.4.

Disposal – The discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into any land or water. The act is such that the solid waste or hazardous waste, or any constituent thereof, may enter the environment or be emitted into the air or discharged into any waters, including ground water (40 CFR 260.10).

Disposal (Real Property) – Any authorized method of permanently divesting DA of control of and responsibility for real property. This also includes sales as defined below. (Note that this definition varies according to the Army regulation consulted.)

Emission standards – Limits on the quality of emissions that may be discharged to the atmosphere from any regulated source, established by federal, state, local, and host nation authorities.

Endangered species – Any species in danger of extinction throughout all or a significant portion of its range.

Enforcement Action – Any written notice of a violation of any environmental law from a regulatory official having legal enforcement authority. Examples include, but are not limited to: Warning Letters, Notice of Noncompliance (NON), Notice of Violation (NOV), Notice of Significant Noncompliance (NOSN), Compliance Order (CO), Administrative Order (AO), Compliance Notice Order (CNO), and Finding of Violation (FOV).

Environment –The complex of physical, chemical, and biotic factors (such as climate, soil, and living things) that act upon an organism or an ecological community and ultimately determine its form and survival. Includes the following:

a. Navigable waters
b. Near-shore and open waters and any other surface water
c. Groundwater
d. Drinking water supply
e. Land surface or subsurface area
f. Ambient air
g. Vegetation
h. Wildlife

Environmental audit – An environmental compliance review of facility operations, practices, and records to assess and verify compliance with Federal, state, and local environmental

regulations. These reviews are not audits as defined in DOD Directive 7600.2. The USEPA defines environmental auditing as a systemic, documented, periodic, and objective review by regulated entities (Army installations) of facility operations and practices related to meeting environmental requirements.

Environmental awareness – Environmental knowledge or understanding of the importance of performing normal job skills in accordance with appropriate environmental requirements, and of consulting with environmental staff and Army or local compliance publications to determine specific procedures. Environmental Awareness Training is environmental knowledge provided by written information or presentations. It is often provided outside a normal classroom setting. It has limited applicability to teaching competence in specific environmental job skills. It is intended to promote an environmental stewardship ethic; create an understanding of how non-environmental missions and functions can affect the environment; and encourage consultation with environmental staff and Army or local compliance publications to determine specific procedures.

Environmental noise – The outdoor noise environment consisting of the noise, including ambient noise, from all sources that extends beyond the work place. The noise environment of the work place is not considered environmental noise.

Environmental pollution – The condition resulting from the presence of chemical, mineral, radioactive, or biological substances that:

a. Alter the natural environment.
b. Adversely affect human health or the quality of life, biosystems, the environment, structures and equipment, recreational opportunities, aesthetics, and/or natural beauty.

Environmental Training – Instruction with the primary purpose of providing measurable competence for doing specific environmental jobs or tasks. This is commonly taught in a classroom, by such methods as lecture, discussion, or practical exercise. However, other methods may also be used. Environmental training includes both separate environmental courses and environmental content in non-environmental courses. It also includes both training mandated by Federal or state regulation, and training not mandated by law or regulation, but which is intended to prepare the trainee to meet the requirements of all applicable mandatory regulations.

Extremely Hazardous Substance – The term “extremely hazardous substance” indicates a substance published on a list in 40 CFR 355, Emergency Planning and Notification. This list contains over 360 substances, including chemicals in pure form and mixtures. Placing a substance on this list reflects concern for the substance's toxicity, reactivity, volatility, dispersability, combustibility, and/or flammability.

Facility – Facilities include buildings, structures, public works, equipment aircraft, vessels, and other vehicles and property under control of, or constructed or manufactured for leasing to, the Army. Any buildings or collection of buildings, grounds, or structure, as well as any fixture or part thereof, which is owned or held under a lease-acquisition agreement by the

United States or any Federal agency. Also includes any building leased in whole or in part for use by the Federal Government where the term of the lease exceeds five years and the lease does not prohibit implementation of the provision in question.

Federal – The U.S. government; this does not include a host nation government where the term "federal" is also applicable**.**

Federal Action/Undertaking – A project, activity, or program funded in whole, or in part, under direct or indirect jurisdiction of a federal agency, including: A) those carried out by or in behalf of an agency; B) those carried out by federal financial assistance; C) those regulated by a federal permit, license, or approval; and D) those subject to state or local regulations administered pursuant to delegation or approval by a federal agency.

Federal agency – An Executive Agency as defined in 5 USC 105, Executive Agency; for military departments, as defined in 5 USC 102, Military Departments.

Groundwater – The supply of water found beneath the Earth's surface, usually in aquifers, which supply wells and springs.

Hazardous Chemical – As defined in 40 CFR 355 and 40 CFR 370, which implement EPCRA. These sections define a hazardous chemical the same as 29 CFR 1910.1200 (c), OSHA Regulation on Hazardous Communications, Worker's Right to Know, except that they do not include the following substances:

a. Any food, food additive, color additive, drug, or cosmetic regulated by the Food and Drug Administration.
b. Any substance present as a solid in any manufactured item to the extent exposure to the substance does not occur under normal conditions of use.
c. Any substance to the extent it is used for personal, family, or household purposes, or is present in the same form and concentration as a product packaged for distribution and used by the general public.
d. Any substance to the extent it is used in a research facility under the laboratory or a hospital or other medical facility under the direct supervision of a technically qualified individual.
e. Any substance to the extent it is used in routine agricultural operations or is a fertilizer held for sale by a retailer to the ultimate customer.

Hazardous Material – A material as defined by Federal Standard, Material Safety Data, Transportation Data and Disposal Data for Hazardous Materials Furnished to Government Activities (FED-STD-313C, 3 April 96) (the General Services Administration has authorized the use of this federal standard by all federal agencies).

a. Any item or chemical that is a "health hazard" or "physical hazard" as defined by OSHA in 29 CFR 1910.1200, which includes the following:
    (1) Chemicals that are carcinogens, toxic, or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, nephrotoxins, neurotoxins, agents which act on

the hematopoietic system, and agents which damage the lungs, skin, eyes, or mucus membranes.
(2) Chemicals that are combustible liquids, compressed gases, explosives, flammable liquids, flammable solids, organic peroxides, oxidizers, pyrophorics, unstable (reactive) or water-reactive.
(3) Chemicals that in the course of normal handling, use, or storage operations may produce or release dusts, gases, fumes, vapors, mists or smoke which have any of the above characteristics.

b. Any item or chemical that is reportable or potentially reportable or notifiable as inventory under the requirements of the Hazardous Chemical Reporting (40 CFR Part 370), or as an environmental release under the reporting requirements of the Toxic Chemical Release Reporting: Community Right To Know (40 CFR Part 372), which includes:
(1) Chemicals with special characteristics which, in the opinion of the manufacturer, can cause harm to people, plants, or animals when released by spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other receptacles).

c. Any item or chemical that, when being transported or moved, is a risk to public safety or an environmental hazard and is regulated as such by one or more of the following:
(1) Department of Transportation Hazardous Materials Regulations (49 CFR 100-180).
(2) International Maritime Dangerous Goods Code of the International Maritime Organization.
(3) Dangerous Goods Regulations of the International Air Transport Association.
(4) Technical Instructions of the International Civil Aviation Organization.
(5) U.S. Air Force Joint Manual, Preparing Hazardous Materials for Military Air Shipments (AFJMAN 24-204).

Hazardous Substance – A substance as defined by section 101(14) of CERCLA:

a. For the purposes of this regulation, a hazardous substance is any of the following:
(1) Any substance designated pursuant to section 311(b)(2)(A) of the CWA.
(2) Any element, compound, mixture, solution, or substance designated pursuant to section 102 of the CAA.
(3) Any hazardous waste having the characteristics identified under the RCRA.
(4) Any toxic pollutant listed under TSCA.
(5) Any hazardous air pollutant listed under section 112 of the CAA.
(6) Any imminently hazardous chemical substance or mixture with respect to which the EPA Administer has taken action pursuant to subsection 7 of TSCA.

b. The term does not include:
(1) Petroleum, including crude oil or any fraction thereof, which is not otherwise specifically listed or designated as a hazardous substance in (a) above.
(2) Natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures or natural gas and such synthetic gas usable for fuel (or mixtures or natural gas and such synthetic gas).

c. A list of hazardous substances is found in 40 CFR 302.4, Designation of Hazardous Substances.
   (1) Anything that due to its chemical, physical, or biological nature causes safety, public health, or environmental concerns.
   (2) Any material that:
      (a) Is regulated as a hazardous material per 49 CFR 173.2, shippers - General Requirements for Shipment and Packaging.
      (b) Requires an MSDS per 29 CFR 1910.1200, OSHA Hazard Communications Standards.
      (c) Which during end use, treatment, handling, packaging, storage, transportation, or disposal, meets or has components which meet or have the potential to meet, the definition of hazardous waste as defined by 40 CFR 261, Identification and Listing of Hazardous Waste, subparts A, B, C, or D.
   (3) In general, any material, which because or its quality, concentration, or physical chemical, or infectious characteristics, may pose a substantial hazard to human health or the environment.

Hazardous Waste – A solid waste identified in 40 CFR section 261.13, Identification and Listing of Hazardous Wastes, or applicable foreign law, rule, or regulation (see also solid waste).

Hazardous Waste Disposal – As defined in 40 CFR section 260.10, Hazardous Waste Management Systems, disposal means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.

Hazardous Waste Generator – The hazardous waste generator is defined in 40 CFR section 260.1 as "...any person, by site whose act or process produces hazardous waste identified or listed in part 261... or whose act first causes a hazardous waste to become subject to regulation." For reporting purposes in the Army, the IC is considered the generator.

Hazardous Waste Storage – As defined in 40 CFR section 260.10,"...the holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere."

Hazardous Waste Treatment – As defined in 40 CFR section 260.1," any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste non-hazardous or less hazardous; safer to transport, store, or dispose of; or amenable for recovery, amenable for storage, or reduced in volume."

Installation Response Team – A group of persons on an installation designated to act in an emergency as directed by the OSC.

Integrated Pest Management – The management of actual and potential pest problems using a combination of available preventive and corrective control measures. The biological effectiveness, environmental acceptability, and cost effectiveness of the measures must be considered before such measures can be approved for use on Army-controlled property.

Mobile source – Any non-stationary source of air pollution such as cars, trucks, motorcycles, busses, airplanes, or locomotives.

Monitoring – The assessment of emissions or discharges from various sources. Monitoring guidelines are often outlined and required in facility permits.

National Environmental Policy Act – A United States statute that requires all federal agencies, or authorized representatives, to consider the potential effects of proposed actions on the human and natural environment.

National Response Team – A team of representatives from the primary and advisory agencies that serves as the national policy-making body for planning and preparedness actions to prevent and minimize accidental pollution discharges.

Oil – Oil or petroleum products of any kind or in any form, and oil mixed with wastes other than dredged spoil.

Outgrant – A legal document that conveys or gives the right to use Army-controlled real property, including, for the purposes of this regulation only, leases and, when appropriate, easements.

Permit, Environmental – Authorization from an environmental regulatory agency to operate a facility, discharge, or emit pollutants to an authorized standard, or perform an activity with environmental effects.

Pollution/Pollutant – The terms "pollution" and "pollutant" refer to all nonproduct outputs, irrespective of any recycling or treatment that may prevent or mitigate releases to the environment.

Potential to Emit – The maximum capacity of a stationary source to emit pollutants under its physical and operational design.

Process Waste – Waste generated from a specific process (e.g., parts cleaning). P2 alternatives include modifying the "process" to avoid or minimize the quantity of "process waste" generated.

Procurement – The acquiring by contract with appropriated funds for supplies or services by and for the use of the Federal Government through purchase or lease, whether the supplies or services are already in existence or must be created, developed, demonstrated and evaluated.

Proponent – The person responsible for planning an action.

Public Water System – A Public Water System (PWS) is a system that supplies piped water for human consumption, through pipes or constructed conveyances. A system is not considered a PWS (and therefore is not regulated by the Safe Drinking Water Act) if it meets all of the following requirements:

a. Receives its water from another regulated PWS.
b. Does not provide any additional treatment to the water.
c. Does not sell any of the water it receives.
d. Does not supply the water to commercial carriers conveying passengers in interstate commerce.

Resource Conservation and Recovery Act – A Federal law (42 USC 6901 et seq.) that established requirements for the management of hazardous waste. RCRA established specific requirements for hazardous waste generators, transporters, and owners/operators of hazardous waste treatment, storage, and disposal facilities (see 40 CFR Parts 260-271).

Real property – This includes the definition for real property found in the Federal Property Management Regulations, 41 CFR 101-47.103.12.

Reclamation – Regeneration of a material, or processing of a material to recover a usable product. Examples include recovery of lead from spent batteries, or the regeneration of spent solvents.

Recycling – The series of activities, including separation, and processing, by which products or other materials are reclaimed, recovered and reused either on or off site.

Release – A discharge of one or more hazardous substances into the environment by any means. Excluded are:

a. Minor releases within the workplace.
b. Emissions from engine exhaust.
c. Normal applications of fertilizer.

Reportable Spill or Event – A release of a reportable quantity of oil or hazardous substance into the environment.

a. For oil (defined by 40 CFR 110, Discharge of Oil): A discharge of such quantities of oil into or upon the navigable waters of the United States, its adjoining shorelines, or the contiguous zone so as to meet the qualifications listed in harmful discharge (of oil) into navigable waters or into or beyond the contiguous zone above.
b. For hazardous substances: Any release of one or more reportable substances in reportable quantities into the environment, requiring that:
    (1) The EPA National Response Center to be notified immediately.
    (2) All other reporting as required by the ISCP and SPCCP.

Reportable Quantity – Quantity of environmental pollutant above which a report must be rendered to environmental authorities such as the EPA, state or local regulators.

Secondary Containment – Refers to secondary containment designed to contain all leaks and spills from tanks and their associated underground equipment (tank piping). Secondary containment must be designed to prevent the escape of leaks and spills into the surrounding soil, groundwater and/or surface water. Common options are: dike areas constructed of concrete with a pad (floor); double wall tanks and piping; liners that completely cover the bottom and side walls of a tank excavation or dike area; and vaults which are rigid structures (i.e., concrete) located within the ground and which serve to completely isolate the tank system from the surrounding soil. All forms of secondary containment must be installed 100 percent around the tank and associated underground equipment; must be designed to contain at least 110 percent of the capacity of the largest tank within its boundary plus be designed or operated to prevent run-on or infiltration of precipitation from a 25-year, 24 hour rainfall; and must be impervious to the material being stored. Impervious being confined as chemically compatible with the material being stored and capable of forming a barrier through which the material cannot penetrate to enter the surrounding area.

Solid Waste – Materials that are discarded by being abandoned or by being recycled, or are inherently waste-like (refer to the definition of "abandon" in this section). Recycled means to use, reuse, or reclaim certain types of materials in certain limited cases as described in table 1 of 40 CFR 261.2, Identification and Listing of Hazardous Waste. Since explosive ordnance is not a type of material listed in table 1, its recycling normally does not make it a solid waste under RCRA. Unused explosive ordnance normally is not inherently waste-like.

Spill – A generic term, as used in this regulation, which encompasses the accidental and the deliberate but unpermitted, discharge or release of a pollutant. For distinction, see discharge classifications, harmful discharge (etc.), potential discharge, release, and reportable spill or event. For comparison, see discharge and federally permitted release.

Stationary Source – Any building, structure, facility, or installation which emits or may emit an air pollutant for which a national standard is in effect.

Storage – The holding of hazardous substances (as defined in this section), other than for a temporary period of less than 30 days, prior to the hazardous substance being either used, neutralized, disposed of, or stored elsewhere.

Threatened Species – Any species likely to become endangered within the foreseeable future, throughout all or a significant portion of its range.

Toxic Chemical – The term "toxic chemical" is a substance published on the list in 40 CFR 372.65, Toxic Chemical Release Reporting. About 650 chemicals and chemical categories, both in pure and mixture form, are currently listed.

Toxic Pollutant – Those pollutants or combinations of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation or assimilation into any organism - either directly from the environment or indirectly by ingestion through food chains - will cause death; disease; behavioral abnormalities; cancer; generic mutations physiological malfunctions, including malfunctions in reproduction; or physical deformations in such organisms or their offspring.

Transfer, Real Property – Change in jurisdiction over real property from one federal agency or department to another, including military departments and defense agencies, to include permits for the purposes of this regulation only. Refer to AR 405-90, Disposal of Real Estate, for the full definition.

Treat – Conducting a methodology, technique, or process designed to change the physical, chemical, or biological character or composition of a material to recover energy, render material less or non-hazardous, or reduce material volume (see "Treatment" under 40 CFR 260.10).

Underground Injection – The subsurface emplacement of fluids through:

a. A bored, drilled, or driven well.
b. A dug well where the depth of the dug well is greater than the largest surface dimension.

Underground Storage Tank – Any one or combination of tanks (including underground pipes connected thereto) which is used to contain an accumulation of regulated substances, and the volume of which (including the volume of the underground pipes connected thereto) is ten percent or more beneath the surface of the ground (Army policy does not exclude heating oil tanks as given under Subtitle I of RCRA.).

Waste Minimization –

a. Any source reduction or recycling activity that is undertaken by a generator that results in:
   (1) The reduction of the quantity of hazardous waste.
   (2) The reduction in toxicity of hazardous waste that is either generated or subsequently treated, stored, or disposed of. Such activities must be consistent with the goals of minimizing present and future threats to human health and the environment.
b. A working definition of waste minimization reflects two types of activities, source reduction or elimination of waste at the point of generation (for example, within a process). Recycling refers to:
   (1) The use or reuse of a waste stream byproduct as an effective substitute for a commercial product or as an ingredient or feed-stock in a process.
   (2) The reclamation of a waste material which involves recovery of whatever constituent fractions can be reused.

Wetland – Land characterized by the presence of water at a frequency and duration sufficient to support, and that under normal circumstances does support, wetland vegetation or aquatic life and commonly referred to as a bog, swamp, or marsh.

Appendix D

New Jersey Department of Military and Veterans Affairs Installation Fact Sheets

New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Atlantic City Armory/ 34A05	1008 Absecon Blvd.	Atlantic City	08401-1999
PI Number	**Type of Facility**	**County**	**Block/Lot Number**
493520, 521786, 70327, NJ921009002, NJD980790729	Readiness Center	Atlantic	RP-6/1
USGS Quad	**Elevation (range)**	**Total Acreage**	**Wetlands Acreage**
Atlantic City	<5 feet	4.00	0
Watershed	**NJDEP Planning District**	**National Register of Historic Places eligible?**	**Ongoing Site Remediation?**
Absecon Bay	CAFRA and Flood Zone	Yes	No
Spill Plan?	**Regulated UST?**	**Air Permit?**	**Land Owner**
No	No	New Permit Boiler Replacement	State
POC Information:	Eric Wilson (Armorer) (609)-722-0300		

Nearest Noise Sensitive Receptors and Surface Waters

Receptors:	Distance (ft):	Direction:
Residences	80	West
Dr. Martin Luther King Jr. School Complex	475	West
Penrose Canal	1,800	West
Clam Creek	2,800	East

Rare Species in Vicinity

No Natural Heritage database search conducted for this installation.

Site Description

The Atlantic City Armory was built in 1929 for the 112th Field Artillery and the 157th ambulance company. This Urban site is surrounded by residential, commercial, and industrial land use. It is essentially flat, with runoff collecting in storm drains and a few low spots. Majority of property paved or mowed, and landscaped with a few trees, such as red cedar (*Juniperus virginiana*), sycamore (*Platanus occidentalis*), and ornamental shrubs.

Archeological Resources

Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
No	4	0	N/A

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
00001	Armory	1929	Eligible
00002	MVSB	1956	Not Eligible
00003	Flam Storage	1957	Not Eligible
00004	Org Storage	2001	Less than 50 years old
Historic District: The installation does not contain a historic district nor is it included within a local historic district.			
Historic Landscape: The installation does not contain a historic landscape.			

Investigation Records		
Investigation Type	**Authors**	**Title**
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Building Survey (2005)	John Milner Associates	Architectural Inventory of NJARNG Armories Supplementary Report
Archaeological Survey (2021)	Hunter Research	Archaeological Investigations for the NJARNG Atlantic City, Bordentown, Dover, Flemington, Freehold, Hackettstown, Jersey City, Princeton, Trenton Mercer, and Woodbury Facilities

Monuments, Objects, or Displays

A total of 132 objects were catalogued at the Atlantic City Armory (USACE 1999). No exterior plaques, markers, memorials, or static displays are present currently.

Agreement Documents

There are currently no agreement documents (MOAs) in place for this installation.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? No

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? No

New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Bordentown Armory/ 34A10	1048 Route 206 South	Bordentown	08505-2124
PI Number	**Type of Facility**	**County**	**Block/Lot Number**
0304-12-00021, 45611, NJD98079073	Readiness Center	Mercer	128/18
USGS Quad	**Elevation (range)**	**Total Acreage**	**Wetlands Acreage**
Trenton East	35-50 feet	15	0.03
Watershed	**NJDEP Planning District**	**National Register of Historic Places eligible?**	**Ongoing Site Remediation?**
Crosswicks-Neshaminy	None	No	No
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner**
No	No	None	State
POC Information:	Thomas Carroll (Armorer) (609)-722-0292		

Nearest Noise Sensitive Receptors and Surface Waters

Receptors:	Distance (ft):	Direction:
Sucker Run	200	Southeast
Blacks Creek	425	Southwest
Residences	800	North
Bordentown High School	2,200	Southwest

Rare Species in Vicinity

Northern Long-Eared Bat (*Myotis septentrionalis)*

Site Description

Most of the installation is paved or occupied by buildings. Highway 206 forms the eastern boundary, which is landscaped by large pin oaks (*Quercus palustris*) and several ornamental species. The western portion of the property contains the largest area of vegetation and is dominated by black locust (*Robinia pseudoacacia*), cherry (*Prunus sp.*), ash (*Fraxinus sp.*), wild grape (*Vitis sp.*), and poison ivy (*Toxicodendron radicans*). Species such as multiflora rose (*Rosa multiflora*), blackberry (*Rubus sp.*), and Japanese honeysuckle (*Lonicera japonica*) are dominant understory plants in some patches along the western boundary.

Archeological Resources

Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
No	15	0	N/A

Historic Buildings and Structures

Building	Building Type	Date Constructed	Evaluation Status
00001	Armory	1956	Not Eligible
00002	FMS (UMTB)	1949	Not Eligible
00003	Org Storage	2001	Less than 50 years old

Historic District: The installation does not contain a historic district nor is it included within a local historic district.

Historic Landscape: The installation does not contain a historic landscape.

Investigation Records

Investigation Type	Authors	Title
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Architectural Survey (2015)	HDR	Architectural Survey and Evaluation of Selected Facilities
Archaeological Survey (2021)	Hunter Research	Archaeological Investigations for the NJARNG Atlantic City, Bordentown, Dover, Flemington, Freehold, Hackettstown, Jersey City, Princeton, Trenton Mercer, and Woodbury Facilities

Monuments, Objects, or Displays

The Inventory of Historical Objects completed by the USACE in 1999 catalogued 32 objects at Bordentown Armory. Most of these are awards in the form of plaques, documents, and trophies. No exterior plaques, markers, memorials, or static displays are present at this installation.

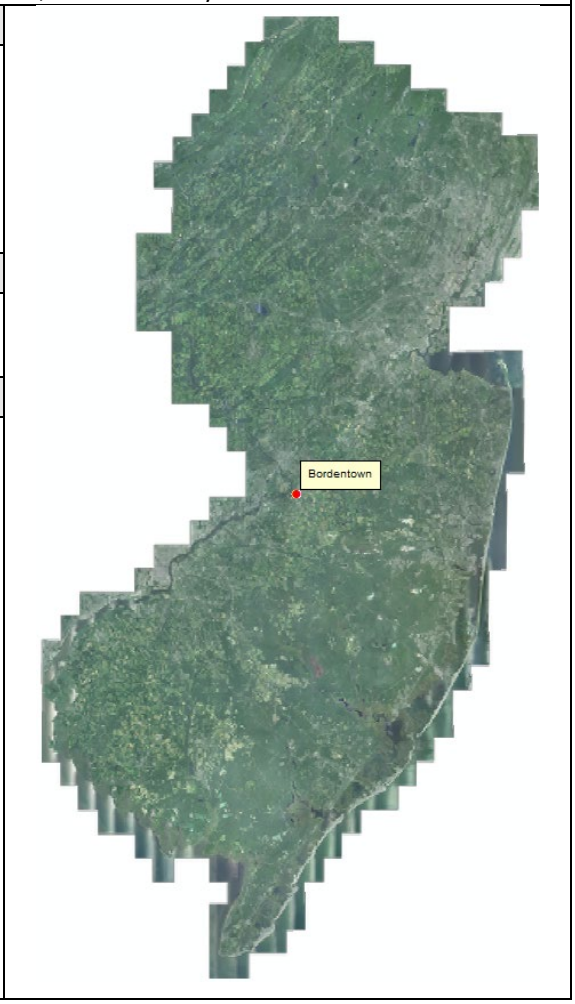
Agreement Documents

There are currently no agreement documents (MOAs) in place for this installation.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? No



New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Camden Armed Forces Reserves	390 Woodbury - Turnersville Rd	Blackwood	08012
PI Number	**Type of Facility**	**County**	**Block/Lot Number**
None	Army Reserve Center	Camden	12302/1.04
USGS Quad	**Elevation (range)**	**Total Acreage**	**Wetlands Acreage**
Runnemede	60-80 feet	12.16	0
Watershed	**NJDEP Planning District**	**National Register of Historic Place eligible?**	**Ongoing Site Remediation?**
Darby Creek-Delaware River	None	Not Assessed	No
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner**
No	No	None	Federal
POC Information:	Tammy Jefferies (Facility Manager) (609)-562-4934		

Nearest Noise Sensitive Receptors and Surface Waters

Receptors:	Distance (ft):	Direction:
Lakeland Sports Complex	25	South
Lake	50	Northwest
Camden Youth Detention Center	100	East
Residents	900	East

Rare Species in Vicinity

No Natural Heritage database search conducted for this installation.

Site Description

The Camden Armed Forces Reserve is an Army Reserves Center that is located in Blackwood, NJ. The site is northernly adjacent to the Lakeland Sports Complex which is a public recreational area. The area surrounding the property consists of developed land, recreational land, or agricultural land. There is also an unnamed lake northwest of the property. The property is mostly maintained grass with some ornamental trees and shrubs.

Archeological Resources

Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
N/A – Leased Property			

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
N/A – Leased Property			
Historic District: The Reserves Center resides in the Camden County Health Complex at Lakeland Historic District.			
Historic Landscape: Historic Landscape determination has not been done for this site as it is a leased property.			

Investigation Records		
Investigation Type	**Authors**	**Title**
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Building Survey (2005)	John Milner Associates	Architectural Inventory of NJARNG Armories Supplementary Report

Monuments, Objects, or Displays

Inventory of monuments, objects, and displays has not taken place from NJDMAVA as this property is leased.

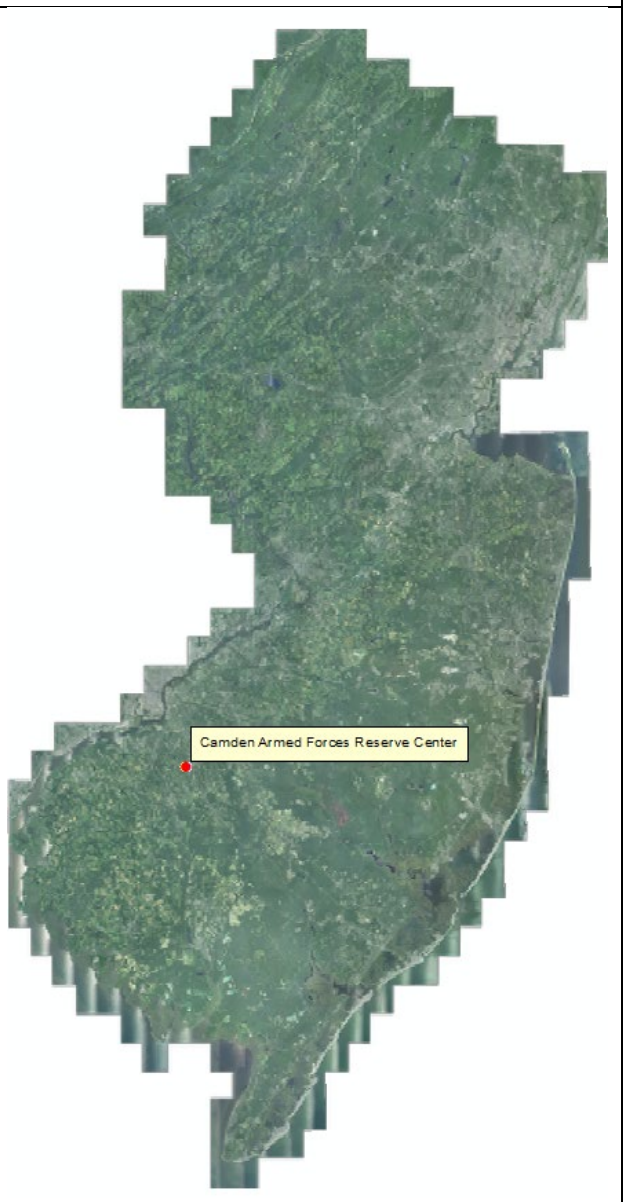
Agreement Documents

NJDMAVA does not currently have any agreement documents associated with this site.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Not from NJDMAVA

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? Not by NJDMAVA.



New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Cape May Armory/ 34A40	600 Garden State Pkwy	Cape May Court House	08210-1699
PI Number	**Type of Facility**	**County**	**Block/Lot Number**
73186, NJD980790786	Readiness Center	Cape May	115/17-A
USGS Quad	**Elevation (range)**	**Total Acreage**	**Wetlands Acreage**
Stone Harbor	<10 feet	22.15	10.87
Watershed	**NJDEP Planning District**	**National Register of Historic Places eligible?**	**Ongoing Site Remediation?**
Great Channel-Hereford Inlet	CAFRA and Flood Zone	No	Yes
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner**
No	No	Boiler 1 and Boiler 2 Permits	State
POC Information:	Stephen Allay (Armorer) (609)-722-0284		

Nearest Noise Sensitive Receptors and Surface Waters

Receptors:	Distance (ft):	Direction:
Residences	140	North
Vo-Tech School	140	North
Pond	400	Northwest
Cape May Special Services School	700	Northwest
DCF Regional School	1,000	Northeast
Holmes Creek	Adjacent to southwest boundary	

Rare Species in Vicinity

Bald eagle (*Haliaeetus leucocephalus*)	Black skimmer (*Rynchops niger*)
Stinking fleabane (*Pluchea foetida*)	Common tern (*Sterna hirundo*)
Black-Crowned Night Heron (*Nycticorax nycticorax*)	Cooper's hawk (*Accipiter cooperii*)
Cattle egret (*Bubulcus ibis*)	Glossy ibis (*Plegadis falcinellus*)
Great blue heron (*Ardea Herodias*)	Osprey (*Pandion haliaetus*)
Gull-billed tern (*Celochelidon nilotica*)	Snowy egret (*Egretta thula*)
Little blue heron (*Egretta caerulea*)	Yellow-crowned night heron (*Nyctana violacea*)

Site Description

The property is bordered on the west by the Garden State Parkway and on the south by a salt marsh and tidal creek. The northern half of the property contains buildings and parking lots, but most of this area is mowed lawn. Two types of wetlands are found on the southern half of this property. Those areas farther from the tidal creek appear disturbed and are dominated by shrubs, small trees, and impenetrable vines. Approaching the tidal creek, the wetland community becomes dominated by common reed (*Phragmites australis*), eventually becoming a typical salt marsh community immediately surrounding the creek.

Archeological Resources

Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
No	18.7 (unpaved only)	0	N/A

Historic Buildings and Structures

Building	Building Type	Date Constructed	Evaluation Status
0001	Armory	1961	Not Eligible
0002	FMS #4	1952	Not Eligible
0003	Flam Storage	1964	Not Eligible
0004	Org Storage	2001	Less than 50 years old

Historic District: The installation does not contain a historic district nor is it included within a local historic district.

Historic Landscape: The installation does not contain a historic landscape.

Investigation Records

Investigation Type	Authors	Title
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Architectural Survey (2015)	HDR	Architectural Survey and Evaluation of Selected Facilities
Archaeological Survey (2017)	Richard Grubb and Associates	Archaeological Investigations for the NJARNG Cape May, Hammonton, Newark, Somerset, Teaneck, Toms River, Washington, and Woodstown Facilities
Archaeological Survey (2020)	Richard Grubb and Associates	Archaeological Investigations for the NJARNG Cape May, Cherry Hill, Hammonton, Mount Holly, Somerset, Teaneck, Toms River, Westfield, and Woodstown Facilities

Monuments, Objects, or Displays

The Inventory of Historical Objects (USACE 1999) catalogued 285 objects, including two static displays (a captured Iraqi anti-aircraft gun of Desert Storm vintage and Honest John rocket on a static launcher). Both static displays are on federal property.

Agreement Documents

There are currently no agreement documents (MOAs) in place for this installation.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as "of concern or significance" to a federally recognized tribe? No

New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Cherry Hill Armory/ 34A45	2001 Park Blvd	Cherry Hill	08002-2797
PI Number	**Type of Facility**	**County**	**Block/Lot Number**
51979, NJ0210090031	Armory	Camden	49/1
USGS Quad	**Elevation (range)**	**Total Acreage**	**Wetlands Acreage**
Camden	<25 feet	12.05	3.56
Watershed	**NJDEP Planning District?**	**National Register of Historic Places eligible?**	**Ongoing Site Remediation?**
Lower Delaware	Flood Zone	No	Yes
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner**
Yes	No	HB Smith Boilers Permit	State
POC Information:	Ed Torres (Armorer) (609)-802-5772		

Nearest Noise Sensitive Receptors and Surface Waters		
Receptors:	**Distance (ft):**	**Direction:**
Residences	75	North
Cooper River	Adjacent to southern boundary	

Rare Species in Vicinity
None.

Site Description
The property sits along the north back of the Cooper River and is bounded by Park Drive to the north. The Armory buildings, vehicles compound, and parking lots are concentrated along Park Drive, and areas along the river are forested. The forested areas are comprised mostly of red oak (*Quercus rubra*), red maple (*Acer rubrum*), and sweetgum (*Liquidambar styraciflua*), and the understory is kept open for picnicking and recreation. Vegetation on the river banks are similar, except for the appearance of black willow (*Salix nigra*), box elder (*A. negundo*), green ash (*Fraxinus pennsylvanica*), and various herbaceous species.

Archeological Resources			
Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
No	6.6 (unpaved only)	0	N/A

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
0001	Armory	1958	Not eligible
0002	VMS	1977	Not eligible

Historic District: The installation does not contain a historic district nor is it included within a local historic district.

Historic Landscape: The installation does not contain a historic landscape.

Investigation Records		
Investigation Type	**Authors**	**Title**
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Architectural Survey (2015)	HDR	Architectural Survey and Evaluation of Selected Facilities
Archaeological Survey (2018)	Richard Grubb and Associates	Archaeological Investigations for the NJARNG Cherry Hill, Mount Holly, Riverdale, Westfield, and Woodbridge Facilities
Archaeological Survey (2020)	Richard Grubb and Associates	Archaeological Investigations for the NJARNG Cape May, Cherry Hill, Hammonton, Mount Holly, Somerset, Teaneck, Toms River, Westfield, and Woodstown Facilities

Monuments, Objects, or Displays

The Inventory of Historical Objects (USACE 1999) catalogued 6 objects, one of which has been subsequently removed to Sea Girt. Objects include: a M-55 self-propelled howitzer and M-110 howitzer (federal property), both of which are housed in the equipment storage area rather than on display, and a muzzle-loading cannon (private) inside the Armory.

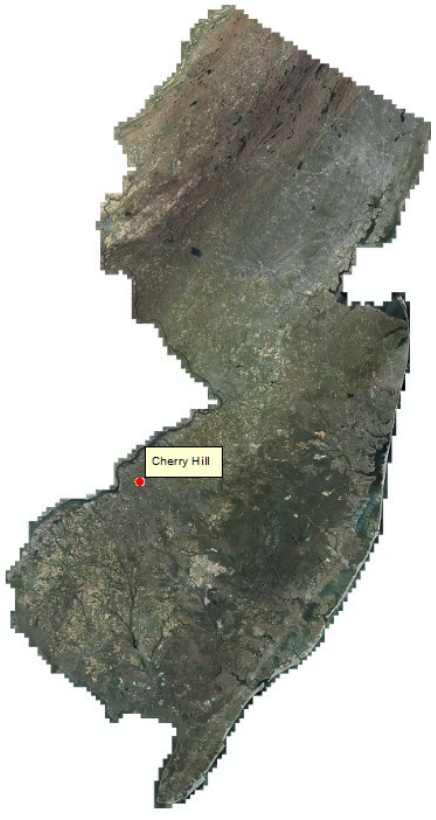
Agreement Documents

There are currently no agreement documents (MOAs) in place for this installation.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? No



New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Dover Armory/ 34A50	479 West Clinton St	Dover/Rockaway	07801-1799
PI Number	**Type of Facility**	**County**	**Block/Lot Number**
25824, NJ4210090032, NJD980790802	Armory	Morris	151-A/1,2,3
USGS Quad	**Elevation (range)**	**Total Acreage**	**Wetlands Acreage**
Dover	615-645 feet	16.16	2.93
Watershed	**NJDEP Planning District?**	**National Register of Historic Places eligible?**	**Ongoing Site Remediation?**
Upper Rockaway River	Highlands	No	Yes
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner**
Yes	No	New Permit Boiler Replacement	State
POC Information:	Charles Rissmiller (Supervisor) (609)-649-4808		

Nearest Noise Sensitive Receptors and Surface Waters

Receptors:	Distance (ft):	Direction:
Residences	50	South
Green Pond Brook	50	Northeast
Rockaway River	300	Southwest
Cooper River	Adjacent to southern boundary	

Rare Species in Vicinity

Wood turtle (*Cemmys insculpta*)	Wood thrush (*Hylocichla mustelina*)
Indiana bat (*Myotis sodalist*)	Northern long-eared bat (*Myotis septentrionalis*)

Site Description

The western portion of the property borders Hwy 15 and contains Armory buildings and a vehicle compound. The land on this half of the installation is generally mowed or paved, while the land on the eastern half remains forested. The area immediately east of the vehicle compound is best described as red maple (*Acer rubrum*) swamp, with green ash (*Fraxinus pennsylvanica*) and coast pepperbush (*Clethra alnifolia*) dominating the understory. Farther east, the forest community is dominated by more upland species such as oak (*Quercus spp.*) and beech (*Fagus grandfolia*).

Archeological Resources

Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
No	11.9 (unpaved only)	0	N/A

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
0001	Armory	1963	Not Eligible
0002	FMS	1958	Not Eligible
0006	Org Storage	2001	Less than 50 years old

Historic District: The installation does not contain a historic district nor is it included within a local historic district.

Historic Landscape: The installation does not contain a historic landscape.

Investigation Records		
Investigation Type	**Authors**	**Title**
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Architectural Survey (2015)	HDR	Architectural Survey and Evaluation of Selected Facilities
Archaeological Survey (2021)	Hunter Research	Archaeological Investigation for the NJARNG Atlantic City, Bordentown, Dover, Flemington, Freehold, Hackettstown, Jersey City, Princeton, Trenton Mercer, and Woodbury Facilities

Monuments, Objects, or Displays

The Inventory of Historical Objects (USACE 1999) catalogued 30 items at Dover, including a M-151 utility truck, items in display cases or frames, and a collection of documents and photographs related to the history of the 50th Support Battalion.

Agreement Documents

There are currently no agreement documents (MOAs) in place for this installation.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? No

New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Flemington Armory/ 34A80	State Hwy 12 Box 149	Flemington/Raritan Twp	08822-9511
PI Number	**Type of Facility**	**County**	**Block/Lot Number**
000663, 1021365, 08117, 80225, NJD980790844	Armory	Hunterdon	42/14
USGS Quad	**Elevation (range):**	**Total Acreage:**	**Wetlands Acreage:**
Pittstown	525-535 feet	13.88	2.07
Watershed:	**NJDEP Planning District**	**National Register of Historic Places Eligible?**	**Ongoing Site Remediation?**
Wickecheoke Creek	Delaware Raritan Canal	No	No
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner:**
Yes	Yes – Planned to replace with AST in 2023	HB Smith Boiler Permit	State
POC Information:	Brett Davala (Armorer) (609)-316-3251		

Nearest Noise Sensitive Receptors and Surface Waters		
Receptors:	**Distance (ft):**	**Direction:**
Residences	50	East
Plum Brook	400	West

Rare Species in Vicinity

Northern long-eared bat (*Myotis septentrionalis*)

Site Description

Hwy 12 and Everetts Hill Road form the northern and southeastern boundaries of the installation, respectively. The area immediately surrounding the Armory is a mowed lawn with very few ornamentals. Along the northeastern boundary, there is a mixed oak forest community. There is also a forest community on the southern end of the site. The forest communities include vegetation such as black oak (*Quercus velutina*), scarlet oak (*Q. coccinea*), white ash (*Fraxinus americana*), shagbark hickory (*Carya ovata*), sugar maples (*Acer saccharum*), Japanese barberry (*Berberis thunbergii*), Japanese stiltgrass (*Microstegium vimineum*), and Virginia creeper (*Parthenocissus quinquefolia*). The wetland area consists of cattails (*Typha spp.*), multiflora rose (*Rosa multiflora*), soft rush (*Juncus effusus*), jack-in-the-pulpit (*Arisaema triphyllum*), sensitive fern (*Onoclea sensibilit*), jewelweed (*Impatiens capensis*), arrowleaf tearthumb (*Persicaria sagittata*), sugar maple (*A. saccharum*), grape vine (*Vitis vinifera*), Virginia creeper (*P. quinquefolia*), poison ivy *(Toxicodendron radica*), and common reed (*Phragmites australis*). More information about site species can be found in the 2018 Rare Species Report.

Archeological Resources

Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
No	10.4 (unpaved only)	0	N/A

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
00001	Armory	1961	Not eligible
00002	MVSB	1950	Not eligible
0004	Flam Storage	1961	Not eligible
Historic District: The installation does not contain a historic district, nor is it within a local historic district.			
Historic Landscape: The installation does not contain a historic landscape.			

Investigation Records		
Investigation Type	**Authors**	**Title**
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Archaeological Survey (2021)	Hunter Research	Archaeological Investigation for the NJARNG Atlantic City, Bordentown, Dover, Flemington, Freehold, Hackettstown, Jersey City, Princeton, Trenton Mercer, and Woodbury Facilities

Monuments, Objects, or Displays

The Inventory of Historical Objects (USACE 1999) catalogued 34 items at the Flemington Armory, including a M-60 Sherman tank and a M-16 half-track. The M-60 tank remains on static display outside of the Armory; however, the M-16 half-track is no longer at this installation.

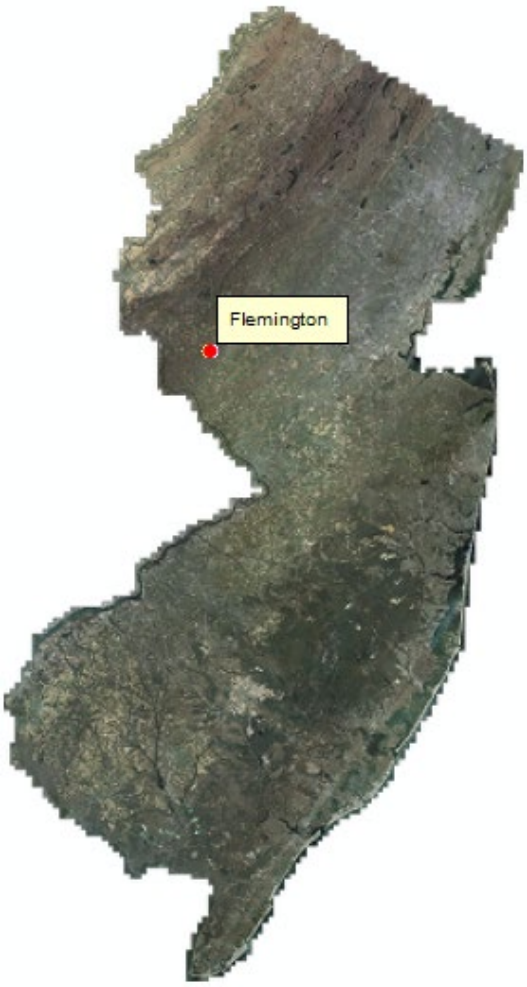
Agreement Documents

There are currently no agreement documents (MOAs) in place for this installation.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? No



New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Fort Dix Building 3601	Florida Ave	Fort Dix	08640
PI Number	**Type of Facility**	**County**	**Block/Lot Number**
95376, 947999, 00000001409, 0000-09-00291, 002427, 007195, 222870, 2236P, 440421, 45897, 032606, 1523-11-0004.1, 45924NJD98661238	JT2DC	Burlington	1802/1 and 201/1
USGS Quad	**Elevation (range):**	**Total Acreage:**	**Wetlands Acreage:**
Columbus	160-200 feet	3.43	0
Watershed:	**NJDEP Planning District**	**National Register of Historic Places Eligible?**	**Ongoing Site Remediation?**
Union Branch	Military & Federal (Pinelands)	No	Yes
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner:**
Yes – Red Plan	No	None	Federal
POC Information:	Rick Ruffin (Repairer/Landlord) (609)-209-9991		

Nearest Noise Sensitive Receptors and Surface Waters		
Receptors:	**Distance (ft):**	**Direction:**
Saylors Pond	1,300	Southwest

Rare Species in Vicinity
None.

Site Description
Fort Dix Building 3601 is a battle lab. It is located within Joint-base Maguire-Dix-Lakehurst (MDL). The Fort Dix 3600 Area is primarily maintained grass, paved surfaces, and buildings. There are also some wetlands in the 3600 area and Building 3601 resides within the wetland buffer of two separate wetlands. To the north and west of this property resides forested areas. To the east is maintained grass and developed land. The southern property boundary is another portion of Joint-base MDL.

Archeological Resources			
Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
N/A – Leased Property			

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
3601	Battle Lab	1990	Evaluate when 50 years old
Historic District: The installation does not contain a historic district, nor is it within a local historic district.			
Historic Landscape: The installation does not contain a historic landscape.			

Investigation Records		
Investigation Type	**Authors**	**Title**
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard

Monuments, Objects, or Displays

Inventory of monuments, objects, and displays have not been conducted by NJDMAVA as this is a leased property.

Agreement Documents

NJDMAVA does not have any agreement documents in relation to this site as it is a leased property.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? No

New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Fort Dix Building 3650	Florida Ave	Fort Dix	08640-7600
PI Number	**Type of Facility**	**County**	**Block/Lot Number**
95376, 947999, 00000001409, 0000-09-00291, 002427, 007195, 222870, 2236P, 440421, 45897, 032606, 1523-11-0004.1, 45924NJD98661238	HQ & T3BL	Burlington	Federal Military
USGS Quad	**Elevation (range):**	**Total Acreage:**	**Wetlands Acreage:**
Columbus	175-195 feet	1.38	0
Watershed:	**NJDEP Planning District**	**National Register of Historic Places Eligible?**	**Ongoing Site Remediation?**
Union Branch	Military & Federal (Pinelands)	No	Yes
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner:**
Yes – Red Plan	No	Boiler Permits (4), Generator Permit, and 2 CAT Mobile Generator Permits	Federal
POC Information:	Scott Redler (Armorer/Landlord) (609)-562-0626		

Nearest Noise Sensitive Receptors and Surface Waters

Receptors:	Distance (ft):	Direction:
Saylors Pond	1,100	West
Tributary of Barkers Brook	1,400	North

Rare Species in Vicinity

None.

Site Description

Florida Avenue forms the eastern boundary of the NJARNG property, which consists of several buildings, paved parking lots, a large, fenced-in vehicle compound, and an expansive lawn along Florida Avenue. This area is also landscaped with a few willow oaks (*Quercus phellos*) and red cedars (*Juniperus virginiana*). The western portion of the property is adjacent to a mixed hardwood forest community, including beech (*Fagus grandifolia*), red maple (*Acer rubrum*), sassafras (*Sassafras albidum*) and several oaks (*Quercus spp*.). In the southern end of the site, between Technology Drive and Florida Ave., a large field of wildflowers thrives in the growing season. Rare species include the Barred owl (*Strix varia).*

Archeological Resources

Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
N/A – Leased Property			

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
3650	Armory	1990	Evaluate when 50 years old
Historic District: The installation does not contain a historic district, nor is it within a local historic district.			
Historic Landscape: The installation does not contain a historic landscape.			

Investigation Records		
Investigation Type	**Authors**	**Title**
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard

Monuments, Objects, or Displays

Inventory of monuments, objects, and displays have not been conducted by NJDMAVA as this is a leased property.

Agreement Documents

NJDMAVA does not have any agreement documents in relation to this site as it is a leased property.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? No

New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Freehold Armory/ 34A90	635 State Hwy 33	Freehold	07728
PI Number	**Type of Facility:**	**County:**	**Block/Lot Number:**
20803, NJD980790869	Armory	Monmouth	108/401-5
USGS Quad:	**Elevation (range):**	**Total Acreage:**	**Wetlands Acreage:**
Freehold	155-160 feet	4.63	0
Watershed:	**NJDEP Planning District**	**National Register of Historic Places Eligible?**	**Ongoing Site Remediation?**
Upper Manasquan River	None	No	No
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner:**
Yes	No	Boiler Permits (2)	State
POC Information:	William Homeyer (Armorer) (609)-802-4196		

Nearest Noise Sensitive Receptors and Surface Waters

Receptors:	Distance (ft):	Direction:
Residences	350	South
Tributary of Debois Creek	700	Southwest

Rare Species in Vicinity

None.

Site Description

This property is located between Jerseyville Road to the north, and Hwy 33 to the south, and is surrounded by both industrial and land use. Much of the site is paved and occupied by buildings, but a forested lawn is maintained along Hwy 33. White pine (*Pinus strobus*) and pin oak (*Quercus palustris*) are planted in front of the Armory, as well as sugar maple (*Acer saccharum*) and northern red oak (*Q. rubra).*

Archeological Resources

Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
No	2	0	N/A

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
00001	Armory	1961	Not eligible
00002	Flam Storage	1963	Evaluate when 50 years old
00003	Org Storage	2001	Evaluate when 50 years old
	MVSB	1941	Not eligible
Historic District: The installation does not contain a historic district, nor is it within a local historic district.			
Historic Landscape: The installation does not contain a historic landscape.			

Investigation Records		
Investigation Type	**Authors**	**Title**
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Archaeological Survey (2021)	Hunter Research	Archaeological Investigations for the NJARNG Atlantic City, Bordentown, Dover, Flemington, Freehold, Hackettstown, Jersey City, Princeton, Trenton Mercer, and Woodbury Facilities

Monuments, Objects, or Displays

The Inventory of Historical Objects (USACE 1999) catalogued 14 items at Freehold, including a M-114 armored personnel carrier (federal).

Agreement Documents

There are currently no agreement documents (MOAs) in place for this installation.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? No

New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Hackettstown Armory/ 34A95	901 Willow Grove St	Hackettstown	07840-5099
PI Number	**Type of Facility:**	**County:**	**Block/Lot Number:**
000666, 85231, NJD980790877	Armory	Warren	44/2
USGS Quad:	**Elevation (range):**	**Total Acreage:**	**Wetlands Acreage:**
Hackettstown	620-650 feet	15.88	0.16
Watershed:	**NJDEP Planning District**	**National Register of Historic Places Eligible?**	**Ongoing Site Remediation?**
Lubbers Run-Musconetcong River	Highlands	No	No
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner:**
No	Yes - 1	HB Smith Boiler Permit	State
POC Information:	Kevin Walsh (Armorer) (609)-649-5991		

Nearest Noise Sensitive Receptors and Surface Waters

Receptors:	Distance (ft):	Direction:
Musconetcong River	900	East
Unnamed Tributary	Adjacent to Northern Boundary	

Rare Species in Vicinity

Barred owl (*Strix varia*)
Indiana bat (*Myotis sodalist*)
Bobcat (*Lynx rufus*)
Worm eating warbler (*Helmitheros vermivorum*)
Northern long-eared bat (*Myotis septentrionalis*)

Site Description

Willow Grove Street forms the eastern boundary of the installation. The length of the property extends to the railroad right of way to the west. Over 75 percent of the land is forested, as is most of the surrounding land which is encompassed by Stephens State Park. The forest consists of quaking aspen (*Populus tremuloides*), pignut hickory (*Carya glabra*), red oak (*Quercus rubra*), stiff dogwood (*Cornus foemina*), white pine (*Pinus strobus*), red maple (*Acer rubrum*), and several understory species such as Japanese barberry (*Berberis thunbergii*), wild rose (*Rosa acicularis*), red raspberry (*Rubus idaeus*), wood fern (*Dryopteris*), poison ivy (*Toxicodendron*), and Virginia creeper (*Pathenocissus quinquefolia*). The eastern-most portion of land is cleared for the Armory buildings and parking lot. A small wetland area sits to the west of the pines along the southern boundary. Wetland vegetation communities include red maple (*Acer rubrum*), green ash (*Fraxinus pennsylvanica*), winterberry (*Ilex verticillata*), sensitive fern (*Onoclea sensibilis*), jewelweed (*Impantiens capensis*), and tussock sedge (*Carex stricta*). More information about site species can be found in the 2018 Rare Species Report.

Archeological Resources

Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
No	14.1 (unpaved only)	0	N/A

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
00001	Armory	1961	Not eligible
00002	MVSB	1949	Not eligible
Historic District: The installation does not contain a historic district, nor is it within a local historic district.			
Historic Landscape: The installation does not contain a historic landscape.			

Investigation Records		
Investigation Type	**Authors**	**Title**
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Archaeological Survey (2021)	Hunter Research	Archaeological Investigations for the NJARNG Atlantic City, Bordentown, Dover, Flemington, Freehold, Hackettstown, Jersey City, Princeton, Trenton Mercer, and Woodbury Facilities

Monuments, Objects, or Displays

No monuments, objects, or displays have been catalogued at the Hackettstown Armory.

Agreement Documents

There are currently no agreement documents (MOAs) in place for this installation.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? No

New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Hammonton Armory/ 34B00	550 S Egg Harbor Rd	Hammonton	08037
PI Number	**Type of Facility:**	**County:**	**Block/Lot Number:**
73026, NJD980790885	Armory	Atlantic	3702/3
USGS Quad:	**Elevation (range):**	**Total Acreage:**	**Wetlands Acreage:**
Hammonton	80-100 feet	9.20	3.72
Watershed:	**NJDEP Planning Designation**	**National Register of Historic Places Eligible?**	**Ongoing Site Remediation?**
Middle Mullica River	Pinelands	No	Yes
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner:**
No	No	Boiler Permit (1)	State
POC Information:	Mark Odeja (Armorer) (609)-722-0282		

Nearest Noise Sensitive Receptors and Surface Waters

Receptors:	Distance (ft):	Direction:
Hammonton Lake	75	North
Grand Swamp	750	South
Residences	1,500	Southwest

Rare Species in Vicinity

Northern long-eared bat (*Myotis septentrionalis*)

Site Description

Egg Harbor Road runs northwest to southeast, forming the upper boundary of the installation. A railroad which runs parallel to Egg Harbor Road forms the lower boundary. The surrounding land use is industrial and recreations. On the eastern half of the property, an unnamed tributary of Hammonton Lake meanders through a forested wetland. The dominant species of this community are red maple (*Acer rubrum*), alder (*Alnus serrulata*), Atlantic white cedar (*Chemaecyparis thyoides*), and black willow (*Salix nigra*). Uphill from the tributary, the forest vegetation becomes more typical of upland communities, with some pitch pines (*Pinus rigida*), sassafras (*Sassafras albidum*), and more oaks (*Quercus spp.*) appearing. The western half of the property contains buildings and paved areas, and also a large, maintained lawn with minimal landscaping.

Archeological Resources

Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
No	7.3 (unpaved only)	0	N/A

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
00001	Armory	1961	Not eligible
00002	MVSB	1949	Not eligible
Historic District: The installation does not contain a historic district, nor does it lie within a historic district.			
Historic Landscape: The installation does not contain a historic landscape.			

Investigation Records		
Investigation Type	**Authors**	**Title**
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Archaeological Survey (2017)	Richard Grubb and Associates	Archaeological Investigations for the NJARNG Cape May, Hammonton, Newark, Somerset, Teaneck, Toms River, Washington, and Woodstown Facilities
Archaeological Survey (2020)	Richard Grubb and Associates	Archaeological Investigations for the NJARNG Cape May, Cherry Hill, Hammonton, Mount Holly, Somerset, Teaneck, Toms River, Westfield, and Woodstown Facilities

Monuments, Objects, or Displays

The Inventory of Historical Objects (USACE 1999) catalogued one item, an Iraqi, towed, quad-mounted anti-aircraft gun with Iraqi Ministry of Defense markings (federal). The unit previously assigned to the Armory painted over the Iraqi markings.

Agreement Documents

There are currently no agreement documents (MOAs) in place for this installation.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? No

New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Jersey City Armory/ 34B05	678 Montgomery St	Jersey City	07306-2208
PI Number	**Type of Facility:**	**County:**	**Block/Lot Number:**
000668, 11534, 523891, NJD980790893	Armory	Hudson	1898/1-21, 30-39
USGS Quad:	**Elevation (range):**	**Total Acreage:**	**Wetlands Acreage:**
Jersey City	75 feet	1.85	0
Watershed:	**NJDEP Planning District**	**National Register of Historic Places Eligible?**	**Ongoing Site Remediation?**
East River-Hudson River	None	Yes (NJHPO opinion)	Yes
Spill Plan?	**Regulated UST?**	**Air Permit?**	**Land Owner:**
No	None	None	State
POC Information:	Gregory Mottola (Armorer) (609)-802-4703		

Nearest Noise Sensitive Receptors and Surface Waters		
Receptors:	**Distance (ft):**	**Direction:**
Residences	15	Northeast
Greek Orthodox Church	200	East
Hudson Catholic Regional High School	415	Northwest
Old Bergen Church	775	Northwest
Mac Mahon Student Center	1,100	West

Rare Species in Vicinity
No Natural Heritage database search conducted for this installation.

Site Description
Located in an urban area, the Armory encompasses most of a city block. Neighboring properties consist of residential and commercial buildings.

Archeological Resources			
Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
No	2	0	N/A

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
00001	Armory	1934	Eligible
Historic District: The installation does not contain a historic district nor is it within a local historic district.			
Historic Landscape: The installation does not contain a historic landscape.			

Investigation Records		
Investigation Type	**Authors**	**Title**
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Archaeological Survey (2021)	Hunter Research	Archaeological Investigations for the NJARNG Atlantic City, Bordentown, Dover, Flemington, Freehold, Hackettstown, Jersey City, Princeton, Trenton Mercer, and Woodbury Facilities

Monuments, Objects, or Displays

The Inventory of Historical Objects (USACE 1999) catalogued only one item, a guidon for F Company, 50th Armored Division, at the Jersey City Armory. A plaque commemorating the building's construction as a Works Progress Administration Project in 1934 is affixed to the wall in the building's main entrance.

Agreement Documents

There are currently no agreement documents (MOAs) in place for this installation.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as "of concern or significance" to a federally recognized tribe? No

New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
AASF	Building 780 Rounds Rd	Lakehurst	08759
PI Number	**Type of Facility:**	**County:**	**Block/Lot Number:**
None	Army Aviation Support	Ocean	23601/1
USGS Quad:	**Elevation (range):**	**Total Acreage:**	**Wetlands Acreage:**
Lakehurst	80-100 feet	845.28	0
Watershed:	**NJDEP Planning District**	**National Register for Historic Places Eligible?**	**Ongoing Site Remediation?**
Union Branch	Pinelands Town (Pinelands) and Historic District	No	No
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner:**
Yes – Red Plan	No	None	Federal
POC Information:	David Lohman (Armorer) (609)-851-9546		

Nearest Noise Sensitive Receptors and Surface Waters

Receptors:	Distance (ft):	Direction:
Residences	2,000	South
St John's Roman Catholic Church	2,000	Southeast
Manapaqua Branch	Adjacent to Southern Boundary	

Rare Species in Vicinity

Northern long-eared bat (*Myotis septentrionalis*)

Site Description

Lakehurst Army Aviation Support Facility (AASF) is located between Building 129 and the CLTF. The AASF is also east of Fort Dix. The surrounding area of the AASF consists of undeveloped land. Beyond adjacent properties resides some residential areas and some commercial establishments. There are no known rare species to exist at this site.

Archeological Resources

Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
N/A – Leased Property			

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
N/A – Leased Property			
Historic District: The Lakehurst AASF is part of the Lighter-Than-Air Historic District.			
Historic Landscape: Leased Property – Not Assessed by NJDMAVA			

Investigation Records		
Investigation Type	**Authors**	**Title**
Cultural Resources Survey (1994)	Baystate Environmental Consultants	Cultural Resources Survey for Naval Air Engineering Station Lakehurst, NJ
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Environmental Study (1999)	Parsons Engineering Science Inc	Environmental Studies for the Proposed NJARNG Maneuver Area Training Equipment Site and NAES at Lakehurst, New Jersey

Monuments, Objects, or Displays

An inventory of monuments, objects, and displays have not been conducted by NJDMAVA at this site since the property is leased.

Agreement Documents

Agreement documents have not been made by NJDMAVA since this is a leased property.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? No

New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Lakehurst CLTF	1 Pinehurst Rd	Manchester	08759
PI Number	**Type of Facility:**	**County:**	**Block/Lot Number:**
None	Consolidated Logistics Training Facility	Ocean	23601/1
USGS Quad:	**Elevation (range):**	**Total Acreage:**	**Wetlands Acreage:**
Lakehurst	160-180 feet	140.65	0
Watershed:	**NJDEP Planning District**	**National Register of Historic Places Eligible?**	**Ongoing Site Remediation?**
Union Branch	Pinelands Town (Pinelands)	No	No
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner:**
Yes – Red Plan	No	Boiler Permits (5), Dust Collector (1), Paint Booth (1), and Paint Gun Cleaner (1)	Federal
POC Information:	David Lohman (Armorer) (609)-851-9546		

Nearest Noise Sensitive Receptors and Surface Waters		
Receptors:	**Distance (ft):**	**Direction:**
North Ruckels Branch	850	North
Residences	1,800	South

Rare Species in Vicinity
Northern long-eared bat (*Myotis septentrionalis*)

Site Description
Lakehurst Consolidated Logistics Training Facility (CLTF) is located west of Building 129 and the AASF. The CLTF is also east of Fort Dix. The surrounding area of the CLTF consists of undeveloped land. Beyond adjacent properties resides some residential areas. There are no known rare species to exist at this site. NJARNG leases building space only.

Archeological Resources			
Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
N/A – Leased Property			

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
00129	Armory	1937	Contributing element to NR Historic District
00194	Hangar/Shop	1943	Contributing element to NR Historic District
00608	AC MNT	1993	Evaluate when 50 years old

Historic District: The 2 buildings contribute to the proposed Lighter than Air (LTA) National Historic District at Lakehurst

Historic Landscape: Although several landscape elements are included within the proposed LTA Historic District, the installation has not been evaluated to determine whether it contains a historic landscape.

Investigation Records		
Investigation Type	**Authors**	**Title**
Cultural Resources Survey (1994)	Baystate Environmental Consultants	Cultural Resources Survey for Naval Air Engineering Station Lakehurst, NJ
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Environmental Study (1999)	Parsons Engineering Science Inc	Environmental Studies for the Proposed NJARNG Maneuver Area Training Equipment Site and NAES at Lakehurst, New Jersey

Monuments, Objects, or Displays

No historic objects, monuments, objects, or static displays owned by the NJARNG are present at this installation.

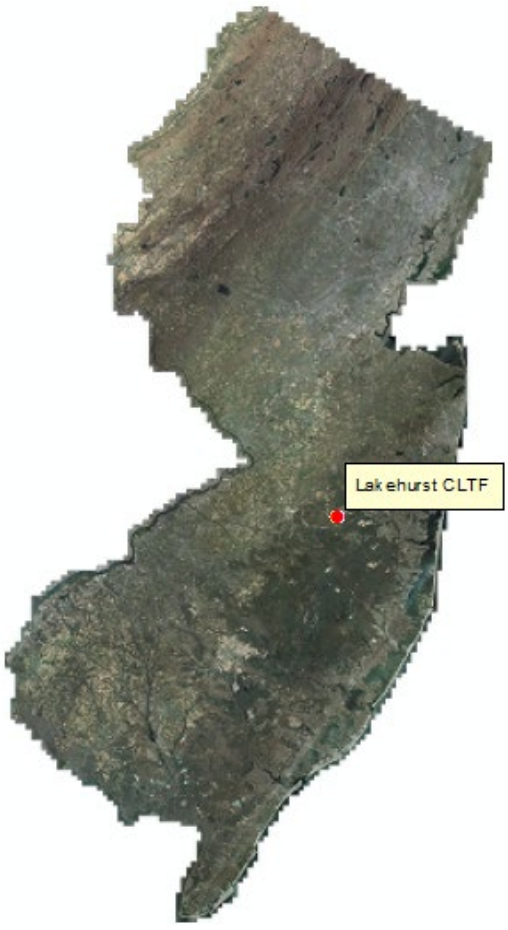
Agreement Documents

There are currently no agreement documents (MOAs) in place for this installation.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? No



New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Lawrenceville Complex/ 34B15	101 Eggerts Crossing Rd	Lawrenceville	08648-2805
PI Number	**Type of Facility:**	**County:**	**Block/Lot Number:**
000675, 60652, NJD980790901	Armory & DMVA	Mercer	80/13, 14, 15, 17, 20, 21, 22
USGS Quad:	**Elevation (range):**	**Total Acreage:**	**Wetlands Acreage:**
Princeton	80-120 feet	79.09	0.70
Watershed:	**NJDEP Planning Designation**	**National Register of Historic Places Eligible?**	**Ongoing Site Remediation?**
Lower Assunpink Creek	Delaware Raritan Canal	No	Yes
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner:**
Yes	No	Generator Permits (3), Gasoline Dispensing Facility (1), Boiler Permits (3)	State
POC Information:	Al Woods (Armorer) (609)-940-2040		

Nearest Noise Sensitive Receptors and Surface Waters

Receptors:	Distance (ft):	Direction:
Residences	50	South
St Ann's School/Rectory	250	East
Lawrence Intermediate School	475	North
First Baptist Church of Eggerts Crossing	1,500	West
Little Shabakunk Creek	1,750	Northeast

Rare Species in Vicinity

None.

Site Description

Eggert Crossing forms the northern boundary of the site, which extends southward almost to Eldridge Road. Most buildings and associated infrastructure are located on the northern portion of the property, and the southern portion is forested. Vegetation on site include several canopy species such as red maple (*Acer rubrum*), black cherry (*Prunus serotina*), red osier dogwood (*Cornus sericea*), sweetgum (*Liquidambar styraciflua*), green ash (*Fraxinus pennsylvanica*), American elm (*Ulmus americana*), red oak (*Quercus rubra*), Norway maple (*A. platanoides*), pignut hickory (*Carya glabra*), tulip poplar (*Liriodendron tulipifera*), black oak (*Q. velutina*), shellbark hickory (*C. laciniosa*), and sweet cherry (*P. avium*). Understory species consist of red raspberry (*Rubus idaeus*), wild onion (*Allium canadense*), southern arrowwood (*Viburnum dentatum*), soft rush (*Juncus effusus*), tussock sedge (*Carex stricta*), cinnamon fern (*Osmundastrum cinnamomeum*), and poison ivy (*Toxicodendron radica)*. More information about site species can be found in the 2018 Rare Species Report.

Archeological Resources

Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
Yes	50	50	None

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
00001	DMAVA Headquarters/ Admin	1971	Not eligible
00002	Armory	1927	Not eligible
00003	FMS	1927	Not eligible
00004	Storage Shed	1927	Not eligible
00005	MVSB	1927	Not eligible
00006	Flam Storage	1960	To be demolished – Approved by SHPO in 2022
00007	USFPO Warehouse/ Storage	1971	Not eligible
00008	Flam Storage	1971	To be demolished – Approved by SHPO in 2022
00009	Org Storage	1971	Not eligible
00010	POL Shed/ Storage	1987	Evaluate when 50 years old
00011	US Marshals Service/ Admin	1987	Not eligible
011-A	Warehouse Storage	1987	Not eligible
00012	Open Storage	1987	Evaluate when 50 years old
00017	Haz Mat	1941	Not eligible

Historic District: The installation does not contain a historic district nor is it located within a local district.

Historic Landscape: The installation does not contain a historic landscape.

Investigation Records		
Investigation Type	**Authors**	**Title**
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Archaeological Survey (2004)	John Milner Associates	Archaeological Investigations for the NJARNG Sea Girt, Morristown, Fort Dix, Picatinny, Lawrenceville, Vineland, and West Orange Facilities
Archaeological Survey (2006)	John Milner Associates	Archaeological Investigations for the NJARNG Fort Dix, Picatinny, Lawrenceville, and Vineland Facilities

Monuments, Objects, or Displays

The Inventory of Historical Objects (USACE 1999) catalogued 1,754 items at the Lawrenceville Complex, including 8 static displays and 2 monuments. Inventory of the static displays and monuments in 2006 found the following: 2 M2 Towed guns, a M115 Towed Howitzer, a M42 Anti-aircraft gun, a Marmon-Herrington CTMS Light Tank, 2 M110A2 203mm Howitzers, a M55 8-in Howitzer, a M578 Light Armored Recovery Vehicle, a M108 105mm Howitzer, a M48A5 Tank, a M60A3 Tank, a memorial to those who have fallen during the Global War on Terrorism, a memorial for the fallen of the 112th Field Artillery, a plaque and tree commemorated to General Cantwell, and a memorial and tank commemorating the World War II fallen.

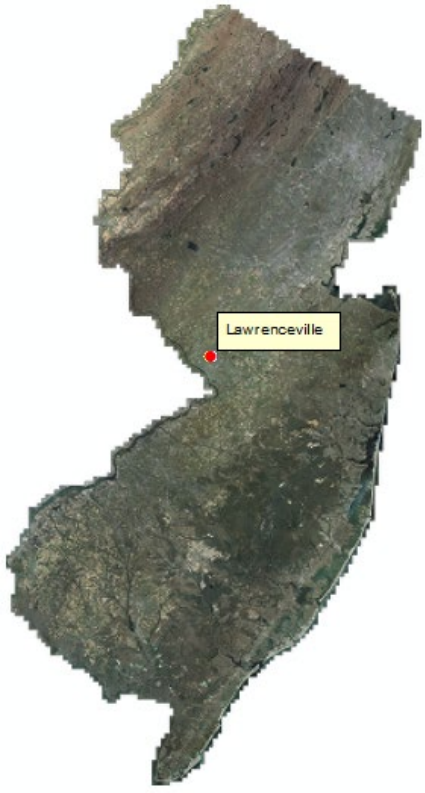
Agreement Documents

There are currently no agreement documents (MOAs) in place for this installation.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? No



New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Lodi Armory	178 Essex St	Lodi	07644
PI Number	**Type of Facility:**	**County:**	**Block/Lot Number:**
000669, 01784, NJD980790919	Armory	Bergen	286/1.01
USGS Quad:	**Elevation (range):**	**Total Acreage:**	**Wetlands Acreage:**
Hackensack	80-100 feet	4.23	0
Watershed:	**NJDEP Planning District**	**National Register of Historic Places Eligible?**	**Ongoing Site Remediation?**
Saddle River	None	No	Yes
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner:**
No	No	Boiler Permit (1)	State
POC Information:	Frank Martinez (Armorer) (609)-955-1177		

Nearest Noise Sensitive Receptors and Surface Waters		
Receptors:	**Distance (ft):**	**Direction:**
Residences	250	Southwest

Rare Species in Vicinity

No Natural Heritage database search conducted for this installation.

Site Description

Christopher Columbus Highway comprises the southern property boundary of the Lodi Armory. To the west resides commercial businesses, and to the east is the Alexander Hamilton US Army Reserve Center and a commercial business.

Archeological Resources

Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
No	4	0	N/A

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
00001	Armory	1958	Not eligible
00002	MVSB	1948	Not eligible
00003	MVSB	1948	Not eligible

Historic District: The installation does not contain a historic district nor is it located within a local district.

Historic Landscape: The installation does not contain a historic landscape.

Investigation Records		
Investigation Type	**Authors**	**Title**
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard

Monuments, Objects, or Displays

Inventory for monuments, objects, and displays have not yet been performed for the Lodi Armory.

Agreement Documents

There are currently no agreement documents (MOAs) in place for this installation.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? No

New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Morristown Armory/ 34B40	430 Western Ave	Morristown	07960-0499
PI Number	**Type of Facility:**	**County:**	**Block/Lot Number:**
000672, 25812, 524658, NJD980790935	Armory	Morris	330/1
USGS Quad:	**Elevation (range):**	**Total Acreage:**	**Wetlands Acreage:**
Mendham	560-680 feet	41.67	4.23
Watershed:	**NJDEP Planning District**	**National Register of Historic Places Eligible?**	**Ongoing Site Remediation?**
Lower & Upper Whippany River	Highlands	Yes	No
Site Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner:**
Yes	No	Boiler Permits (2)	State
POC Information:	Kambia Creighton (Armorer) (609)-649-7351		

Nearest Noise Sensitive Receptors and Surface Waters

Receptors:	Distance (ft):	Direction:
Residences	75	South
Villa Walsh School	800	North
Pond	1,800	Northeast
Catfish Brook	2,150	Southeast
Residences	Along All Property Boundaries	

Rare Species in Vicinity

Indiana bat (*Myotis sodalis*)

Site Description

About 70 percent of the property is characterized as forested. In the western portion of the property, a deciduous wooded wetland area is fed by several intermittent stream channels. A pocket of herbaceous wetlands is also found on the property, to the east of the Armory building. This area is surrounded by forest and an open field which is predominantly vegetated by grasses. The land immediately surrounding the Armory is kept mowed, and a large gravel parking lot lies to the west of the building. The North and West property boundaries are formed by Western Ave. and Bailey Hollow Rd., respectively, and the South and East boundaries are adjacent to suburban properties. Rare species include the Long-tail salamander (*Eurycea longicauda longicauda*). The vegetation community on site consists of several canopy and understory species. More information about site species can be found in the 2018 Rare Species Report.

Archeological Resources

Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
Yes	18	18	None

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
00001	Armory	1937	Eligible
00002	MVSB	1956	Not eligible
00003	Flam Storage	1960	To be demolished – Approved by SHPO in 2022
00005	HazMat	1999	Evaluate when 50 years old
00006	Org Storage	2001	Evaluate when 50 years old
Historic District: The installation does not contain a historic district, nor is it within a local historic district			
Historic Landscape: The installation does not contain a historic landscape			

Investigation Records		
Investigation Type	**Authors**	**Title**
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Archaeological Survey (2004)	John Milner Associates	Archaeological Investigations for the NJARNG Sea Girt, Morristown, Fort Dix, Picatinny, Lawrenceville, Vineland, and West Orange Facilities
Building Survey (2005)	John Milner Associates	Architectural Inventory of NJARNG Armories Supplementary Report

Monuments, Objects, or Displays

The Inventory of Historical Objects (USACE 1999) catalogued 137 items at Morristown, including 4 artillery pieces – a 75mm pack howitzer and 3 105mm saluting howitzers; a reconstructed Napoleon 12-pounder cannon and 2 coehorn mortars, 2 WWII-era M-37 self-propelled howitzers, a self-propelled 155mm howitzer, and a 12-pound brass muzzle loader. A site visit in 2006 found all these items present except for the 75mm pack howitzer, 3 105mm saluting howitzers, which have apparently been transferred to the Fort Dix UTES and other Armories, respectively. The WWII-era M-37 howitzers are sitting off the side of an access road on the side of the installation and in poor condition. A boy scout dedication marker and tree are also present at this installation.

Agreement Documents

There are currently no agreement documents (MOAs) in place for this installation.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? No

New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Mount Holly Armory/ 34B45	1670 Route 38 East	Mount Holly	08060-9701
PI Number	**Type of Facility:**	**County:**	**Block/Lot Number:**
46323, NJD980790943	Armory	Burlington	22/4-B
USGS Quad:	**Elevation (range):**	**Total Acreage:**	**Wetlands Acreage:**
Mount Holly	55-60 feet	5.96	0
Watershed:	**NJDEP Planning District**	**National Register of Historic Places Eligible?**	**Ongoing Site Remediation?**
Powells Run-North Branch Rancocas Creek	None	No	No
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner:**
No	No	Boiler Permit (3)	State
POC Information:	Jacob Falana (Armorer) (609)-802-2646		

Nearest Noise Sensitive Receptors and Surface Waters		
Receptors:	**Distance (ft):**	**Direction:**
Residences	90	South
Lake	950	Northeast
South Branch Rancocas Creek	2,100	North

Rare Species in Vicinity
None.

Site Description
Route 38 forms the northern boundary of the property, while Windmill and Stuyvesant Streets form the eastern and southern boundaries, respectively. The western boundary is marked by a line of shrubs, trees and grasses, since most of the property is mowed lawn. Buildings and parking lots occupy the northern half, while the southern portion is designated as a helicopter landing area. Several white ash (*Fraxinus americana*) trees are planted along Windmill Street.

Archeological Resources

Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
No	4.5 (unpaved only)	0	N/A

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
00001	Armory	1963	Not eligible
00003	Org Storage	2001	Evaluate when 50 years old
00011	Flam Storage	1963	Not eligible
Historic District: This installation does not contain a historic district, nor is it within a local historic district			
Historic Landscape: The installation does not contain a historic landscape			

Investigation Records		
Investigation Type	**Authors**	**Title**
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Archaeological Survey (2018)	Richard Grubb and Associates	Archaeological Investigations for the NJARNG Cherry Hill, Mount Holly, Riverdale, Westfield, and Woodbridge Facilities
Archaeological Survey (2020)	Richard Grubb and Associates	Archaeological Investigations for the NJARNG Cape May, Cherry Hill, Hammonton, Mount Holly, Somerset, Teaneck, Toms River, Westfield, and Woodstown Facilities

Monuments, Objects, or Displays

The Inventory of Historical Objects (USACE 1999) catalogued 61 items, most of which are documents, photographs, plaques, and trophies. The only federally-owned object is a M-59 armored personnel carrier.

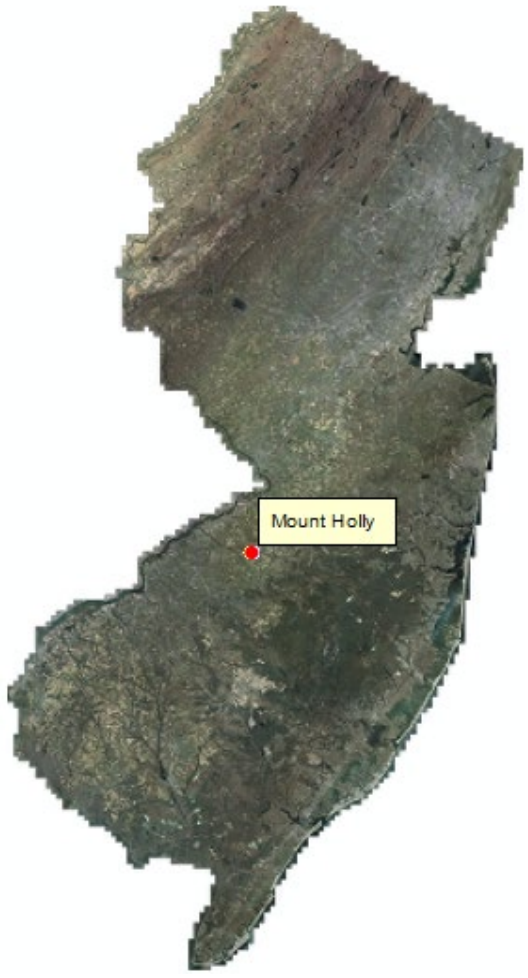
Agreement Documents

There are currently no agreement documents (MOAs) in place for this installation.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? No



New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Newark Armory	120 Roseville Ave	Newark	07107
PI Number	**Type of Facility:**	**County:**	**Block/Lot Number:**
06512, NJD980790950	Armory	Essex	1905/28
USGS Quad:	**Elevation (range):**	**Total Acreage:**	**Wetlands Acreage:**
Elizabeth	140-145 feet	2.00	0
Watershed:	**NJDEP Planning District:**	**National Register of Historic Places Eligible?**	**Ongoing Site Remediation?**
Second River-Passaic River	None	No	No
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner:**
No	No	Boiler Permits (2)	State
POC Information:	Wendell Laws (Armorer) (609)-802-4312		

Nearest Noise Sensitive Receptors and Surface Waters

Receptors:	Distance (ft):	Direction:
St Rose of Lima Church	80	South
First Hopewell Baptist Church	150	South
Roseville Community Charter School	300	Southwest
River	2,250	East
Residences	Adjacent to Western Property Boundary	

Rare Species in Vicinity

No Natural Heritage database search conducted for this installation.

Site Description

Located in the middle of a city block, this installation is very urban and is surrounded by buildings or pavement.

Archeological Resources

Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
No	2	0	N/A

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
00001	Armory	1899 (1910)	Not eligible
Historic District: The installation does not contain a historic district, nor is it within a local historic district			
Historic Landscape: The installation does not contain a historic landscape			

Investigation Records		
Investigation Type	**Authors**	**Title**
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Building Survey (2005)	John Milner Associates	Architectural Inventory of NJARNG Armories Supplementary Report
Archaeological Survey (2017)	Richard Grubb and Associates	Archaeological Investigations for the NJARNG Cape May, Hammonton, Newark, Somerset, Teaneck, Toms River, Washington, and Woodstown Facilities

Monuments, Objects, or Displays

The Inventory of Historical Objects (USACE 1999) catalogued 8 items at the Newark Armory, including an Armored Personnel Carrier (M-75, S/N 689) with Civil Defense markings. The APC is housed inside the drill hall and is not on display.

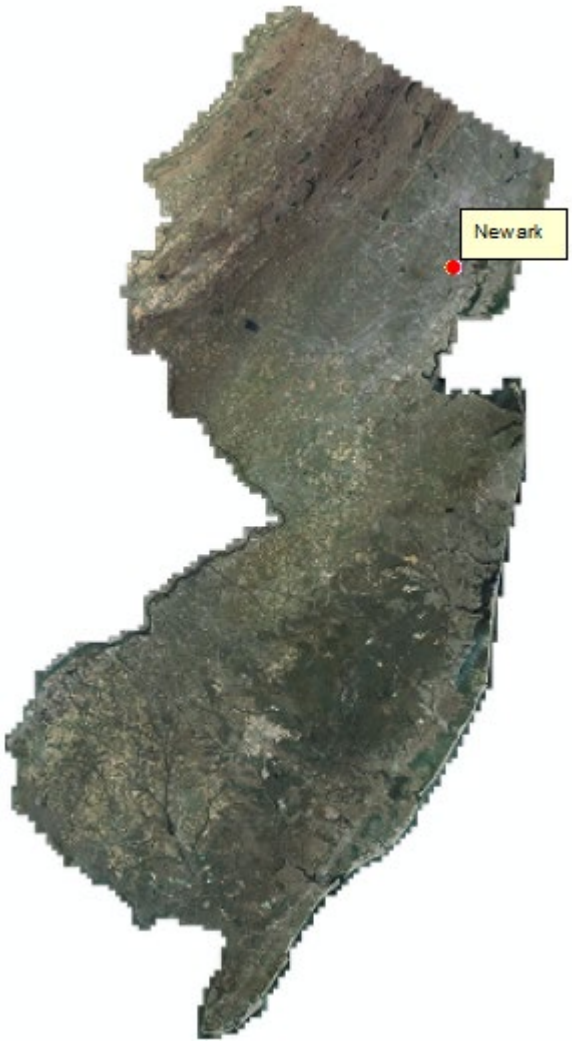
Agreement Documents

There are currently no agreement documents (MOAs) for this installation.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? No



New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Picatinny Arsenal/ 34A55	Lake Denmark & Snakehill Rd	Picatinny Arsenal	07806-5000
PI Number	**Type of Facility:**	**County:**	**Block/Lot Number:**
0055631, 1269, 143500138000, 1435003, 1435-06-006.1, 1435-07-0005.2	FMS	Morris	Federal Military Reservation
USGS Quad:	**Elevation (range):**	**Total Acreage:**	**Wetlands Acreage:**
Dover	850-905 feet	13.50	0.01
Watershed:	**NJDEP Planning District**	**National Register of Historic Places Eligible?**	**Ongoing Site Remediation?**
Beaver Brook	Highlands	No	No
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner:**
No	No	None	Federal
POC Information:	SGM Correa Pedro (FMS Shop Supervisor) (973)-891-3496		

Nearest Noise Sensitive Receptors and Surface Waters

Receptors:	Distance (ft):	Direction:
Community Recreation BR Trailer Park	300	South
Pond	525	Northeast
Hibernia Brook	750	Southeast
Lake Denmark	850	North

Rare Species in Vicinity

Bobcat (*Lynx rufus*)

Site Description

Property is fenced and almost all the area within the fenced is mowed in order to provide open space for flight activities. However, the fenceline is bordered by an upland mixed hardwood forest, dominated by sugar maple (*Acer saccharum*), on three sides. The unmowed areas within the fenceline are vegetated by shrubs and herbaceous species, such as staghorn sumac (*Rhus typhina*), Russian olive (*Elaeagnus angustifolia*), and wild rose (*Rosa acicularis*). A small seepage area runs northeast from the northwestern corner of the runway, continuing beyond the property fenceline into an area of deciduous wooded wetlands. Rare species include the Barred owl (*Strix varia*) and the Bobcat (*Lynx rufus).* More information about rare species can be found in the 2018 Rare Species Report.

Archeological Resources

Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
Yes	10	10	None

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
00001	Hangar	1978	Evaluate when 50 years old
03155	Storage	1995	Evaluate when 50 years old
Historic District: The installation does not contain a historic district, nor is it within a local historic district			
Historic Landscape: The installation does not contain a historic landscape			

Investigation Records		
Investigation Type	**Authors**	**Title**
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Archaeological Survey (2004)	John Milner Associates	Archaeological Investigations for the NJARNG Sea Girt, Morristown, Fort Dix, Picatinny, Lawrenceville, Vineland, and West Orange Facilities
Archaeological Survey (2006)	John Milner Associates	Archaeological Investigations for the NJARNG -Fort Dix, Picatinny, Lawrenceville, and Vineland Facilities

Monuments, Objects, or Displays

The Inventory of Historical Objects (USACE 1999) categorized 49 items at Picatinny FMS, all but one of which is framed and mounted on the wall. The unframed item is a memorial plaque mounted outside the FMS entry.

Agreement Documents

There are currently no agreement documents (MOAs) in place for this installation.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? No

New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Princeton Warehouse	River Rd, PO Box 166	Princeton	08540-0166
PI Number	**Type of Facility:**	**County:**	**Block/Lot Number:**
000694, NJR986658128	Warehouse	Mercer	32.04/36
USGS Quad:	**Elevation (range):**	**Total Acreage:**	**Wetlands Acreage:**
Monmouth Junction	65-90 feet	8.20	1.03
Watershed:	**NJDEP Planning District**	**National Register of Historic Places Eligible?**	**Ongoing Site Remediation?**
Lower Millstone River	Delaware Raritan Canal	No	No
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner**
Yes	No	None	State
POC Information:	Chris Harris (Repairer/Landlord) (609)-924-2062		

Nearest Noise Sensitive Receptors and Surface Waters

Receptors:	Distance (ft):	Direction:
Residences	450	South
Millstone River	850	East
Delaware & Raritan Canal	1,000	East
Church of Christ	1,3000	South

Rare Species in Vicinity

Bald eagle (*Melanerpes erythrocephalus*)

Site Description

River Road forms the easternmost boundary of the property, while the other three boundaries are not marked by any constructed features. Most of the southern half of the property is dominated by forested land. An intermittent stream runs close to the western boundary and is surrounded by wetlands. South of the parking lot, a small area of herbaceous wetlands is also fed by this drainage pattern. The stream channel continues to the northern section of the property, where it is contained within steep hillsides. Forested areas on site have canopy layers of red maple (*Acer rubrum*), pin oak (*Quercus palustris*), green ash (*Fraxinus pennsylvanica*), and sassafras (*Sassafras sp*). The understory consists of varies species such as Virginia creeper (*Parthenocissus quinquefolia*), soft rush (*Juncus effusus*), Japanese honeysuckle (*Lonicera japonica*), and poison ivy (*Toxicodendron radica*). Rare species include the Robbin's pondweed (*Potamogenton robbinsii*). More information can be found in the 2018 Rare Species Report.

Archeological Resources

Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
No	7.1 (unpaved only)	0	N/A

Historic Buildings and Structures

Building	Building Type	Date Constructed	Evaluation Status
00001	Armory/Warehouse	1930	Needs to be evaluated

Historic District: The installation does not contain a historic district

Historic Landscape: The installation does not contain a historic landscape

Investigation Records

Investigation Type	Authors	Title
Building Survey	R. Christopher	Architectural Inventory of NJARNG Facilities

(1999)	Goodwin and Associates	
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Archaeological Survey (2021)	Hunter Research	Archaeological Investigations for the NJARNG Atlantic City, Bordentown, Dover, Flemington, Freehold, Hackettstown, Jersey City, Princeton, Trenton Mercer, and Woodbury Facilities

Monuments, Objects, or Displays

The Inventory of Historical Objects (USACE 1999) catalogued 2 wagon wheels in the warehouse that had been converted to chandeliers.

Agreement Documents

There are currently no agreement documents (MOAs) in place for this installation.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? No

New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Riverdale Armory/ 34B85	107 Newark Pompton Tnpk	Riverdale	07457
PI Number	**Type of Facility:**	**County:**	**Block/Lot Number:**
000681, 25811, NJD980791016	Armory	Morris	26/23, 24
USGS Quad:	**Elevation (range):**	**Total Acreage:**	**Wetlands Acreage:**
Pompton Plains	200-215 feet	7.62	0
Watershed:	**NJDEP Planning District**	**National Register of Historic Places Eligible?**	**Ongoing Site Remediation?**
Lower Pequannock River	Highlands	No	No
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner:**
Yes	No	New Permit Boiler Replacement	State
POC Information:	Raul Chacon (Armorer) (973)-839-4953		

Nearest Noise Sensitive Receptors and Surface Waters		
Receptors:	**Distance (ft):**	**Direction:**
Residences	50	West
Sunshine School	250	North
Tributary of Pompton River	1,000	Northeast

Rare Species in Vicinity

No Natural Heritage database search conducted for this installation.

Site Description

The western and southern property boundaries are formed by Newark-Pompton Turnpike and Riverdale Rd., respectively. The eastern boundary follows a railroad right of way, and the northern portion of the property is adjacent to NJDOT property. Most of the installation is paved and contains several buildings for administrative and vehicle maintenance use, except for the lawn and landscaping in the southwest corner.

Archeological Resources

Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
No	7	0	N/A

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
00001	Armory	1963	Not eligible
00002	FMS	1949	Not eligible
00003	Flam Storage	1960	Not eligible
00006	Org Storage	2001	Evaluate when 50 years old
Historic District: The installation does not contain a historic district, nor is it within a local historic district			
Historic Landscape: The installation does not contain a historic landscape			

Investigation Records		
Investigation Type	**Authors**	**Title**
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Archaeological Survey (2018)	Richard Grubb and Associates	Archaeological Investigations for the NJARNG Cherry Hill, Mount Holly, Riverdale, Westfield, and Woodbridge Facilities

Monuments, Objects, or Displays

The Inventory of Historical Objects (USACE 1999) catalogued 60 items at the Riverdale Armory, most of which are trophies and plaques. No static displays, monuments, memorials, or exterior plaques are present at this installation.

Agreement Documents

There are currently no agreement documents (MOAs) in place for this installation.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? No

New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Sea Girt NGTC /34B90	100 Camp Drive	Sea Girt	08750-0277
PI Number	**Type of Facility:**	**County:**	**Block/Lot Number:**
000682, 020261, NJD980791024	Training Center	Monmouth	85/1
USGS Quad:	**Elevation (range):**	**Total Acreage:**	**Wetlands Acreage:**
Point Pleasant	<20 feet	173.53	5.08
Watershed:	**NJDEP Planning District:**	**National Register of Historic Places Eligible?**	**Ongoing Site Remediation?**
Lower Manasquan River	CAFRA Zone	Yes	Yes
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner:**
Yes	No	Dust Collector Permit (1) and Emergency Generator Permits (2)	State
POC Information:	Gary Schmitz (Facility Manager) (732)-974-5952		

Nearest Noise Sensitive Receptors and Surface Waters

Receptors:	Distance (ft):	Direction:
Residences	50	North
Sea Girt Elementary School	875	North
Stockton Lake	Adjacent to Southern Property Boundary	
Atlantic Ocean	Adjacent to Eastern Property Boundary	

Rare Species in Vicinity

Osprey (*Pandion halioaetus*)	Seabeach amaranth (*Amaranthus pumilus*)
Seabeach knotweed (*Polygonum glaucum*)	Piping plover (*Charadrius melodus*)
Least tern (*Sternula antillarum*)	American Kestrel (*Falco sparverius*)
Peregrine falcon (*Falco peregrinus*)	American Oystercatcher (*Haematopus palliatus*)
Common tern (*Sterna hirundo*)	Semipalmated sandpiper (*Calidris pusilla*)
Sanderling (*Calidris alba*)	Great blue heron (*Ardea herodias*)
Horned lark (*Eremophila alpestris*)	Snowy egret (*Egretta thula*)
Fowler's toad (*Bufo fowleri*)	Seabeach sandwort (*Honkenya sp.*)

Site Description

This property is surrounded by residential communities on the north, south, and west, and is adjacent to the Atlantic Ocean on the east. Most of the land is maintained as open, mowed fields, although a few acres of dune habitat remain as a buffer between the installation and the shoreline. Disturbance has altered the vegetative composition of the dune community, but some pure patches of beach grass (*Ammophila brevilgulata)* remain. The greatest concentration of buildings is in the northwest corner of the property, although a network of roads run throughout the southern property. Along the southern boundary adjacent to Stockton Lake and a tidal marsh community is an area designated for camping. Additionally, two very different wetland communities exist in isolated patches, a scrub/shrub wetland in the southwest corner and an herbaceous community in the southeastern portion of the site.

Archeological Resources

Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
Yes	101	101	2 isolated artifacts

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
00001	Quarters 1	1930 (1925)	Eligible
00003	Transient UPH	1930	Not eligible
00004	Building	1930	Not eligible
00005	Shower Bldg	1930	Not eligible
00006	Transient UPH	1930	Not eligible
00007	Brigade HQ	1969	Needs to be evaluated
00008	Transient UPH	1970	Needs to be evaluated
00009	Forensic Lab	1970	Federal building – NJARNG does not evaluate
00011	Dining Facility	1967	Not eligible
00014	Gen Instr	1930	Not eligible
00015	Transient UPH	1930	Not eligible
00017	Transient UPH	1930	Not eligible
00018	Transient UPH	1930	Not eligible
00019	Transient UPH	1930	Not eligible
00020	Transient UPH	1930	Not eligible
00021	Transient UPH	1930	Not eligible
00022	Transient UPH	1930	Not eligible
00023	Transient UPH	1930	Not eligible
00024	Transient UPH	1930	Not eligible
00025	Transient UPH	1930	Not eligible
00026	Gen Instr	1940	Not eligible
00027	Gen Instr	1940	Not eligible
00028	HQ	1989	Evaluate when 50 years old
00029	Gen Instr	1940	Not eligible
00030	Gen Instr	1940	Not eligible
00031	Gen Instr	1940	Not eligible
00032	Transient UPH	1940	Not eligible
00033	Gen Instr	1940	Not eligible
00034	Gen Instr	1940	Not eligible
00035	Armory	1977	Evaluate when 50 years old
00036	FMS #2	1977	Evaluate when 50 years old
00037	Gen Instr	2002	Evaluate when 50 years old
00041	Cmnd Ctr	2001	Evaluate when 50 years old
00054	Gen Instr	1930	Not eligible
00055	Gen Instr	1940	Not eligible
00056	Storage	1940	Not eligible
00058	Gen Instr	1930	Not eligible
00059	Shop	1936	Not eligible
00060	Storage	1936	Not eligible
00064	Health Clinic	1930	Not eligible
00065	Storage	1930	Not eligible
00066	Museum	1930	Not eligible
00071	Ammo Storage	1930	Not eligible
00072	Org Storage	2001	Evaluate when 50 years old

00073	Gen Instr	1930	Not eligible
00074	Bath House	2001	Evaluate when 50 years old
00080	Storage	1930	Not eligible
00081	Storage	1935	Not eligible
00093	Storage	1940	Not eligible
00094	Target House	1990	Evaluate when 50 years old
00095	Range Spt Bldg	1990	Evaluate when 50 years old

Historic District: The installation does not contain a historic district, nor is it within a local historic district

Historic Landscape: The installation does not contain a historic landscape

Investigation Records

Investigation Type	Authors	Title
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Archaeological Survey (2004)	John Milner Associates	Archaeological Investigations for the NJARNG Sea Girt, Morristown, Fort Dix, Picatinny, Lawrenceville, Vineland, and West Orange Facilities

Monuments, Objects, or Displays

The National Guard Militia Museum of New Jersey is located at Sea Girt NGTC. The Inventory of Historical Objects (USACE 1999) catalogued over 4,100 items in the Museum collections, although not all the items are currently housed there. Of note, the Museum collection includes the "Intelligent Whale," a Civil War-era submarine acquired by the Museum, a library, and a park containing static vehicle displays.

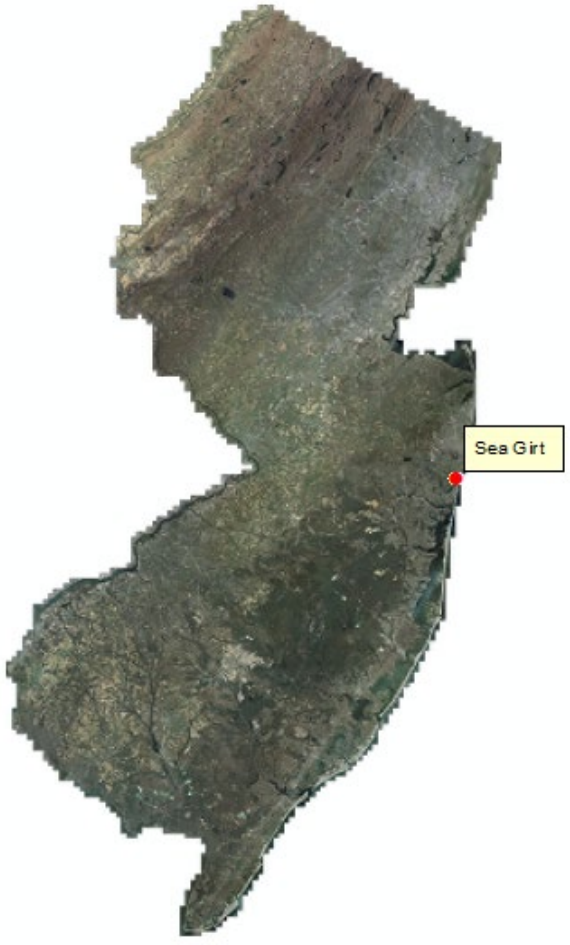
Agreement Documents

There are currently no agreement documents (MOAs) in place for this installation.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as "of concern or significance" to a federally recognized tribe? No



New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Somerset Armory/ 34B98	1060 Hamilton St	Somerset/Franklin Twp	08873
PI Number:	**Type of Facility:**	**County:**	**Block/Lot Number:**
000683, 35335, NJD980791032	Armory	Somerset	103/2
USGS Quad:	**Elevation (range):**	**Total Acreage:**	**Wetlands Acreage:**
New Brunswick	120-130 feet	20.07	0
Watershed:	**NJDEP Planning District**	**National Register of Historic Places Eligible?**	**Ongoing Site Remediation?**
Mile Run-Raritan River	Delaware Raritan Canal	No	No
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner:**
Yes	Yes - 1	New Permit Boiler Replacement	State
POC Information:	Robert Fallat (Armorer) (732)-418-3320 ext. 110		

Nearest Noise Sensitive Receptors and Surface Waters

Receptors:	Distance (ft):	Direction:
Residences	100	North
Emmanuel Tabernacle Baptist Apostolic Faith Church	400	West
Tributary of Delaware & Raritan Canal	2,750	North
Six Mile Run	3,000	West

Rare Species in Vicinity

Bald eagle (*Haliaeetus leucoccephalus*)	Wood thrush (*Hylocichla mustelina*)
Cooper's hawk (*Accipiter cooperii*)	Spotted turtle (*Clemmys guttata*)
Red-shouldered hawk (*Buteo lineatus*)	Indiana bat (*Myotis sodalis*)
Eastern box turtle (*Terrapene carolina carolina*)	Northern harrier (*Circus cyaneus*)

Site Description

Hamilton Street forms the northern boundary of the installation. Most of the property is occupied by buildings, parking areas, and a large vehicle compound. A helicopter landing area, which has been graded to collect drainage, also occupies a large area in the southeastern section. The northwestern corner of the property is forested, with red maple (*Acer rubrum*) and sugar maple (*A. saccharum*) being the dominant canopy species. Another forested area exists in the southeast corner, which is highly disturbed. The understory is denser in this area, and the canopy is dominated by black cherry (*Prunus serotina*), red oak (*Quercus rubra*), and balsam poplar (*Populus balsamifera*). Mapping of deciduous scrub/shrub wetlands does not appear accurate, and drainage patterns may have been altered by the artificial drainage system created in the helicopter landing zone.

Archeological Resources

Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
No	12.5	0	N/A

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
00001	Armory	1980	Not eligible
00002	FMS #8	1980	Not eligible
00005	Org Storage	2001	Evaluate when 50 years old
Historic District: The installation does not contain a historic district, nor is it within a local historic district			
Historic Landscape: The installation does not contain a historic landscape			

Investigation Records		
Investigation Type	**Authors**	**Title**
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Archaeological Survey (2017)	Richard Grubb and Associates	Archaeological Investigations for the NJARNG Cape May, Hammonton, Newark, Somerset, Teaneck, Toms River, Washington, and Woodstown Facilities
Archaeological Survey (2020)	Richard Grubb and Associates	Archaeological Investigations for the NJARNG Cape May, Cherry Hill, Hammonton, Mount Holly, Somerset, Teaneck, Toms River, Westfield, and Woodstown Facilities

Monuments, Objects, or Displays

The Inventory of Historical Objects (USACE 1999) catalogued 45 items at the Somerset Armory including a M-5A1 tank (federal).

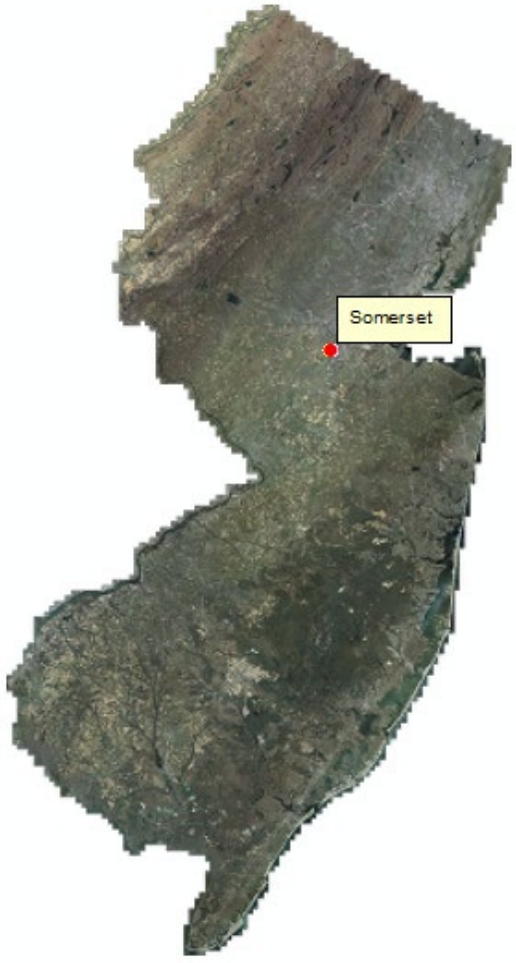
Agreement Documents

There are currently no agreement documents (MOAs) in place for this installation.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? No



New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Teaneck Armory/ 34C05	1799 Teaneck Rd	Teaneck	07666-0687
PI Number	**Type of Facility:**	**County:**	**Block/Lot Number:**
01771, 533171, NJD980791040	Armory	Bergen	5301/1
USGS Quad:	**Elevation (range):**	**Total Acreage:**	**Wetlands Acreage:**
Yonkers	50-80 feet	14.42	0
Watershed:	**NJDEP Planning District:**	**National Register of Historic Places Eligible?**	**Ongoing Site Remediation?**
Overpeck Creek	None	Yes	Yes
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner:**
Yes	No	Boiler Permit (4)	State
POC Information:	Charles Parsons (Armorer) (201)-833-0784		

Nearest Noise Sensitive Receptors and Surface Waters		
Receptors:	**Distance (ft):**	**Direction:**
Residences	100	North
Church of Ged	100	North
Tributary of Overpeck Creek	550	East
Pond	900	East

Rare Species in Vicinity
No Natural Heritage database search conducted for this installation.

Site Description
Most of the property is mowed grass, gravel or pavement, with a few mature trees such as red oak (*Quercus rubra*), or honey locust (*Gleditsia triacanthos*) lining the streets (Teaneck, Liberty and Ward) which form the property boundary. The property slopes to the southeast.

Archeological Resources			
Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
No	6.5 (unpaved only)	0	N/A

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
00001	Armory	1938	Eligible
00002	FMS	1955	Not eligible
00003	Flam Storage	1955	Not eligible
00005	Org Storage	2000	Evaluate when 50 years old
Historic District: The installation does not contain a historic district, nor is it within a local historic district			
Historic Landscape: The installation does not contain a historic landscape			

Investigation Records		
Investigation Type	**Authors**	**Title**
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Archaeological Survey (2017)	Richard Grubb and Associates	Archaeological Investigations for the NJARNG Cape May, Hammonton, Newark, Somerset, Teaneck, Toms River, Washington, and Woodstown Facilities
Archaeological Survey (2020)	Richard Grubb and Associates	Archaeological Investigations for the NJARNG Cape May, Cherry Hill, Hammonton, Mount Holly, Somerset, Teaneck, Toms River, Westfield, and Woodstown Facilities

Monuments, Objects, or Displays

The Inventory of Historical Objects (USACE 1999) catalogued 69 items at Teaneck Armory, including a M-728 Combat Engineer Vehicle and a M-42A1 "Duster" anti-aircraft gun.

Agreement Documents

There are currently no agreement documents (MOAs) for this installation.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as "of concern or significance" to a federally recognized tribe? No

New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Toms River Armory/ 34C10	1200 Whitesville Rd	Toms River/Dover Twp	08753-4130
PI Number	**Type of Facility:**	**County:**	**Block/Lot Number:**
78479, NJD980791057	Armory	Ocean	409/30-2
USGS Quad:	**Elevation (range):**	**Total Acreage:**	**Wetlands Acreage:**
Toms River	25-45 feet	31.85	6.84
Watershed:	**NJDEP Planning District:**	**National Register of Historic Places Eligible?**	**Ongoing Site Remediation?**
Middle Toms River	CAFRA Zone	No	No
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner:**
Yes	No	None	State
POC Information:	Ed Torres (Armorer) (732)-797-0374		

Nearest Noise Sensitive Receptors and Surface Waters

Receptors:	Distance (ft):	Direction:
Winding River Park	300	Northwest
Pond	350	West
Residences	850	Northwest
Toms River	1,150	West

Rare Species in Vicinity

Northern long-eared bat (*Myotis septentrionalis*)

Site Description

This installation is mostly forested, and most of the Armory buildings and parking lots are concentrated in the northern corner of the property. The eastern portion of the property encompasses a utility easement, which is frequently mowed. Some emergent wetlands in this area shows signs of recent cutting and disturbance. The forested communities on site consist of red maple (*Acer rubrum*), pitch pine (*Pinus rigida*), sweetgum (*Liquidambar styraciflua*), and white oak (*Quercus alba*). Understory species include coastal sweet pepperbush (*Clethra alnifolia*), tussock sedge (*Carex stricta*), blueberry (*Cyanococcus*), and mountain laurel (*Kalmia latifolia*). More information can be found in the 2018 Rare Species Report.

Archeological Resources

Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
No	27.3 (unpaved)	0	N/A

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
00001	Armory	1956	Not eligible
00002	Shed	1956	Not eligible
00003	Flam Storage	1960	Not eligible
00004	UMTB	1987	Not eligible
00005	Org Storage	2001	Evaluate when 50 years old
00114	HazMat Bldg	1997	Evaluate when 50 years old

Historic District: The installation does not contain a historic district, nor is it within a local historic district

Historic Landscape: The installation does not contain a historic landscape

Investigation Records		
Investigation Type	**Authors**	**Title**
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Archaeological Survey (2017)	Richard Grubb and Associates	Archaeological Investigations for the NJARNG Cape May, Hammonton, Newark, Somerset, Teaneck, Toms River, Washington, and Woodstown Facilities
Archaeological Survey (2020)	Richard Grubb and Associates	Archaeological Investigations for the NJARNG Cape May, Cherry Hill, Hammonton, Mount Holly, Somerset, Teaneck, Toms River, Westfield, and Woodstown Facilities

Monuments, Objects, or Displays

The Inventory of Historical Objects (USACE) has catalogued 4 items at Toms River Armory, including 2 trophies, a drawing, and a memorial plaque to Chief Warrant Officer Zarillo. A site visit to the installation in 2006 could not locate the memorial plaque or anyone who had ever seen it.

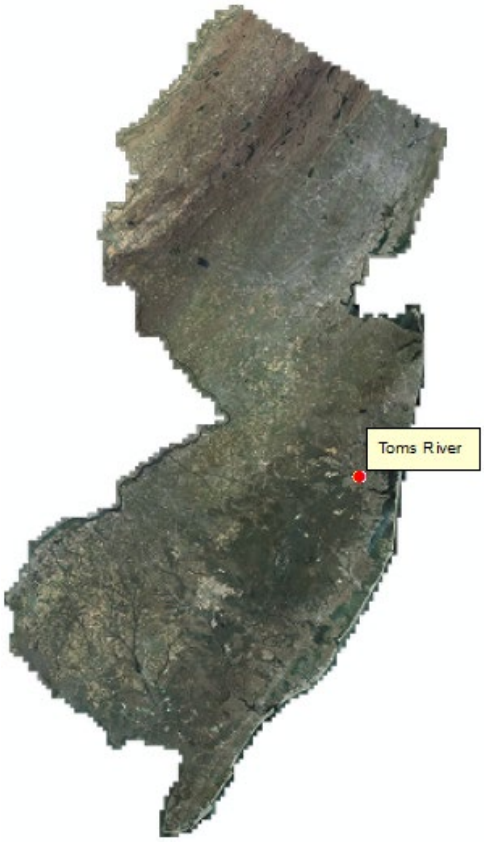
Agreement Documents

There are currently no agreement documents (MOAs) in place for this installation.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? No



New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Vineland Armory/ 34C25	2560 S Delsea Dr	Vineland	08360-7093
PI Number	**Type of Facility:**	**County:**	**Block/Lot Number:**
0614-20-00021, 523303, 75330, NJ4210090060, NJD980791073	Armory	Cumberland	962/1
USGS Quad:	**Elevation (range):**	**Total Acreage:**	**Wetlands Acreage:**
Milleville	70-100 feet	44.61	0.08
Watershed:	**NJDEP Planning District:**	**National Register of Historic Places Eligible?**	**Ongoing Site Remediation?**
Union Lake-Maurice River	Historic - NRHP	Yes (NJHPO Opinion)	Yes
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner:**
Yes	No	Boiler Permit (1)	State
POC Information:	Phillip Fiore (Armorer) (609)-794-5793		

Nearest Noise Sensitive Receptors and Surface Waters

Receptors:	Distance (ft):	Direction:
Residences	225	South
Straton Hall/Cumberland Christian School	575	West
Closed lake	2,000	Northeast
Parvin Branch of Maurice River	3,600	North

Rare Species in Vicinity

Brown thrasher (*Toxostoma rufum*)

Site Description

Hwy 47, or Delsea Drive, forms the eastern property boundary, and the main ICRC facilities are located along this road. In the front of the ICRC is an expansive lawn, and behind it is a vehicle compound and fields of successional grass communities. A network of unpaved roads navigates throughout the forest to the west, south, and east of the ICRC. The wetland flora community consists of multiflora rose (*Rosa multiflora*), blackberry (*Rhubus allegheny*), blueberry (Cyanococcus), false nettle (*Boehmeria cylindrica*), threesquare (*Schoenoplectus pungens*), pokeweed (*Phytolacca decandra*), spotted water hemlock (*Cicuta maculata*), forked bluecurls (*Trichostema dichotomum*), soft rush (*Juncus effusus*), swamp smartweed (*Polygonum hydropiperoides*), Japanese honeysuckle (*Lonicera japonica*), and lance-leaved goldenrod (*Euthamia graminifolia*). Dominant trees in the forest community include scrub pine (*P. virginia*), white oak (*Quercus alba*), pitch pine (*P. rigida*), red cedar (*Juniperus virginia*), red oak (*Quercus rubra*), sassafras (*Sassafras albidum*), pignut hickory (*Carya glabra*), and blackjack oak (*Q. marilandica.* More information can be found in the 2018 Rare Species Report.

Archeological Resources

Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
Yes	42	42	None

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
00001	Armory	1941	Eligible
00002	FMS #10	1956	Not eligible
00003	Org Storage	2001	Evaluate when 50 years old
00004	Flam Storage	1960	Not eligible
Historic District: The installation does not contain a historic district, nor is it within a local historic district			
Historic Landscape: The installation does not contain a historic landscape			

Investigation Records		
Investigation Type	**Authors**	**Title**
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Archaeological Survey (2004)	John Milner Associates	Archaeological Investigations for the NJARNG Sea Girt, Morristown, Fort Dix, Picatinny, Lawrenceville, Vineland, and West Orange Facilities

Monuments, Objects, or Displays

The Inventory of Historical Objects (USACE 1999) catalogued 57 items, including 2 M-60 tanks flanking the flagpole and a M-4 Sherman tank.

Agreement Documents

There are currently no agreement documents (MOAs) in place for this installation.

GIS Data Layers

The following GIS data sets are populated for this installation:

Cult_probable_sensitive_area	Structure_existing_area
Photograph_location_point	Cultural_cleared_area
Cultural_survey_area	Cultural_survey_point
Historic_feature_point	Historic_structure_area

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? No

New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Warren Grove	Bombing Range Rd	Bass River Twp	08005
PI Number	**Type of Facility:**	**County:**	**Block/Lot Number:**
013040, 11068W, 968288, NJX000337188	Helicopter Training Area	Burlington	98/10, 98/2A, 98/1
USGS Quad:	**Elevation (range):**	**Total Acreage:**	**Wetlands Acreage:**
New Gretna	120-140 feet	128.08	0
Watershed:	**NJDEP Planning District:**	**National Register of Historic Places Eligible?**	**Ongoing Site Remediation?**
Wading River	Pinelands Village	No	No
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner:**
None	No	None	Federal
POC Information:	Jose Vidal (Real Property Manager) (609)-761-6138		

Nearest Noise Sensitive Receptors and Surface Waters		
Receptors:	**Distance (ft):**	**Direction:**
Lake	1,700	East

Rare Species in Vicinity
No Natural Heritage database search conducted for this installation.

Site Description
Warren Grove is a helicopter training area located in Bass River Township, NJ. The site consists primarily of forests and bare ground. The northeast section of the property has a few buildings and structures. Surrounding the property on all sides are maintained forested areas accompanied with bare ground paths.

Archeological Resources			
Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
Leased Property – N/A			

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
MVSB	MVSB	1991	Evaluate when 50 years old
Historic District: The installation does not contain a historic district, nor is it within a local historic district			
Historic Landscape: Historic Landscape determination has not been done at this site since it is a leased property.			

Investigation Records		
Investigation Type	**Authors**	**Title**
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard

Monuments, Objects, or Displays

Inventory of monuments, objects, or displays has not been conducted for this site by NJDMAVA since it is a leased property.

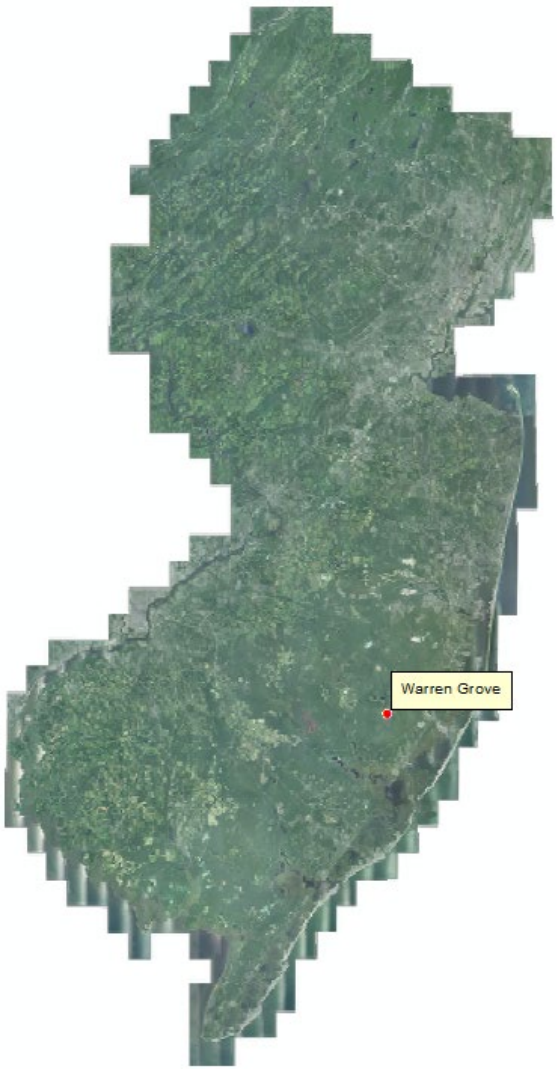
Agreement Documents

No agreement documents have been made in relation to this site from NJDMAVA as it is a leased property.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Not by NJDMAVA

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? None identified by NJDMAVA



New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Washington Armory (Port Murray) / 34C30	550 Route 57	Port Murray/Mansfield Twp	07865
PI Number:	**Type of Facility:**	**County:**	**Block/Lot Number:**
000688, 85233, NJD980791081	Armory	Warren	1509/6-A
USGS Quad:	**Elevation (range):**	**Total Acreage:**	**Wetlands Acreage:**
Washington	560-580 feet	15.60	0
Watershed:	**NJDEP Planning District:**	**National Register of Historic Places Eligible?**	**Ongoing Site Remediation?**
Outlet Musconetcong River	Highlands	No	No
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner:**
None	No	New Permit Changing to Gas	State
POC Information:	Charles Rissmiller (Regional Manager) (908)-684-3198		

Nearest Noise Sensitive Receptors and Surface Waters

Receptors:	Distance (ft):	Direction:
Residences	50	East
Streams	1,850	Northwest
Tributary of Musconetcong River	3,000	East

Rare Species in Vicinity

Northern long-eared bat (*Myotis septentrionalis*) Indiana bat (*Myotis sodalis*)

Site Description

Hwy 57 forms the northern boundary of the property, and the Armory facilities are concentrated in the northern section. The greater part of the installation is occupied by fields, occasionally separated by a line of trees. Field areas are frequently mowed, especially in the southeastern portion of the property. The forest flora community consists predominantly of black cherry (*Prunus serotina*), sassafras (*Sassafras albidum*), staghorn sumac (*Rhus typhina*), dogwood (*Cornus*), red cedar (*Juniperus virginia*), Russian olive (*Elaeagnus angustifolia*), honeysuckle (*Lonicera*), goldenrod (*Solidago*), milkweed (*Asclepias*), poison ivy (*Toxicodendron radicans*), Virginia creeper (*Parthenocissus quinquefolia*), red raspberry (*Rubus strigosus*), wild rose (*Rosa acicularis*), and garlic mustard (*Alliaria petiolate*). More information about site species can be found in the 2018 Rare Species Report.

Archeological Resources

Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
No	30.5 (unpaved only)	0	N/A

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
00001	Armory	1958	Not eligible
00003	Org Storage	2001	Evaluate when 50 years old
Historic District: The installation does not contain a historic district, nor is it within a local historic district			
Historic Landscape: The installation does not contain a historic landscape			

Investigation Records		
Investigation Type	**Authors**	**Title**
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Archaeological Survey (2017)	Richard Grubb and Associates	Archaeological Investigations for the NJARNG Cape May, Hammonton, Newark, Somerset, Teaneck, Toms River, Washington, and Woodstown Facilities

Monuments, Objects, or Displays

The Inventory of Historical Objects (USACE 1999) catalogued 49 items at the Washington Armory, including 2 armored vehicles (federal), an M-113 APC, and a M-60 MBT.

Agreement Documents

There are currently no agreement documents (MOAs) in place for this installation.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? No

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New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Westfield Armory/ 34C35	500 Rahway Ave	Westfield	07090-3335
PI Number:	**Type of Facility:**	**County:**	**Block/Lot Number:**
000689, 41212, 525416, NJ021009006, NJD980791099	Armory	Union	751/40
USGS Quad:	**Elevation (range):**	**Total Acreage:**	**Wetlands Acreage:**
Roselle	125-155 feet	12.21	0.07
Watershed:	**NJDEP Planning District**	**National Register of Historic Places Eligible?**	**Ongoing Site Remediation?**
Middlesex Reservoir Robinsons Branch	Historic - NRHP	Yes	No
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner:**
Yes	No	Boiler Permit (2)	State
POC Information:	Paul Rios (Armorer) (732)-815-4875		

Nearest Noise Sensitive Receptors and Surface Waters

Receptors:	Distance (ft):	Direction:
Westfield High School	250	Northeast
Robinsons Brook	950	Southeast
Residences	Adjacent to Western, Eastern, and Southern Property Boundaries	

Rare Species in Vicinity

Indiana bat (*Myotis sodalis*)	Bald eagle (*Haliaeetus leucocephalus*)
Northern long-eared bat (*Myotis septentrionalis*)	Blue-winged warbler (*Vermivora pinus*)
Kentucky warbler (*Oporonis discolor*)	Prairie warbler (*Dendroica discolor*)
Rusty blackbird (*Euphagus carolinus*)	Wood thrush (*Hylocichla mustelina*)

Site Description

The installation is bordered by Rahway Avenue on the northeastern side and extends in the southwest direction for several blocks. The Armory facilities encompass almost all the property, except for the forested area along the southeastern edge. This forest community appears mature, with a mix of sweetgum (*Liquidambar styraciflua*), northern red oak (*Quercus rubra*), white oak (*Q. alba*), beech (*Fagus grandifolia*), and hickory (*Carya spp*.) in the canopy. The western boundary appears more disturbed but is also densely vegetated.

Archeological Resources

Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
No	6.4 (unpaved)	0	N/A

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
00001	Armory	1925	Eligible
00002	FMS	1949	Not eligible
00003	Flam Storage	1960	To be demolished – Approved by SHPO in 2022
00005	Org Storage	2001	Evaluate when 50 years old
Historic District: The installation does not contain a historic district, nor is it within a local historic district			
Historic Landscape: The installation does not contain a historic landscape			

Investigation Records		
Investigation Type	**Authors**	**Title**
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Building Survey (2005)	John Milner Associates	Architectural Inventory of NJARNG Armories Supplementary Report
Archaeological Survey (2018)	Richard Grubb and Associates	Archaeological Investigations for the NJARNG Cherry Hill, Mount Holly, Riverdale, Westfield, and Woodbridge Facilities
Archaeological Survey (2020)	Richard Grubb and Associates	Archaeological Investigations for the NJARNG Cape May, Cherry Hill, Hammonton, Mount Holly, Somerset, Teaneck, Toms River, Westfield, and Woodstown Facilities

Monuments, Objects, or Displays

The Inventory of Historical Objects (USACE 1999) catalogued 430 items at the Westfield installation, most of which relate to the history of the 117th Calvary Association. No monuments, memorials, plaques, or static displays are present at this installation.

Agreement Documents

There are currently no agreement documents (MOAs) in place for this installation.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? No

New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
West Orange Armory/ 34C40	1299 Pleasant Valley Way	West Orange	07052-5269
PI Number:	**Type of Facility:**	**County:**	**Block/Lot Number:**
000690, 523712, NJD980791107	Armory	Essex	171/1
USGS Quad:	**Elevation (range):**	**Total Acreage:**	**Wetlands Acreage:**
Caldwell	385-600 feet	65.57	0.90
Watershed:	**NJDEP Planning District**	**National Register of Historic Places Eligible?**	**Ongoing Site Remediation?**
Upper Rahway River	Historic - NRHP	Yes	Yes
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner:**
Yes	No	Boiler Permits (2)	State
POC Information:	Richard King (Armorer) (973)-669-8962		

Nearest Noise Sensitive Receptors and Surface Waters

Receptors:	Distance (ft):	Direction:
Residences	60	South
Kessler Institute for Rehabilitation	350	North
West Branch Rahway River	600	East

Rare Species in Vicinity

None.

Site Description

The installation is bordered on the east by Pleasant Valley Way and extends westward into a deciduous hardwood forest. Most of the Armory facilities are located on the eastern third of the property, except for a tank training area located in the northwest section. As a result of the steep increase in elevation from east to west, a rocky outcropping separates the tank training area from the forest to the west. Several pockets of associated wetlands occur along the western boundary, including species such as multiflora rose (*Rosa multiflora*), Japanese barberry (*Berberis thunbergii*), Japanese stiltgrass (*Microstegium rimineum*), Virginia water horehound (*Lycopus americanus*), goldenrod (*Solidago*), arrowleaf tearthumb (*Persicaria sagittata*), soft rush (*Juncus effusus*), tussock sedge (*Carex stricta*), poison ivy (*Toxicodendron radicans*), American red raspberry (*Rubus strigosus*), water smartweed (*Persicaris amphibia*), and jewelweed (*Impatiens capensis*). Red maple (*Acer rubum*), white oak (*Quercus alba*), shagbark hickory (*Carya ovata*), and sweet cherry (*Prunus avium*) are the dominant trees of the forest. More information about site species can be found in the 2018 Rare Species Report.

Archeological Resources

Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
Yes	46	46	None

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
00001	Armory	1937	Eligible
00002	Comp Repair	1977	Not eligible
00003	CSMS	1958	Not eligible
00004	CSMS	1958	Not eligible
Historic District: The installation does not contain a historic district, nor is it within a local historic district			
Historic Landscape: The installation does not contain a historic landscape			

Investigation Records		
Investigation Type	**Authors**	**Title**
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Archaeological Survey (2004)	John Milner Associates	Archaeological Investigations for the NJARNG Sea Girt, Morristown, Fort Dix, Picatinny, Lawrenceville, Vineland, and West Orange Facilities

Monuments, Objects, or Displays

The Inventory of Historical Objects (USACE 1999) catalogued 785 items at the West Orange installation, most of which are the property of the Essex Troop Association. Among the federally-owned objects inventoried in 1999 were 2 anti-tank guns, an armored personnel carrier and a M-48 tank. State-owned items consist of a "Gamma Goat" and 2 trucks at the 50th CSMS. A site visit to the installation in 2006 found 1 anti-tank gun, the APC, and the M-48 tank on display in front of the Armory. The second anti-tank gun has been transferred to the museum at Sea girt, and the "Gamma Goat" has been transferred to Lawrenceville. The two tricks were not located.

Agreement Documents

There are currently no agreement documents (MOAs) in place for this installation.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as "of concern or significance" to a federally recognized tribe? No

New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Woodbridge Armory/ 34C45	625 Main St	Woodbridge	07095
PI Number:	**Type of Facility:**	**County:**	**Block/Lot Number:**
16786, NJD980791123	Armory	Middlesex	189/1
USGS Quad:	**Elevation (range):**	**Total Acreage:**	**Wetlands Acreage:**
Perth Amboy	78-98 feet	3.89	0
Watershed:	**NJDEP Planning District**	**National Register of Historic Places Eligible?**	**Ongoing Site Remediation?**
Woodbridge Creek-Arthur Kill	None	No	No
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner:**
No	No	None	State
POC Information:	John Murray (Armorer) (732)-815-4922		

Nearest Noise Sensitive Receptors and Surface Waters		
Receptors:	**Distance (ft):**	**Direction:**
Residences	60	West
Pond	900	East
Heards Brook	2,400	North

Rare Species in Vicinity

Northern long-eared bat (*Myotis septentrionalis*)

Site Description

Main Street forms the northern boundary of the installation, while the New Jersey Turnpike forms the southern boundary. The majority of the property is occupied by buildings and pavement, and the vegetated areas are predominantly mowed lawns with a few landscaping trees. Successional species such as winged sumac (*Rhus copallina*), black cherry (*Prunus serotina*), raspberry (*Rubus spp*.), and sweetgum (*Liquidambar styraciflua*) grow along the southern boundary.

Archeological Resources

Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
No	2.2 (unpaved only)	0	N/A

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
00001	Armory	1961	Not eligible
00002	Org Storage	2001	Evaluate when 50 years old
Historic District: The installation does not contain a historic district, nor is it within a local historic district			
Historic Landscape: The installation does not contain a historic landscape			

Investigation Records		
Investigation Type	**Authors**	**Title**
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Archaeological Survey (2018)	Richard Grubb and Associates	Archaeological Investigations for the NJARNG Cherry Hill, Mount Holly, Riverdale, Westfield, and Woodbridge Facilities

Monuments, Objects, or Displays

The Inventory of Historical Objects (USACE 1999) catalogued 2 M-114 APCs at Woodbridge.

Agreement Documents

There are currently no agreement documents (MOAs) in place for this installation.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? No

New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Woodbury Armory/ 34C50	658 N Evergreen Ave	Woodbury	08096-1399
PI Number:	**Type of Facility:**	**County:**	**Block/Lot Number:**
523767, 56022, NJ8210090066	Armory	Gloucester	BA-0150-A/1,2,3
USGS Quad:	**Elevation (range):**	**Total Acreage:**	**Wetlands Acreage:**
Woodbury	25-35 feet	4.86	0
Watershed:	**NJDEP Planning District:**	**National Register of Historic Places Eligible?**	**Ongoing Site Remediation?**
Woodbury Creek-Delaware River	Historic - NRHP	Yes	Yes
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner:**
Yes	No	New Permit Boiler Replacement and Boiler Permit (2)	State
POC Information:	George Moore, Jr. (Armorer) (856)-384-3772 ext. 119		

Nearest Noise Sensitive Receptors and Surface Waters

Receptors:	Distance (ft):	Direction:
Residences	100	North
Stewart Lake	675	South
St Stephan's Lutheran Church	1,200	South
Pond	1,800	East
Evergreen Avenue Elementary School	2,000	South

Rare Species in Vicinity

No Natural Heritage database search was conducted for this installation.

Site Description

The installation is bordered on the north, south, east, and west by Dare, Red Bank, Evergreen, and Roosevelt streets, respectively. Buildings and pavement occupy most of the property, with the vehicle compound encompassing over half of the area. Along Evergreen Street, the lawn is maintained and several large red maples (*Acer rubrum*), sugar maples (*A. saccharum*), red oaks (*Quercus rubra*), and white ash (*Fraxinus americana*) trees are planted.

Archeological Resources

Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
No	5	0	N/A

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
00001	Armory	1929	Eligible
00002	FMS	1941	Eligible
00003	MVSB	1941	Eligible
00004	MVSB	1941	Eligible
00005	Flam Storage	1960	Not eligible
00006	Org Storage	2001	Evaluate when 50 years old
Historic District: The installation does not contain a historic district, nor is it within a local historic district			
Historic Landscape: The installation does not contain a historic landscape			

Investigation Records		
Investigation Type	**Authors**	**Title**
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Archaeological Survey (2021)	Hunter Research	Archaeological Investigations for the NJARNG Atlantic City, Bordentown, Dover, Flemington, Freehold, Hackettstown, Jersey City, Princeton, Trenton Mercer, and Woodbury Facilities

Monuments, Objects, or Displays

The Inventory of Historical Objects (USACE 1999) catalogued 103 items at Woodbury, including a M-114 APC.

Agreement Documents

There are currently no agreement documents (MOAs) in place for this installation.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? No

New Jersey Department of Military and Veterans Affairs Fact Sheet

Natural and Cultural Resources

Site Name/FAC#	Address	City/Township	Zip Code
Woodstown Armory/ 34C53	501 N Main St	Woodstown Borough	08098-9549
PI Number:	**Type of Facility:**	**County:**	**Block/Lot Number:**
000693, 65110, NJD980791149	Armory	Salem	13/17.01, 14.01/2
USGS Quad:	**Elevation (range):**	**Total Acreage:**	**Wetlands Acreage:**
Woodstown	60-80 feet	8.09	0.06
Watershed:	**NJDEP Planning District**	**National Register of Historic Places Eligible?**	**Ongoing Site Remediation?**
Headwaters Salem River	None	No	No
Spill Plan?	**Regulated USTs?**	**Air Permit?**	**Land Owner:**
Yes	No	Boiler Permit (3) and Roof Top Unit Permit (1)	State
POC Information:	Frank Pimpinella (Regional Manager) (609)-463-0644		

Nearest Noise Sensitive Receptors and Surface Waters

Receptors:	Distance (ft):	Direction:
Residences	130	Southwest
Tributary to Salem River	250	North
Morning Star Baptist Church	750	Southwest
Woodstown Presbyterian Church	2,000	Southwest

Rare Species in Vicinity

No Natural Heritage database search conducted for this installation.

Site Description

Most of the property is mowed lawn, with several red oaks (*Quercus rubra*) planted along the southwest and northwest perimeters. The eastern half of the property is designated as a helicopter landing area and is kept mowed. The Armory building and parking areas are located on the western property. Prevalent canopy species on site include silver maple (*Acer saccharium*), red cedar (*Juniperus virginia*), sweetgum (*Liquidambar styraciflua*), ashleaf maple (*A. negundo)*, and Atlantic white cedar (*Chamaecyparis thyoides*). Common understory species include winged sumac (*Rhus copalline*), steeplebush (*Spiraea tomentosa*), poison ivy (*Toxicodendron radicans*), Virginia creeper (*Parthenocissus quinquefolia*), multiflora rose (*Rosa multiflora*), southern arrowwood (*Viburnum dentatum)*, phragmites (*Phragmites australis*), common threesquare (*Schoenoplectus pungens*), ground ivy (*Glechoma hederacea*), sensitive fern (*Onoclea sensibilis*), and soft rush (*Juncus effuses).* More information about site species can be found in the 2018 Rare Species Report.

Archeological Resources

Predictive Model/Sensitivity Assessment	Acreage Requiring Inventory	Acreage Inventoried to Date	Resources Identified
No	6.4 (unpaved only)	0	N/A

Historic Buildings and Structures			
Building	**Building Type**	**Date Constructed**	**Evaluation Status**
00001	Armory	1981	Evaluate when 50 years old
00002	Flam Storage	1981	Evaluate when 50 years old
00003	Org Storage	2001	Evaluate when 50 years old
Historic District: The installation does not contain a historic district, nor is it within a local historic district			
Historic Landscape: The installation does not contain a historic landscape			

Investigation Records		
Investigation Type	**Authors**	**Title**
Building Survey (1999)	R. Christopher Goodwin and Associates	Architectural Inventory of NJARNG Facilities
Inventory (1999)	USACE – St. Louis District	An Inventory of Historical Objects for the New Jersey Army National Guard
Archaeological Survey (2017)	Richard Grubb and Associates	Archaeological Investigations for the NJARNG Cape May, Hammonton, Newark, Somerset, Teaneck, Toms River, Washington, and Woodstown Facilities
Archaeological Survey (2020)	Richard Grubb and Associates	Archaeological Investigations for the NJARNG Cape May, Cherry Hill, Hammonton, Mount Holly, Somerset, Teaneck, Toms River, Westfield, and Woodstown Facilities

Monuments, Objects, or Displays

The Inventory of Historical Objects (USACE 1999) catalogued 4 items at Woodstown, including a bronze memorial plaque dedicated to MSG James F. Snodgrass from the now-closed Pitman Armory. No monuments, markers, memorials, or static displays are present at this installation.

Agreement Documents

There are currently no agreement documents (MOAs) in place for this installation.

Traditional Cultural Places/Native American Concerns

Has consultation occurred regarding this installation? Yes

Have any resources or areas of the installation been identified as “of concern or significance” to a federally recognized tribe? No

Appendix E
Initial Planning Phase Timeline