Pesticide Discharge Management Plan (PDMP) Template

Introduction

Any Decision-maker who is required to submit an NOI, as required in the Pesticide General Permit (PGP) Part 1.2.2, and is a large entity, as defined in Appendix A, must prepare a Pesticide Discharge Management Plan (PDMP) by the time the Notice of Intent (NOI) is filed, with two exceptions:

- Any application is made in response to a Declared Pest Emergency Situation, as defined in Appendix A; or
- Any Decision-makers that is required to submit an NOI solely because their application results in a point source discharge to Waters of the United States containing NMFS Listed Resources of Concern, as defined in Appendix A.

To help you develop your Pesticide Discharge Management Plan (PDMP), the U.S Environmental Protection Agency (EPA) has created this electronic PDMP template. The template is designed to help guide you through the PDMP development process and help ensure that your PDMP addresses all the necessary elements stated in the pesticide general permit (PGP). In your PDMP, you may incorporate by reference any procedures or plans in other documents that meet the requirements of the PGP. The template can be used as guidance in determining whether a document meets the requirements of the permit.

This template covers the PDMP elements that the pesticide general permit requires; however, you are strongly encouraged to customize this template to reflect the conditions at your site.

Using the PDMP Template

Each section of this template includes “instructions” and space for project information. You should read the instructions for each section before you complete that section. This template was developed in Word so that you can easily add tables and additional text. Some sections may require only a brief description while others may require several pages of explanation.

Tips for completing the Template:

- The Template generally uses blue text where information is expected to be entered.
- Multiple pest management areas and use pattern(s) may be in the same PDMP.
- Pest management area(s) may be as large as an entire state or as small as cooling water intakes.
- Incorporate by reference any procedures or plans in other documents that meet the requirements of the permit. Attached a copy of any portions of any documents that you refer to in the PDMP.
- Modify this PDMP template so that it addresses the requirements in the pesticide general permit and meets the needs of your project. Consider adding permit citations in the PDMP when you address a specific permit requirement.
Pesticide Discharge Management Plan

Prepared for:

U.S. Army Corps of Engineers
Albuquerque District
Operations Division

Prepared by:

U.S. Army Corps of Engineers
Albuquerque District
Environmental Engineering Section

July 2012
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SECTION 1: Operator Information

Instructions (see PGP Part 1.0):

— Describe the Pest Management Area(s) and identify the type(s) of Pesticide Use Patterns, Operator type, and if there will be a discharge to a Tier 3 water.

Note: An “Operator” is defined in Appendix A of the PGP to mean any entity associated with the application of pesticides that results in a discharge to Waters of the United States that meets either of the following two criteria: (1) any entity who performs the application of a pesticide or who has day-to-day control of the application (i.e., they are authorized to direct workers to carry out those activities); or (2) any entity with control over the decision to perform pesticide applications including the ability to modify those decisions. Operators identified in (1) above are referred to in the permit as Applicators while Operators identified in (2) are referred to in the permit as Decision-makers. As defined, more than one Operator may be responsible for complying with this permit for any single discharge from the application of pesticides.

A “Pest Management Area” is defined in Appendix A of the PGP to mean the area of land, including any water, for which an Operator has responsibility for and is authorized to conduct pest management activities as covered by the PGP permit (e.g., for an Operator who is a mosquito control district, the pest management area is the total area of the district). The Pest Management Area could include contiguous and non-continuous sites.

1. Provide a brief description of the Pest Management Area(s).

The U.S. Army Corps of Engineers (USACE) Albuquerque District (“District”) owns and manages seven dams (“project”) in New Mexico (Abiquiu, Cochiti, Conchas, Santa Rosa, Jemez Canyon, and Two Rivers) and two in southern Colorado (John Martin and Trinidad). This permit targets; native and non-native pests in accordance with Engineering technical letter (ETL) No. 1110-2-571, invasive species removal as an integral part of ecosystem restoration, and pests that predate on state and federally listed species.

For each project, it is important that the operations and maintenance manual include an annual maintenance program to control animal burrows and vegetative growth. It is also important that vegetation be managed in such a manner as to avoid the need for mechanized removal and associated embankment repair, and avoid any incidental growth and subsequent presence of endangered species that might prohibit access and activities necessary for operations or maintenance. Engineering technical letter (ETL) No. 1110-2-571, Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams and Appurtenant Structures, requires a vegetation-free zone surrounding all levees, floodwalls, embankment dams, and critical appurtenant structures in all flood damage reduction systems. No vegetation, other than approved grasses, may penetrate the vegetation-free zone except for approved deviations as identified in figure 2 of the ETL. The ETL also requires a root-free zone, which provides a margin of safety between the greatest expected extent of plant roots and the beginning face of any structure that is critical to the performance and reliability of the flood damage reduction system. Burring animals identified within this zone shall be removed physically or chemical to insure the stability of the structure. All flora and fauna not in compliance with this ETL shall be removed. A detailed removal plan is submitted to the District for review and comment prior to removal of vegetation and burrowing animals. In regions with endangered or threatened species, and/or their critical habitat,
vegetation removal of any kind may require clearance through the U.S. Fish and Wildlife Service or the National Marine Fisheries Service under the Endangered Species Act.

In executing USACE missions, districts are faced with diverse and challenging issues concerning invasive species. The USACE Invasive Species Policy provides the framework to identify, implement invasive species removal, restore terrestrial and aquatic ecosystems, and prevent future introductions. The District has identified invasive plants that are being targeted using manual, mechanical, and chemical treatment. Methods for invasive plants are species specific. Invasive species projects are managed by the District’s Operations Technical Support Section. Technical staff from other sections (civil engineers, biologists, ecologists, geologists) are included in the planning and execution of invasive species removal and ecosystem restoration at the District’s dams and reservoirs. Invasive species and fuel reduction may include manual, mechanical treatment and chemical treatment. Stumps of any live non-native trees would be treated immediately with herbicide if the root-ball cannot be removed. Herbicide application may also occur after the initial removal process to target non-native resprouts. Re-establishment of native vegetation will occur after invasive species removal.

The federally endangered interior populations of the least tern, *Sterna antillarum*, and the threatened piping plover, *Charadrius melodus*, inhabit John Martin Dam and Reservoir, Bent County, Colorado. In accordance with Section 7 of the Endangered Species Act USACE initiated formal consultation on impacts to federally-listed endangered and threatened species at John Martin Dam and Reservoir, Bent County, Colorado. Least Tern and Piping plover use shorelines and islands within the project for breeding, nesting and brooding. The Biological Opinion issued to USACE (USFWS, 2001) identifies conservation measures in order to reduce the impacts of the action or further the recovery of federally-listed species. Conservation measure no. 10, includes the removal of predators that predare on nesting or brooding least tern or piping plover. This may include physical trapping or rodenticide application to target predators. Predator removal may be conducted when such action is warranted in the opinion of a professional wildlife biologist from the USACE or Colorado Department of Wildlife. Applications will occur on islands and shorelines that are periodically inundated, thus require a pesticide general permit.

2. Identify the Pesticide Use Patterns for this Pest Management Area that trigger the requirement to develop a Pesticide Discharge Management Plan. (check all that apply). Note: Decision-makers, that are a large entity, are required to develop a PDMP if they are required to submit an NOI. See Part 5.0 of the PGP for exceptions.
   a. □ Mosquitoes and Other Flying Insect Pests c. X Animal Pests
   b. □ Weeds and Algae d. □ Forest Canopy Pests

3. Operator Type (check one):
   a. X Federal Government
   b. □ State Government
c. □ Local Government
d. □ Mosquito control district (or similar)
e. □ Irrigation control district (or similar)
f. □ Weed control district (or similar)
g. □ Other: If other, provide brief description of type of Operator:
SECTION 2: PDMP Team

Instructions (see PGP Part 5.1.1):

- List the Decision-maker, person or organization that prepared the PDMP and/or responsible for revising the PDMP, and the person or organization that will prepare and address corrective actions, adverse incident, and spills. Indicate respective responsibilities, where appropriate.

1. **Decision-maker:** Any entity with control over the decision to perform pesticide applications including the ability to modify those decisions.

   U.S. Army Corps of Engineers, Albuquerque District
   Mark Yuska
   Chief, Operations Division
   4101 Jefferson Plaza
   Albuquerque, NM 87109
   505-342-3608
   mark.e.yuska@usace.army.mil
   Area of Control: Albuquerque District Operations Projects

2. **PDMP Contact:** Person(s) who should be contacted regarding PDMP questions.

   U.S. Army Corps of Engineers, Albuquerque District
   Cecilia Horner
   Chief, Environmental Engineering Section
   4101 Jefferson Plaza
   Albuquerque, NM 87109
   505-342-3474
   cecilia.v.horner@usace.army.mil
   Area of Control: Albuquerque District Operations Projects

3. **This PDMP was Prepared by:** Person(s) responsible for developing and revising the PDMP.

   U.S. Army Corps of Engineers, Albuquerque District
   Justin Reale
   Environmental Engineering Section
   4101 Jefferson Plaza
   Albuquerque, NM 87109
4. Please include any additional team members and their responsibilities.

<table>
<thead>
<tr>
<th>Team Member Name(s)</th>
<th>Individual Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ondrea Hummel, Ecologist</td>
<td>Provides technical guidance regarding invasive species and restoration</td>
</tr>
<tr>
<td>Dana Price, Botanist</td>
<td>Provides technical guidance regarding invasive species and restoration</td>
</tr>
<tr>
<td>Suzi Hess-Brittelle, P.G.</td>
<td>Dam Safety Program Manager</td>
</tr>
<tr>
<td>Kelly Allen, Natural Resource Manager</td>
<td>Operations Natural Resources Project Manager</td>
</tr>
</tbody>
</table>
SECTION 3: Problem Identification

3.1 Pest Problem Description

Instructions (see PGP Part 5.1.2):

— Briefly describe the pest problem, including identification of the target pest(s), source of the pest problem, and source of data used to identify the problem in Parts 2.2.1, 2.2.2, 2.2.3, and 2.2.4 of the PGP.

Note: The response will be one or more paragraphs, depending on the nature and complexity of the project. The source of the pest problem may be unknown. EPA does not expect the Decision-maker(s) to conduct long term studies to determine the source of the pest problem.

1. Provide a brief summary of the pest problem in the table.

<table>
<thead>
<tr>
<th>Plant Target Pest Species</th>
<th>Source of the pest problem</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salt Cedar</td>
<td>Anthropogenic Introduction</td>
<td>Invasive plant species have been identified during dam safety inspections, and Level One Natural Resources Inventory conducted by USACE staff</td>
</tr>
<tr>
<td>Siberian Elm</td>
<td>Anthropogenic Introduction</td>
<td>Invasive plant species have been identified during dam safety inspections, and Level One Natural Resources Inventory conducted by USACE staff</td>
</tr>
<tr>
<td>Tree of Heaven</td>
<td>Anthropogenic Introduction</td>
<td>Invasive plant species have been identified during dam safety inspections, and Level One Natural Resources Inventory conducted by USACE staff</td>
</tr>
<tr>
<td>Russian Olive</td>
<td>Anthropogenic Introduction</td>
<td>Invasive plant species have been identified during dam safety inspections, and Level One Natural Resources Inventory conducted by USACE staff</td>
</tr>
<tr>
<td>ravenna grass</td>
<td>Anthropogenic Introduction</td>
<td>Invasive plant species have been identified during dam safety inspections, and Level One Natural Resources Inventory conducted by USACE staff</td>
</tr>
<tr>
<td>Russian knapweed</td>
<td>Invasive plant species have been identified during dam safety inspections, and Level One Natural Resources Inventory conducted by USACE staff</td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>perennial pepperweed</td>
<td>Invasive plant species have been identified during dam safety inspections, and Level One Natural Resources Inventory conducted by USACE staff</td>
<td></td>
</tr>
<tr>
<td>tumbleweed</td>
<td>Invasive plant species have been identified during dam safety inspections, and Level One Natural Resources Inventory conducted by USACE staff</td>
<td></td>
</tr>
<tr>
<td>kochia</td>
<td>Invasive plant species have been identified during dam safety inspections, and Level One Natural Resources Inventory conducted by USACE staff</td>
<td></td>
</tr>
<tr>
<td>Canada thistle</td>
<td>Invasive plant species have been identified during dam safety inspections, and Level One Natural Resources Inventory conducted by USACE staff</td>
<td></td>
</tr>
<tr>
<td>Cottonwood</td>
<td>Seedlings and samplings on the shorelines have been identified as pests encroaching on listed species habitat at John Martin</td>
<td></td>
</tr>
<tr>
<td>Cocklbur</td>
<td>Annual weed that been identified as a pest species, encroaching on listed species habitat at John Martin.</td>
<td></td>
</tr>
<tr>
<td>Sunflower</td>
<td>Annual weed that been identified as a pest species, encroaching on listed species habitat at John Martin.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mammalian Target Pest Species</th>
<th>Source of the pest problem</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spotted Ground-Squirrel *</td>
<td>native species predates on Piping Plover clutches</td>
<td>Yearly Piping Plover and interior least turn monitoring at John Martin</td>
</tr>
<tr>
<td>Ord's Kangaroo Rat *</td>
<td>native species predates on Piping Plover clutches</td>
<td>Piping Plover and interior least turn monitoring at John Martin</td>
</tr>
</tbody>
</table>

* Target pest at John Martin only
2. Provide a brief description of the pest problem.

See Section 1.1 of the PDMP

### 3.2 Action Threshold(s)

**Instructions (see PGP Part 5.1.2):**

- Describe the action threshold(s) for pest(s) in the pest management area, including data used in developing the action threshold(s) and method(s) to determine when the action threshold(s) has been met.

Note: An action threshold is the point at which pest populations or environmental conditions necessitate that pest control action be taken based on economic, human health, aesthetic, or other effects. An action threshold may be based on current and/or past environmental factors that are or have been demonstrated to be conducive to pest emergence and/or growth, as well as past and/or current pest presence. Action thresholds are those conditions that indicate both the need for control actions and the proper timing of such actions.

1. Provide a brief summary of the action threshold(s) in the table.

<table>
<thead>
<tr>
<th>Target Pests</th>
<th>Action Thresholds</th>
</tr>
</thead>
<tbody>
<tr>
<td>All non-native plant species listed in section 3</td>
<td>The action threshold for these non-native plant species is the loss of ecosystem function at USACE dams and reservoirs. Restoring native vegetation and habitat along with invasive species/fuel reduction is currently needed to restore ecosystems. Invasive species removal also promotes recreation activities such as boating, birding, and hiking.</td>
</tr>
<tr>
<td>Burrowing Animals</td>
<td>Burrowing animals degrade the stability of flood control structures</td>
</tr>
<tr>
<td>Predatory mammals</td>
<td>Loss of suitable piping plover and interior least tern habitat and individuals at John Martin</td>
</tr>
</tbody>
</table>

2. Provide a brief description of the action threshold(s).

1. **Pest Management Objective:** Invasive plant species removal
   
   **Target Pest:** see section 3
   
   **Action Threshold:** impede ecosystem function and fire hazard
   
   **Basis for the action threshold:** USACE Invasive Species Policy
   
   **Method to determine when the action threshold has been met:** monitoring to determine if a native plant community has been established within the invasive plant species removal project areas.

2. **Pest Management Objective:** burrowing animal removal

   **Target Pest:** see section 3
Action Threshold: ETL 1110-2-571  
Method to determine when the action threshold has been met: monitoring to determine if burrowing animals inhabit flood control structures.

3. Pest Management Objective: Predatory small mammal removal  
   Target Pest: see section 3  
   Action Threshold: See USFWS Biological Opinion for John Martin  
   Method to determine when the action threshold has been met: monitoring interior least tern and piping plover fecundity and survival at John Martin. Monitor predation rates at interior least tern and piping plover before and after removal of predatory small mammals.

3.3 **General Location Maps**
See Attachment A

3.4 **Water Quality Standards**

Instructions (see PGP Part 5.1.2):

- Document waters impaired for pesticide(s) or any degradates for which there may be a discharge. Note: Operators are not eligible for coverage under the PGP for any discharges from a pesticide application to Waters of the United States if the water is identified as impaired by a substance which either is an active ingredient in that pesticide or is a degradate of such an active ingredient. See PGP Part 1.1.2.1.

- Indicate the location of all waters, including wetlands, on the general location map.

- Document any Tier 3 (Outstanding National Resource Waters) and any water(s) impaired for a specific pesticide or its degradates to which there may be a discharge.

Note: Decision-maker is not required to make a water quality standard (WQS) determination. Internet links to all state, territory and tribal water quality standards are available at: [http://epa.gov/waterscience/standards/wqslibrary/](http://epa.gov/waterscience/standards/wqslibrary/).

USACE preformed a literature search to determine any Outstanding Natural Resource Waters (ONRWs) and waters impaired for pesticides within the proposed pest management areas.

In New Mexico, outstanding national resource waters are identified in Standards for Interstate and Intrastate Waters, 20.6.4 NMAC, 2005. Section 20.6.4.9 identifies the criteria and water classified at ONRWs in New Mexico. No ONRWs occur within the proposed pest management areas.

In Colorado, outstanding national resource waters are identified by Colorado Department of Public Health and Environment, Water Quality Control Commission, Regulation No. 31, The Basic Standards and Methodologies for Surface Water (5 CCR 1002-31). The mainstem of the Arkansas River above and below John Martin Reservoir is designated as use-protected. This
section of the Arkansas River is not designated as an ONRW. Purgatoire River, the source of water to Trinidad reservoir, is not designated as an ONRW.

No ONRWs occur within the proposed pest management areas.

SECTION 4: Pest Management Options Evaluation

Instructions (see PGP Part 5.1.3):

— Document your evaluation of the pest management options, including combination of the pest management options, to control the target pest(s) in the following sections:
  • No Action
  • Prevention
  • Mechanical/Physical Methods
  • Cultural Methods
  • Biological Control Agents
  • Pesticides

— In your evaluation, you must consider the impact to water quality, impact to non-target organisms, feasibility, and cost effectiveness.

Note: All six pest management options may not be available for a specific use category and/or treatment area. However, the PDMP must include documentation of how the six pest management options were evaluated. The PGP does not require the use of the least toxic alternative or that non-pesticide methods be tried first. Combinations of various pest management options are frequently the most effective Pest Management Measures over the long term. The goal should be to emphasize long-term control rather than a temporary fix. "Pest Management Measure" is defined to be any practice used to meet the effluent limitations that comply with manufacturer specifications, industry standards and recommended industry practices related to the application of pesticides, relevant legal requirements and other provisions that a prudent Operator would implement to reduce and/or eliminate pesticide discharges to waters of the United States.

1. Provide a brief description of the pest management options (include impact to water quality, impact to non-target organisms, feasibility, cost effectiveness and any relevant previous Pest Management Measures).
   a) Target Pest: animal burrows and vegetative growth on flood control structures
      
      No Action: Increased probability of structure failure and flood risk
      
      Prevention: Limiting the establishment of vegetation and suitable habitat occurs with periodic maintenance
      
      Mechanical/Physical Methods: Mechanical and physical removal are viable options. These methods will be used in conjunction with pesticide applications. Due to the
steepness and sensitive of engineered flood control structures, mobilization of mechanical equipment may not be allowed.

Cultural Methods: Not Applicable

Biological Control Agents: Biological controls are not applicable at this time.

Pesticides: herbicides and pesticides will be used in conjunction with mechanical and physical removal methods

b) Target Pest: exotic plant species

No Action: Loss of ecosystem function, loss of biodiversity, loss of native habitat and increased fuel loads.

Prevention: Not applicable, these exotic species are well established. To prevent the spread of invasive species USACE and other agencies have billboards and pamphlets to inform the public.

Mechanical/Physical Methods: mechanical and physical removal will occur in conjunction with chemical applications. If the rootball is not removed the stump will receive chemical treatment. In highly sensitive areas (cultural areas, wetlands, areas with listed species) mechanical methods may be prohibited to limit ground disturbance.

Cultural Methods: Not Applicable

Biological Control Agents: (Diorhabda elongata) i.e. the salt cedar leafbeetle is not authorized for use in the Middle Rio Grande, but has been identified in the Rio Jemez watershed, which is a tributary to the Rio Grande. Other biological controls are not applicable at this time to target invasive plant species.

Pesticides: herbicides will be used in conjunction with mechanical and physical removal methods

c) Target Pest: small mammals on shorelines and islands at John Martin

No Action: Loss of federally-listed bird species mating, nesting and brooding habitat. Direct predation will result in smaller clutch size.

Prevention: small mammals are native and well established

Mechanical/Physical Methods: mechanical and physical removal using Sherman traps

Cultural Methods: Not Applicable

Biological Control Agents: biological controls are not applicable at this time.

Pesticides: rodenticides will be used in conjunction with mechanical and physical removal methods
SECTION 5: Response Procedures

For contracted applications, the contractor shall submit an Environmental Protection Plan (EPP) as outline in specification 01 57 20 (See Attachment 1) The Environmental Protection Plan is site specific. USACE will review and approve the EPP.

For projects executed by USACE staff, the Operations Project Manager or applicator will be responsible for fulfilling reporting requirements below. This section will be submitted to the Operations Project Manager and District Office (ERGO, Environmental Engineering, and Environmental Resources) prior to execution.

This section will be updated for each project executed by contract or USACE. Contractors and USACE staff shall follow the requirements as outlined in Part 5.1.4 of the PGP (Attachment B)

5.1 Spill Response, Notification and Containment Procedures

1. For contracted applications, the contractor shall select an individual who shall report any spills or hazardous substance releases and who will follow up with complete documentation. This individual shall immediately notify the Contracting Officer in addition to the legally required Federal, State, and local reporting channels (including the National Response Center 1-800-424-8802) if any hazardous substance, hazardous material, or petroleum product is released to the environment. The plan shall contain a list of the required reporting channels and telephone numbers. For projects executed by USACE staff, the Operations Project Manager or applicator will be responsible for fulfilling reporting requirements.

2. The name and qualifications of the individual who will be responsible for implementing and supervising the containment and cleanup.

3. Materials And Procedures (EPA label, MSDS, pesticide used, Active Ingredient, quantity, application rate, storage (location and compatibility), location where mixing will occur)

4. Training requirements for USACE or contractor personnel and methods of accomplishing the training.

5. A list of materials and equipment to be immediately available at the job site, tailored to cleanup spills of the potential hazard(s) identified.

6. The names and locations of suppliers of containment materials, cleanup, restoration, and material-placement equipment available in case of an unforeseen spill emergency.

7. The methods and procedures to be used for expeditious contaminant cleanup and waste disposal.
5.1.1 Spill Containment

— Document the procedure for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases to Waters of the United States.

— The applicator who may cause, detect, or respond to a spill or leak must be trained in these procedures and have necessary spill response equipment available. Justin Reale or Cecilia Horner will be notified if a release of a reportable quantity is released.

5.1.2 Spill Notification

— Document the procedure for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies.

5.2 Adverse Incident Response Procedures

5.2.1 Responding to an Adverse Incident

— Document the procedures for responding to any adverse incident resulting from pesticide applications.

5.2.2 Notification of an Adverse Incident

Instructions (See PGP Part 5.1.4):

— Document the procedures for notification of the adverse incident, both internal to the Decision-maker’s agency/organization and external. Contact information for state/federal permitting agency, nearest emergency medical facility, and nearest hazardous chemical responder must be in locations that are readily accessible and available.

SECTION 6: Documentation to Support Eligibility
Considerations under Other Federal Laws

Instructions (See PGP Part 5.1.5):

— If applicable, Decision-makers must keep documentation supporting their determination with regard to Part 1.1.2.4 (Endangered and Threatened Species and Critical Habitat Protection).

Include a copy of the documentation in Attachment C
SECTION 7: Signature Requirements

Instructions (see PGP Part 5.1.6):

- The following certification statement must be signed and dated to certify that the PDMP is in accordance with Appendix B, Subsection B.11 of the PGP.

Note: This certification must be re-signed whenever necessary to address any of the triggering conditions for corrective action in Part 6.1 or when a change in pest control activities significantly changes the type or quantity of pollutants discharged.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the application of pesticides, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: _______________________________ Title: _______________________________

Signature: _______________________________ Date: _______________________________

Repeat as needed for multiple Decision-makers at the site.
SECTION 8: PDMP Plan Modifications

Instructions (see PGP Part 5.2):

- You must modify your PDMP whenever necessary to address any of the triggering conditions for corrective action in Part 6.1 or when a change in pest control activities significantly changes the type or quantity of pollutants discharged. Changes to your PDMP must be made before the next pesticide application that results in a discharge, if practicable, or if not, no later than 90 days after any change in pesticide application activities. The revised PDMP must be signed and dated in accordance with the PGP, Appendix B, Subsection B.11.

- You should include significant changes in the activities or their timing on the project, changes in personnel, updates to site maps, and so on.

REFERENCE ATTACHMENT E, F and/or I
SECTION 9: PDMP Availability

Instructions (see PGP Part 5.3):

- You must retain a copy of the current PDMP, along with all supporting maps and documents, at the address provided in Section III.3 of the NOI. The PDMP and all supporting documents must be readily available, upon request, and copies of any of these documents provided, upon request, to EPA; a State, Territorial, Tribal, or local agency governing discharges or pesticide applications within their respective jurisdictions; and representatives of the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS). EPA may provide copies of your PDMP or other information related to this permit that is in its possession to members of the public.

- Any Confidential Business Information (CBI), as defined in 40 CFR Part 2, may be withheld from the public provided that a claim of confidentiality is properly asserted and documented in accordance with 40 CFR Part 2; however, CBI must be submitted to EPA, if requested, and may not be withheld from those staff within EPA, FWS, and NMFS cleared for CBI review.
ATTACHMENTS

Attach the following documentation to the PDMP:

Attachment A – General Location Map
Attachment B – Pesticide General Permit
Attachment C – NOI and Acknowledgement Letter from EPA/State
Attachment D – Adverse Incident Report
Attachment E – Corrective Action Log
Attachment F – PDMP Amendment Log
Attachment G – Subcontractor Certifications/Agreements
Attachment H – Delegation of Authority
Attachment I – Annual Reports and Other Record Keeping
Attachment A – General Location Maps
Attachment B – Pesticide General Permit
Attachment C – NOI and Acknowledgement Letter from EPA/State
Attachment D – Adverse Incident Report
# Attachment E – Corrective Action Log Template

<table>
<thead>
<tr>
<th>Date</th>
<th>Description of Problem triggering the Corrective Action</th>
<th>Corrective Action Needed (including planned date/responsible person)</th>
<th>Date Action Taken/Responsible person</th>
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</tbody>
</table>
## Attachment F – PDMP Amendment Log Template

**Project Name:**  
**PDMP Contact:**

<table>
<thead>
<tr>
<th>Amendment No.</th>
<th>Description of the Amendment</th>
<th>Date of Amendment</th>
<th>Amendment Prepared by [Name(s) and Title]</th>
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Attachment G – Subcontractor Certifications/Agreements Template

SUBCONTRACTOR CERTIFICATION
PESTICIDE DISCHARGE MANAGEMENT PLAN

Project Number: ________________________________

Project Name: ________________________________

Decision-maker(s): ________________________________

As a subcontractor, you are required to comply with the Pesticide Discharge Management Plan (PDMP) for any work that you perform for the above designated project. Any person or group who violates any condition of the PDMP may be subject to substantial penalties or loss of contract. You are encouraged to advise each of your employees working on this project of the requirements of the PDMP. A copy of the PDMP is available for your review.

Each subcontractor engaged in pesticide activities in the pest management area that could impact Waters of the United States must be identified and sign the following certification statement:

I certify under the penalty of law that I have read and understand the terms and conditions of the PDMP for the above designated project.

This certification is hereby signed in reference to the above named project:

Company: ____________________________________________

Address: ____________________________________________

Telephone Number: __________________________________

Type of pesticide application service to be provided: ____________________________________

Signature: ____________________________________________

Title: ________________________________________________

Date: ________________________________________________
Attachment H – Delegation of Authority Form Template

Delegation of Authority

I, _______________________ (name), hereby designate the person or specifically described position below to be a duly authorized representative for the purpose of overseeing compliance with environmental requirements, including the Pesticide General Permit, for the ____________________________________ project. The designee is authorized to sign any reports, other documents required by the permit.

________________________________________________________ (name of person or position)
________________________________________________________ (company)
________________________________________________________ (address)
________________________________________________________ (city, state, zip)
________________________________________________________ (phone)

By signing this authorization, I confirm that I meet the requirements to make such a designation as set forth in Appendix B, Subsection B.11.A of EPA’s Pesticide General Permit (PGP), and that the designee above meets the definition of a “duly authorized representative” as set forth in Appendix B, Subsection B.11.A.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the pest management area, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: ________________________________________________

Company: _____________________________________________

Title: __________________________________________________

Signature: _____________________________________________

Date: __________________________________________________
Attachment I – Annual Reports and Other Record Keeping

The following is a list of records you should keep at your site and available for inspectors to review:

– Copies of Annual Reports
– Records as required in PGP Part 7.4

Check your permit for additional details
NOTE: This guide specification covers the requirements for environment protection during construction activities.

Comments and suggestions on this guide specification are welcome and should be directed to the proponent of the specification. A listing of technical proponents, including their organization designation and telephone number, is on the Internet.

Recommended changes to a UFGS should be submitted as a Criteria Change Request (CCR).

Use of electronic communication is encouraged.

Brackets are used in the text to indicate designer choices or locations where text must be supplied by the designer.

GENERAL

NOTE: This specification serves as a general environmental section for construction contracts. It integrates the DoD Pest Management Program and DA Environmental Program policies and requirements for USACE construction activities that occur on military installations and/or are funded under the military construction/O&M funding. Army Environmental Program policies are promulgated in the following regulations, AR 200-1 (Environmental Protection and Enhancement), AR 200-2 (Environmental Effects of Army Actions), AR 200-3 (Natural Resources – Land, Forest
Pesticide Discharge Management Plan (PDMP)

and Wildlife Management), and AR 200-5 (Pest Management). Department of Defense Instruction 4150.7 promulgates Pest Management policies for the component services, as implemented by their respective regulations. USACE civil works pest management activities are not regulated by DOD policies but by ER 1130-2-540 and EP 1130-2-540. Chemistry and Industrial Hygiene Designers are required to edit this portion of the specification when an air pathway analysis indicates perimeter air monitoring and controls are warranted.

Designers need to ensure that the project design and contemplated methods of construction comply with all applicable laws, including: Clean Air Act (CAA), Clean Water Act (CWA), Coastal Zone Management Act (CZMA), Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), Emergency Planning and Community Right to Know Act (EPCRA), Endangered Species Act (ESA), Fish and Wildlife Coordination Act (FWCA), Marine Protection, Research, and Sanctuaries Act (MPRSA), National Environmental Policy Act (NEPA), National Historic Preservation Act (NHPA), National Pollutant Discharge Elimination System (NPDES), Oil Pollution Act (OPA), Research and Sanctuaries Act, Native American Graves Protection and Repatriation Act (NAGPRA), Resource Conservation and Recovery Act (RCRA), Rivers and Harbors Act of 1899 (R&H), Safe Drinking Water Act (SDWA), Toxic Substance Control Act (TSCA), Wild & Scenic Rivers Act (WSRA), Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), and Subsequent Executive Orders. Many construction contracts contain paragraphs in the technical provisions that discuss specific operations which provide for the prevention of pollution. Because specialists familiar with problems in their field of activity are to prepare individual sections of the technical provisions, those sections should contain specifications for the control of pollution when applicable to the operation covered by the section.

This guide specification addresses hazardous waste only to the extent that it is Contractor generated. For clean up and removal of Government generated hazardous waste, CEGS Section 01 35 30 SAFETY, HEALTH, AND EMERGENCY RESPONSE (HTRW/UST), CEGS 02 81 00 TRANSPORTATION AND DISPOSAL OF HAZARDOUS MATERIALS or other appropriate specifications must be included in the project.

Land resources which are to be protected by the Contractor should be identified on the contract
drawings. Any special protective actions for land resources should be specified in this section or in other appropriate sections.

This guide specification contains environmental requirements for many different types of projects. The Designer will delete, add, or modify these requirements to assure that only applicable or possible applicable environmental conditions specific to the project are addressed. The Designer, when deleting requirements in the body of the specification, should also delete the applicable definition and references.

**************************************************************************
REFERENCES
**************************************************************************

NOTE: Issue (date) of references included in project specifications need not be more current than provided by the latest change (Notice) to this guide specification.

**************************************************************************

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

U.S. AIR FORCE (USAF)

U.S. ARMY (DA)
DA AR 200-1 (2007) Environmental Protection and Enhancement

U.S. ARMY CORPS OF ENGINEERS (USACE)
EM 385-1-1 (2008; Errata 1-2010; Changes 1-3 2010; Changes 4-6 2011) Safety and Health Requirements Manual


U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)
33 CFR 328 Definitions of Waters of the United States
40 CFR 150 – 189 Pesticide Programs
DEFINITIONS

Environmental Pollution and Damage

Environmental pollution and damage is the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to humankind; or degrade the environment aesthetically, culturally and/or historically.

Environmental Protection

Environmental protection is the prevention/control of pollution and habitat disruption that may occur to the environment during construction. The control of environmental pollution and damage requires consideration of land, water, and air; biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive material as well as other pollutants.

Contractor Generated Hazardous Waste

Contractor generated hazardous waste means materials that, if abandoned or disposed of, may meet the definition of a hazardous waste. These waste streams would typically consist of material brought on site by the Contractor to execute work, but are not fully consumed during the course of construction. Examples include, but are not limited to, excess paint thinners (i.e. methyl ethyl ketone, toluene etc.), waste thinners, excess paints, excess solvents, waste solvents, and excess pesticides, and contaminated pesticide equipment rinse water.
**Installation Pest Management Coordinator**

Installation Pest Management Coordinator (IPMC) is the individual officially designated by the Installation Commander to oversee the Installation Pest Management Program and the Installation Pest Management Plan.]

**Project Pesticide Coordinator**

The Project Pesticide Coordinator (PPC) is an individual that resides at a Civil Works Project office and that is responsible for oversight of pesticide application on Project grounds.]

**Land Application for Discharge Water**

The term "Land Application" for discharge water implies that the Contractor shall discharge water at a rate which allows the water to percolate into the soil. No sheeting action, soil erosion, discharge into storm sewers, discharge into defined drainage areas, or discharge into the "waters of the United States" shall occur. Land Application shall be in compliance with all applicable Federal, State, and local laws and regulations.

**Pesticide**

Pesticide is defined as any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant or desiccant.

**Pests**

The term "pests" means arthropods, birds, rodents, nematodes, fungi, bacteria, viruses, algae, snails, marine borers, snakes, weeds and other organisms (except for human or animal disease-causing organisms) that adversely affect readiness, military operations, or the well-being of personnel and animals; attack or damage real property, supplies, equipment, or vegetation; or are otherwise undesirable.

**Surface Discharge**

The term "Surface Discharge" implies that the water is discharged with possible sheeting action and subsequent soil erosion may occur. Waters that are surface discharged may terminate in drainage ditches, storm sewers, creeks, and/or "waters of the United States" and would require a permit to discharge water from the governing agency.

**Waters of the United States**
All waters which are under the jurisdiction of the Clean Water Act, as defined in 33 CFR 328.

**Wetlands**

Wetlands means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, and bogs. Official determination of whether or not an area is classified as a wetland must be done in accordance with WETLAND DELINEATION MANUAL.

**GENERAL REQUIREMENTS**

The Contractor shall minimize environmental pollution and damage that may occur as the result of construction operations. The environmental resources within the project boundaries and those affected outside the limits of permanent work shall be protected during the entire duration of this contract. The Contractor shall comply with all applicable environmental Federal, State, and local laws and regulations. The Contractor shall be responsible for any delays resulting from failure to comply with environmental laws and regulations.

**SUBCONTRACTORS**

The Contractor shall ensure compliance with this section by subcontractors.

**PAYMENT**

No separate payment will be made for work covered under this section. The Contractor shall be responsible for payment of fees associated with environmental permits, application, and/or notices obtained by the Contractor. All costs associated with this section shall be included in the contract price. The Contractor shall be responsible for payment of all fines/fees for violation or non-compliance with Federal, State, Regional and local laws and regulations.

**SUBMITTALS**

**************************************************************************

NOTE: Review submittal description (SD) definition in Section 01 33 00 SUBMITTAL PROCEDURES and edit the following list to reflect only the submittals required for the project. Submittals should be kept to the minimum required for adequate quality control.

A “G” following s submittal item indicates that the submittal requires Government approval. Some submittals are already marked with a “G”. Only
delete an existing “G” if the submittal item is not complex and can be reviewed through the Contractor’s Quality Control system. Only add a “G” if the submittal is sufficiently important or complex in context of the project.

For submittals requiring Government approval on Army projects, a code of up to three characters within the submittal tags may be used following the "G" designation to indicate the approving authority. Codes for Army projects using the Resident Management System (RMS) are: "AE" for Architect-Engineer; "DO" for District Office (Engineering Division or other organization in the District Office); "AO" for Area Office; "RO" for Resident Office; and "PO" for Project Office.

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Environmental Protection Plan; G, [_____]  
The environmental protection plan.

**************************************************************************

NOTE: If the Contractor provides the SWPPP include the following submittals.

**************************************************************************

NPDES Notice of Intent
NPDES Notice of Termination

Environmental Protection Plan; G

**************************************************************************

NOTE: Borrow site testing is only for New Mexico, so far.

**************************************************************************

SD-06 Test Reports

Borrow Site Testing; G, EE
Phase 1 ESA of Borrow Site; G, EE
ENVIRONMENTAL PROTECTION PLAN

Prior to commencing construction activities or delivery of materials to the site, the Contractor shall submit an Environmental Protection Plan for review and approval by the Contracting Officer. The purpose of the Environmental Protection Plan is to present a comprehensive overview of known or potential environmental issues which the Contractor must address during construction. Issues of concern shall be defined within the Environmental Protection Plan as outlined in this section. The Contractor shall address each topic at a level of detail commensurate with the environmental issue and required construction task(s). Topics or issues which are not identified in this section, but which the Contractor considers necessary, shall be identified and discussed after those items formally identified in this section. Prior to submittal of the Environmental Protection Plan, the Contractor shall meet with the Contracting Officer for the purpose of discussing the implementation of the initial Environmental Protection Plan; possible subsequent additions and revisions to the plan including any reporting requirements; and methods for administration of the Contractor's Environmental Plans. The Environmental Protection Plan shall be current and maintained onsite by the Contractor.

Compliance

No requirement in this Section shall be construed as relieving the Contractor of any applicable Federal, State, and local environmental protection laws and regulations. During Construction, the Contractor shall be responsible for identifying, implementing, and submitting for approval any additional requirements to be included in the Environmental Protection Plan.

Contents

Note: Any unnecessary or inapplicable plans or requirements are to be deleted.

Brackets in item j. should be replaced with the name of the Facility, Installation, or Project Office where the project is located; the title of their
spill control plan; and where it may be reviewed by
the Contractor. Instead of referencing their plan, the Designer could add specific requirements of the
plan to this paragraph.

The pesticide paragraph (item q.) should not be
deleted since an unforeseen site condition could
require a pesticide treatment. The pesticide
treatment plan serves two purposes. It provides a
mechanism for early coordination with the appropriate
installation personnel through the Contracting
Officer and provides a mechanism for reporting
pesticide use information to the Installation as
required by the Federal Insecticide Fungicide and
Rodenticide Act (FIFRA). For military construction,
this information must be provided to the Installation
under DoDI 4150.7 DoD Pest Management Instruction,
under AR 200-5 Pest Management or under Air Force
Instruction AFI 32-1053 Pest Management Program. The
Designer should coordinate this section with others
sections requiring pesticide application (32 92 19
SEEDING, 32 92 23 SODDING, 32 92 26 SPRIGGING, 32 93
00 EXTERIOR PLANTS, and 32 05 33 LANDSCAPE
ESTABLISHMENT) and with the Installation's Pest
Management organization for any additional
requirements.

**************************************************************************

The environmental protection plan shall include, but shall not be limited
to, the following:

a. Name(s) of person(s) within the Contractor's organization who is
(are) responsible for ensuring adherence to the Environmental
Protection Plan.

b. Name(s) and qualifications of person(s) responsible for manifesting
hazardous waste to be removed from the site, if applicable.

c. Name(s) and qualifications of person(s) responsible for training
the Contractor's environmental protection personnel.

d. Description of the Contractor's environmental protection personnel
training program.

e. An erosion and sediment control plan which identifies the type and
location of the erosion and sediment controls to be provided. The plan
shall include monitoring and reporting requirements to assure that the
control measures are in compliance with the erosion and sediment
control plan, Federal, State, and local laws and regulations. A Storm
Water Pollution Prevention Plan (SWPPP) may be substituted for this
plan.
f. Drawings showing locations of proposed temporary excavations or embankments for haul roads, stream crossings, material storage areas, structures, sanitary facilities, and stockpiles of excess or spoil materials including methods to control runoff and to contain materials on the site.

g. Traffic control plans including measures to reduce erosion of temporary roadbeds by construction traffic, especially during wet weather. Plan shall include measures to minimize the amount of mud transported onto paved public roads by vehicles or runoff.

h. Work area plan showing the proposed activity in each portion of the area and identifying the areas of limited use or nonuse. Plan should include measures for marking the limits of use areas including methods for protection of features to be preserved within authorized work areas.

i. Drawing showing the location of borrow areas.

j. The Spill Control plan shall include the procedures, instructions, and reports to be used in the event of an unforeseen spill of a substance regulated by 40 CFR 68, 40 CFR 302, 40 CFR 355, and/or regulated under State or Local laws and regulations. The Spill Control Plan supplements the requirements of EM 385-1-1 [and the [_____]]. This plan shall include as a minimum:

1. The name of the individual who will report any spills or hazardous substance releases and who will follow up with complete documentation. This individual shall immediately notify the Contracting Officer and [the local Fire Department] [Facility Fire Department] [Facility Response Personnel] [Facility Environmental Office] in addition to the legally required Federal, State, and local reporting channels (including the National Response Center 1-800-424-8802) if a reportable quantity is released to the environment. The plan shall contain a list of the required reporting channels and telephone numbers.

2. The name and qualifications of the individual who will be responsible for implementing and supervising the containment and cleanup.

3. Training requirements for Contractor's personnel and methods of accomplishing the training.

4. A list of materials and equipment to be immediately available at the job site, tailored to cleanup work of the potential hazard(s) identified.

5. The names and locations of suppliers of containment materials and locations of additional fuel oil recovery, cleanup, restoration, and material-placement equipment available in case of an unforeseen spill emergency.
6. The methods and procedures to be used for expeditious contaminant cleanup.

k. A non-hazardous solid waste disposal plan identifying methods and locations for solid waste disposal including clearing debris. The plan shall include schedules for disposal. The Contractor shall identify any subcontractors responsible for the transportation and disposal of solid waste. Licenses or permits shall be submitted for solid waste disposal sites that are not a commercial operating facility. Evidence of the disposal facility's acceptance of the solid waste shall be attached to this plan during the construction. The Contractor shall attach a copy of each of the Non-hazardous Solid Waste Diversion Reports to the disposal plan. The report shall be submitted on the first working day after the first quarter that non-hazardous solid waste has been disposed and/or diverted and shall be for the previous quarter (e.g. the first working day of January, April, July, and October). The report shall indicate the total amount of waste generated and total amount of waste diverted in cubic meters yards or tons along with the percent that was diverted.

l. A recycling and solid waste minimization plan with a list of measures to reduce consumption of energy and natural resources. The plan shall detail the Contractor's actions to comply with and to participate in Federal, State, Regional, and local government sponsored recycling programs to reduce the volume of solid waste at the source.

m. An air pollution control plan detailing provisions to assure that dust, debris, materials, trash, etc., do not become airborne and travel off the project site.

n. A contaminant prevention plan that: identifies potentially hazardous substances to be used on the job site; identifies the intended actions to prevent introduction of such materials into the air, water, or ground; and details provisions for compliance with Federal, State, and local laws and regulations for storage and handling of these materials. In accordance with EM 385-1-1, a copy of the Material Safety Data Sheets (MSDS) and the maximum quantity of each hazardous material to be on site at any given time shall be included in the contaminant prevention plan. As new hazardous materials are brought on site or removed from the site, the plan shall be updated.

o. A waste water management plan that identifies the methods and procedures for management and/or discharge of waste waters which are directly derived from construction activities, such as concrete curing water, clean-up water, dewatering of ground water, disinfection water, hydrostatic test water, and water used in flushing of lines. If a settling/retention pond is required, the plan shall include the design of the pond including drawings, removal plan, and testing requirements for possible pollutants. If land application will be the method of disposal for the waste water, the plan shall include a sketch showing the location for land application along with a description of the
A historical, archaeological, cultural resources biological resources and wetlands plan that defines procedures for identifying and protecting historical, archaeological, cultural resources, biological resources and wetlands known to be on the project site; and/or identifies procedures to be followed if historical archaeological, cultural resources, biological resources and wetlands not previously known to be onsite or in the area are discovered during construction. The plan shall include methods to assure the protection of known or discovered resources and shall identify lines of communication between Contractor personnel and the Contracting Officer.

q. A pesticide treatment plan shall be included and updated, as information becomes available. The plan shall include: sequence of treatment, dates, times, locations, pesticide trade name, EPA registration numbers, authorized uses, chemical composition, formulation, original and applied concentration, application rates of active ingredient (i.e. pounds of active ingredient applied), equipment used for application and calibration of equipment. The Contractor is responsible for Federal, State, Regional and Local pest management record keeping and reporting requirements as well as any additional [Installation] [Project Office] specific requirements. [The Contractor shall follow [AR 200-5 Pest Management, Chapter 2, Section III "Pest Management Records and Reports" for data required to be reported to the Installation] [AFI 32-1053 Sections 3.4.13 and 3.4.14 for data required to be reported to the Installation].]
Attached to this specification is a generic Storm Water Pollution Prevention Plan (SWPPP), which has been prepared for the construction activity in accordance with guidelines set forth in EPAPUB (NPDES) General Permit for Storm Water Discharges From Construction Sites. The permit can be accessed at http://www.epa.gov/npdes/pubs/cgp2012_finalpermit.pdf. This SWPPP has been incorporated into the contract drawings. The Contractor shall submit to the Contracting Officer two weeks prior to the commencement of any construction activities a project specific SWPPP based on the generic SWPPP provided herein. The Contractor and subcontractor(s) shall comply with all SWPPP conditions as required by law and set forth in the attached SWPPP. In addition to designing and implementing the SWPPP, the general permit gives both the Contracting Officer and the Contractor responsibility for submitting to EPA 48 hours prior to commencement of construction activities a Notice of Intent (NOI) to perform work under the National Pollutant Discharge Elimination System General Permit. A copy of the NOI form is included as an appendix to the SWPPP which is attached to this specification. The Contractor shall post a copy of the NOI on the project bulletin board.

Both the Contracting Officer and the Contractor are also responsible for submitting to EPA a Notice of Termination (NOT) upon project completion and full stabilization. A copy of the NOT form is included as an appendix to the SWPPP which is attached to this specification. A project is fully stabilized when all soil disturbing activities are complete; when erosion and sediment control measures have been removed or will be removed at an appropriate time; and when all areas of the construction site not otherwise covered by a permanent pavement or structure have been stabilized with a uniform perennial cover with a density of 70% or equivalent measures have been employed.

*******************************************************************************
NOTE: If the Contractor provides the SWPPP include the following paragraph.
*******************************************************************************

NPDES General permits for construction activities

At least 30 calendar days prior to commencement of construction activities (any physical site disturbance), the Contractor shall submit a Storm Water Pollution Prevention Plan (SWPPP) for review and acceptance by the Contracting Officer. Acceptance of the SWPPP is conditional and is predicated upon satisfactory performance during construction. No physical work at the site shall begin prior to the Contractor receiving written approval of the project SWPPP.

The Contractor shall comply with the EPAPUB (NPDES) General Permit for Storm Water Discharges From Construction Sites. The permit can be accessed at http://www.epa.gov/npdes/pubs/cgp2012_finalpermit.pdf. The Contractor shall submit a Notice of Intent (NOI) to the EPA at least 15 calendar days prior to commencement of construction activities. The Notice of Intent (NOI) can be accessed at http://cfpub.epa.gov/npdes/stormwater/enoi.cfm. A copy of the NOI submitted shall be posted at the project site office. The Contractor shall
submit a Notice of Termination (NOT) to the EPA when the project is complete and the site disturbance has reached final stabilization as described in the General Permit for Storm Water Discharges From Construction Sites Act. The Notice of Termination (NOT) can be accessed at http://www.epa.gov/npdes/pubs/cgp_appendixf.pdf.

The Government reserves the right to require the Contractor to modify or revise the SWPPP to insure that all current measures to prevent offsite migration of pollutants, including soils, are included in the SWPPP, or if the Contracting Officer determines that the storm water pollution prevention requirements are not being met.

*******************************************************************************************************************************

NOTE: If no SWPPP is required include the following paragraph just to be on the safe side. If it is certain that no SWPPP will ever be required for the project then delete this one too.
*******************************************************************************************************************************

NPDES General permits for construction activities

A NPDES Permit, Notice of Intent, and Notice of Termination is not currently required for this project provided that the contractor’s staging area and other ground disturbing activities do not total more than 1 acre in size. If this area exceeds one acre, the contractor shall provide a Stormwater Pollution Prevention Plan, Notice of Intent and Notice of Termination in accordance with this section.

At least 30 calendar days prior to commencement of construction activities (any physical site disturbance), the Contractor shall submit a Storm Water Pollution Prevention Plan (SWPPP) for review and acceptance by the Contracting Officer. Acceptance of the SWPPP is conditional and is predicated upon satisfactory performance during construction. No physical work at the site shall begin prior to the Contractor receiving written approval of the project SWPPP.

The Contractor shall comply with the EPAPUB (NPDES) General Permit for Storm Water Discharges From Construction Sites. The permit can be accessed at http://www.epa.gov/npdes/pubs/cgp2012_finalpermit.pdf. The Contractor shall submit a Notice of Intent (NOI) to the EPA at least 15 calendar days prior to commencement of construction activities. The Notice of Intent (NOI) can be accessed at http://cfpub.epa.gov/npdes/stormwater/enoi.cfm. A copy of the NOI submitted shall be posted at the project site office. The Contractor shall submit a Notice of Termination (NOT) to the EPA when the project is complete and the site disturbance has reached final stabilization as described in the General Permit for Storm Water Discharges From Construction Sites Act. The Notice of Termination (NOT) can be accessed at http://www.epa.gov/npdes/pubs/cgp_appendixf.pdf.
The Government reserves the right to require the Contractor to modify or revise the SWPPP to ensure that all current measures to prevent offsite migration of pollutants, including soils, are included in the SWPPP, or if the Contracting Officer determines that the storm water pollution prevention requirements are not being met.

FOR KAFB PROJECTS ONLY – Include the following training requirement and the submittal for KAFB.

Water Quality Training

For construction projects subject to the Construction General Permit (CGP), a required training module must be completed by contractor personnel responsible for CGP compliance and Storm Water Pollution Prevention Plan (SWPPP) implementation before ground disturbance commences. The training module is approximately ten minutes long and will be provided by the Water Quality Program. The proponent must furnish documentation stating the names and titles of the individuals who have completed the training along with the date of completion.

PROTECTION FEATURES

This paragraph supplements the Contract Clause PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS. Prior to start of any onsite construction activities, the Contractor and the Contracting Officer shall make a joint condition survey. Immediately following the survey, the Contractor shall prepare a brief report including a plan describing the features requiring protection under the provisions of the Contract Clauses, which are not specifically identified on the drawings as environmental features requiring protection along with the condition of trees, shrubs and grassed areas immediately adjacent to the site of work and adjacent to the Contractor's assigned storage area and access route(s), as applicable. This survey report shall be signed by both the Contractor and the Contracting Officer upon mutual agreement as to its accuracy and completeness. The Contractor shall protect those environmental features included in the survey report and any indicated on the drawings, regardless of interference which their preservation may cause to the Contractor's work under the contract.

SPECIAL ENVIRONMENTAL REQUIREMENTS

NOTE: The special environmental requirements with which the Contractor must comply must be developed during the design process, included in the bidding documents, and made a part of the contract. The special environmental requirements must be developed by the Designer from such documents as the National
Environmental Policy Act (NEPA) compliance measures specified in the Environmental Assessment (EA) or the Environmental Impact Statement (EIS), the Installation Master Plan, or the Installation Storm Water Management Plan. For Civil Works projects, the Environmental commitments made during planning are usually tracked by Project Management. Coordination with the Project Manager is essential in developing the special requirements.

Attachments referenced below and in paragraph ENVIRONMENTAL PERMITS AND COMMITMENTS, which require Contractor's actions, should be listed in the blank provided and attached at the end of this Section. Remove this paragraph if not required in the project after coordination with paragraph ENVIRONMENTAL PERMITS AND COMMITMENTS.

**************************************************************************

The Contractor shall comply with the special environmental requirements listed here [_____] and included at the end of this section.

ENVIRONMENTAL ASSESSMENT OF CONTRACT DEVIATIONS

Any deviations, requested by the Contractor, from the drawings, plans and specifications which may have an environmental impact will be subject to approval by the Contracting Officer and may require an extended review, processing, and approval time. The Contracting Officer reserves the right to disapprove alternate methods, even if they are more cost effective, if the Contracting Officer determines that the proposed alternate method will have an adverse environmental impact.

NOTIFICATION

The Contracting Officer will notify the Contractor in writing of any observed noncompliance with Federal, State or local environmental laws or regulations, permits, and other elements of the Contractor's Environmental Protection plan. The Contractor shall, after receipt of such notice, inform the Contracting Officer of the proposed corrective action and take such action when approved by the Contracting Officer. The Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No time extensions shall be granted or equitable adjustments allowed to the Contractor for any such suspensions. This is in addition to any other actions the Contracting Officer may take under the contract, or in accordance with the Federal Acquisition Regulation or Federal Law.

HTRW PERIMETER AIR MONITORING

**************************************************************************
NOTE: The following paragraph pertains to HTRW construction when the Designer has determined that the need to protect Air Quality during HTRW remedial action is necessary and appropriate. The paragraph applies to contaminant emissions to the air from HTRW remedial action construction area sources. The Designer should coordinate the editing of CEGS 01 35 45.00 10 CHEMICAL DATA QUALITY CONTROL, so that the Chemistry Data Package, FSP and QAPP meet air monitoring reporting and instrument/sample collection and analysis needs.

An air pathway analysis needs to be conducted prior to specifying the items in the subparagraphs below. The Designer is referred to EP 1110-1-21 Air Pathway Analysis (APA) for the Design of HTRW Remedial Action Project. Design perimeter air monitoring requirements (action levels for the contaminants of concern, monitoring/sampling frequency) based on APA results. Specify monitoring/sampling and analytical requirements in section 01 35 45.00 10, CHEMICAL DATA QUALITY CONTROL. Specify airborne contaminants of concern, action levels, monitoring/sampling locations below. See 40 CFR 300.430(e)(9) of the National Contingency Plan.

**************************************************************************

For the protection of public health, the Contractor shall monitor and control contaminant emissions to the air from HTRW remedial action area sources to minimize short term risks that might be posed to the community during implementation of the remedial alternative in accordance with the following.

**Perimeter Air Contaminant of Concern**

[____].

**Time Averaged Perimeter Action Levels**

[____].

a. Concentration [____].

b. Time [____].

**Perimeter Sampling/Monitoring Location[s]**

[____].

**Monitoring Instruments/Sampling and Analysis Methods**

**************************************************************************
NOTE: CEGS 01 35 45.00 10 CHEMICAL DATA QUALITY CONTROL should be edited to reflect appropriate instruments/sampling and analytical methods which meet required action levels.

[____].

Staffing

NOTE: See staffing requirements in CEGS 01 35 45.00 10 CHEMICAL DATA QUALITY CONTROL and assure that it is edited so that qualified personnel are used to operate instruments, take samples, and perform analysis.

[____].

PRODUCTS (NOT USED)

EXECUTION

NOTE: Edit and/or delete the following paragraphs to reflect project requirements only.

ENVIRONMENTAL PERMITS AND COMMITMENTS

NOTE: The terms and conditions contained in any environmental permits and environmental commitments obtained by the Government must be made a part of the contract. The design must be in accordance with these permits and commitments. The title and requirements of this paragraph may be changed to include environmental reviews and approvals, if pertinent. This paragraph shall be coordinated with the SPECIAL ENVIRONMENTAL REQUIREMENTS paragraph. If the Government has not obtained any environmental permits, commitments, approvals, etc., the first paragraph should be deleted and the second paragraph should be used.

[This paragraph supplements the Contractor's responsibility under the contract clause "PERMITS AND RESPONSIBILITIES" to the extent that the
Government has obtained the [____]. The Contractor shall comply with the terms and conditions of the attached [____] at the end of this section.

[The Contractor shall be responsible for obtaining and complying with all environmental permits and commitments required by Federal, State, Regional, and local environmental laws and regulations.]

**LAND RESOURCES**

The Contractor shall confine all activities to areas defined by the drawings and specifications. Prior to the beginning of any construction, the Contractor shall identify any land resources to be preserved within the work area. Except in areas indicated on the drawings or specified to be cleared, the Contractor shall not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, and land forms without approval. No ropes, cables, or guys shall be fastened to or attached to any trees for anchorage unless specifically authorized. The Contractor shall provide effective protection for land and vegetation resources at all times as defined in the following subparagraphs. Stone, soil, or other materials displaced into uncleared areas shall be removed by the Contractor.

**Work Area Limits**

Prior to commencing construction activities, the Contractor shall mark the areas that need not be disturbed under this contract. Isolated areas within the general work area which are not to be disturbed shall be marked or fenced. Monuments and markers shall be protected before construction operations commence. Where construction operations are to be conducted during darkness, any markers shall be visible in the dark. The Contractor's personnel shall be knowledgeable of the purpose for marking and/or protecting particular objects.

**Landscape**

Trees, shrubs, vines, grasses, land forms and other landscape features indicated and defined on the drawings to be preserved shall be clearly identified by marking, fencing, or wrapping with boards, or any other approved techniques. The Contractor shall restore landscape features damaged or destroyed during construction operations outside the limits of the approved work area.

**Erosion and Sediment Controls**

**************************************************************************

NOTE: This paragraph must be edited to reflect the specific requirements of the project. In place of the blank brackets, enter the name of the Installation, Facility, or Project Office.
If the National or State Pollutant Discharge Elimination System Permit for Storm Water Discharges from Construction Sites over 5 acres of Land Disturbance is not required, but the project site is covered under an existing NPDES Industrial Storm Water Permit, the requirements of that permit will be added to this paragraph, shown on the drawing, and/or attached to this specification.

**************************************************************************

The Contractor shall be responsible for providing erosion and sediment control measures in accordance with Federal, State, and local laws and regulations. The erosion and sediment controls selected and maintained by the Contractor shall be such that water quality standards are not violated as a result of the Contractor's construction activities. The area of bare soil exposed at any one time by construction operations should be kept to a minimum. The Contractor shall construct or install temporary and permanent erosion and sediment control best management practices (BMPs) [as indicated on the drawings] [as specified in Section 01 57 23 - TEMPORARY STORM WATER POLLUTION CONTROL]. BMPs may include, but not be limited to, vegetation cover, stream bank stabilization, slope stabilization, silt fences, construction of terraces, interceptor channels, sediment traps, inlet and outfall protection, diversion channels, and sedimentation basins. [The Contractor's best management practices shall also be in accordance with the [_____] National Pollutant Discharge Elimination System (NPDES) Storm Water Pollution Prevention Plan (SWPPP) which may be reviewed at the [_____] Environmental Office.] Any temporary measures shall be removed after the area has been stabilized.

Contractor Facilities and Work Areas

The Contractor's field offices, staging areas, stockpile storage, and temporary buildings shall be placed in areas designated on the drawings or as directed by the Contracting Officer. Temporary movement or relocation of Contractor facilities shall be made only when approved. Erosion and sediment controls shall be provided for on-site borrow and spoil areas to prevent sediment from entering nearby waters. Temporary excavation and embankments for plant and/or work areas shall be controlled to protect adjacent areas.

WATER RESOURCES

The Contractor shall monitor construction activities to prevent pollution of surface and ground waters. Toxic or hazardous chemicals shall not be applied to soil or vegetation unless otherwise indicated. All water areas affected by construction activities shall be monitored by the Contractor. For construction activities immediately adjacent to impaired surface waters, the Contractor shall be capable of quantifying sediment or pollutant loading to that surface water when required by State or Federally issued Clean Water Act permits.
Cofferdams, Divisions, and Dewatering Operations

NOTE: Edit the first sentence by removing items not included in the project.

Construction operations for dewatering, removal of cofferdams, tailrace excavation, and tunnel closure shall be controlled at all times to maintain compliance with existing State water quality standards and designated uses of the surface water body. The Contractor shall comply with [the State of [_____] water quality standards and anti-degradation provisions] [and] [the Clean Water Act Section 404, Nation Wide Permit No. [____]].

Stream Crossings

Stream crossings shall allow movement of materials or equipment without violating water pollution control standards of the Federal, State, and local governments. [Construction of stream crossing structures shall be in compliance with Clean Water Act Section 404, Nation Wide Permit No. [____].]

Wetlands

NOTE: All wetlands on the site or adjacent to the site must be identified on the drawings and this paragraph edited accordingly. If the wetlands on site must be disturbed, the Designer is responsible for the coordination with the regulatory agencies during design for identification of Section 404 of the Clean Water Act permits whether the permit is an Individual, Nationwide, Regional, State, or Local 404 or similar permit. All permit requirements are to be included in the ENVIRONMENTAL PERMITS, REVIEWS, AND APPROVALS paragraph and attached to this specification. In addition, the Designer must coordinate any mitigation requirements for the project.

If no wetlands are onsite or adjacent to the site, delete this paragraph in its entirety. The first sentence should normally remain intact with the first bracketed item. This will require the Contractor to be cognizant of the responsibility to protect wetlands regardless of whether they are identified on drawings or in the event site conditions have changed since design.

**************************************************************************
The Contractor shall not enter, disturb, destroy, or allow discharge of contaminants into any wetlands except as authorized herein. The Contractor shall be responsible for the protection of wetlands shown on the drawings in accordance with paragraph ENVIRONMENTAL PERMITS, REVIEWS, AND APPROVALS. Authorization to enter specific wetlands identified shall not relieve the Contractor from any obligation to protect other wetlands within, adjacent to, or in the vicinity of the construction site and associated boundaries.

**AIR RESOURCES**

Equipment operation, activities, or processes performed by the Contractor shall be in accordance with all Federal and State air emission and performance laws and standards.

**Particulates**

*NOTE: This is a general performance type requirement for particulate control. For projects where special construction activities, such as concrete batch plants, or extensive earthwork are involved, the Designer should consider the need for a more descriptive specification giving methods, frequency of application, and monitoring methods for controlling particulates.*

Dust particles; aerosols and gaseous by-products from construction activities; and processing and preparation of materials, such as from asphaltic batch plants; shall be controlled at all times, including weekends, holidays and hours when work is not in progress. The Contractor shall maintain excavations, stockpiles, haul roads, permanent and temporary access roads, plant sites, spoil areas, borrow areas, and other work areas within or outside the project boundaries free from particulates which would cause the Federal, State, and local air pollution standards to be exceeded or which would cause a hazard or a nuisance. Sprinkling, chemical treatment of an approved type, baghouse, scrubbers, electrostatic precipitators or other methods will be permitted to control particulates in the work area. Sprinkling, to be efficient, must be repeated to keep the disturbed area damp at all times. The Contractor must have sufficient, competent equipment available to accomplish these tasks. Particulate control shall be performed as the work proceeds and whenever a particulate nuisance or hazard occurs. The Contractor shall comply with all State and local visibility regulations.

**Odors**

Odors from construction activities shall be controlled at all times. The odors shall not cause a health hazard and shall be in compliance with State regulations and/or local ordinances.
Sound Intrusions

NOTE: Insert State's name or remove last sentence when State rules are not applicable. The Designer should further address any facility specific requirements such as operational hours around base housing etc.

The Contractor shall keep construction activities under surveillance and control to minimize environment damage by noise. The Contractor shall comply with the provisions of the State of [_____] rules.

Burning

NOTE: Edit the paragraph after coordinating with the governing agencies.

[Burning shall be prohibited on the Government premises.] [Burning will not be allowed on the project site unless specified in other sections of the specifications or authorized in writing by the Contracting Officer. The specific time, location, and manner of burning shall be subject to approval.] [Fires shall be confined to a closed vessel, guarded at all times, and shall be under constant surveillance until contents have burned out or have been extinguished.] [Burning shall completely reduce the materials to ashes.

REQUIREMENTS FOR OFFSITE SOILS FROM NON-COMMERCIAL BORROW SITES

Only for New Mexico projects.

New Mexico Environmental Department (NMED) Risk Assessment Guidance for Site Investigations and Remediation (February 2012) provides Soil Screening Values and Total Petroleum Hydrocarbon (TPH) soil screening values. Analytical Testing methods are derived from both NMED Residential Soil Screening Values and NMED TPH Screening Value.

Offsite soils from non-commercial borrow sites shall be certified for use in one of the following ways:

1. A Phase 1 Environmental Site Assessment (ESA) in accordance with ASTM 1527-05 or 2247-08 (depending on the locality of the borrow area) shall be conducted on the borrow area to prove
that the borrow area has had no impact from industrial, chemical or waste disposal activities. If the site is shown to be consisting of virgin soils, the soil can be used for clean fill.

2. The borrow soils shall be tested for Total Petroleum Hydrocarbons (TPH EPA Method 418.1), Semi Volatile Organics (EPA Method 8270D), Volatile Organics (EPA Method 8260B), Pesticides (EPA Method 8081A), Herbicides (EPA Method 8151A), Polychlorinated Biphenyls (PCB EPA Method 8082) and the Priority Pollutant Metals (EPA Method 245.1). Discrete samples shall be of actual borrow material to be used for project and no more than 6 months old. Composite sampling for fill material is not appropriate as losses of volatile and semi-volatile analytes can occur. The number of samples required shall be in accordance with the following Sampling Frequency Table.

### Sampling Frequency Table

<table>
<thead>
<tr>
<th>Area of Individual Borrow Area</th>
<th>Sampling Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Acres or Less</td>
<td>Minimum of 4 Discrete Samples</td>
</tr>
<tr>
<td>2 to 4 Acres</td>
<td>Minimum of 1 Discrete Sample Every ½ Acre</td>
</tr>
<tr>
<td>4 to 10 Acres</td>
<td>Minimum of 8 Discrete Samples</td>
</tr>
<tr>
<td>Greater than 10 Acres</td>
<td>Minimum of 8 Discrete Samples with 4 Subsamples per Location</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Volume of Borrow Area Stockpile</th>
<th>Samples per Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 1,000 Cubic Yards (~1,500 Tons)</td>
<td>1 Sample/250 Cubic Yards (~375 Tons)</td>
</tr>
<tr>
<td>1,000 to 5,000 Cubic Yards</td>
<td>4 Samples for first 1000 Cubic Yards + 1 Sample per each additional 500 CY</td>
</tr>
<tr>
<td>Greater than 5,000 Cubic Yards</td>
<td>12 Samples for First 5,000 CY + 1 Sample for Each Additional 1,000 CY</td>
</tr>
</tbody>
</table>

The Contractor shall provide the results of the Borrow Area Phase 1 ESA and/or analytical soil testing to the Contracting Officer and Environmental Engineering within 10 calendar days of conclusion of Phase 1 ESA/results or analytical testing. The analytical results shall be provided as a standard laboratory data package, including a summary of the Quality Assurance/Quality Control (QA/QC) sample results. These sample results shall accompany all analytical reports.

If conducting soils analytical testing, representative samples shall be collected at the borrow area while the potential fill material is still in place, and analyzed prior to removal from the borrow area. Do not bring borrow material onsite until the analytical testing results have been approved by the Contracting Officer.

### HTRW AIR EMISSION CONTROL

****************************************************************************************************************************

NOTE: Edit the paragraphs below so the Contractor controls emissions to the air if action levels are exceeded. Use air pathway analysis results to help edit paragraphs/specify requirements. The following
 paragraphs should be used when an air pathway analysis has been conducted for HTRW remedial action.

The Contractor shall implement the following control(s) to meet or exceed performance levels identified in HTRW PERIMETER AIR MONITORING.

**Air Emission Control to Meet Action Levels**

[____].

**Excavation/Production/Processing Rate Reduction**

[____].

**Exposed Surface Area Reduction**

[____].

**CHEMICAL MATERIALS MANAGEMENT AND WASTE DISPOSAL**

Disposal of wastes shall be as directed below, unless otherwise specified in other sections and/or shown on the drawings.

**Solid Wastes**

NOTE: Select appropriate disposal alternative. In some states certain quantities of clearing debris may be classified as solid waste. The Designer should include appropriate language to comply with State requirements. Remove non-applicable bracketed options.

Solid wastes (excluding clearing debris) shall be placed in containers which are emptied on a regular schedule. Handling, storage, and disposal shall be conducted to prevent contamination. Segregation measures shall be employed so that no hazardous or toxic waste will become co-mingled with solid waste. The Contractor shall transport solid waste off Government property and dispose of it in compliance with Federal, State, and local requirements for solid waste disposal. A Subtitle D RCRA permitted landfill shall be the minimum acceptable off-site solid waste disposal option. The Contractor shall verify that the selected transporters and disposal facilities have the necessary permits and licenses to operate. Waste materials shall be hauled to the Government landfill site [shown on the drawings] [designated by the Contracting Officer]. The Contractor shall comply with [site procedures] [Federal, State, and local laws and regulations] pertaining to the use of landfill areas.]
Chemicals and Chemical Wastes

Chemicals shall be dispensed ensuring no spillage to the ground or water. Periodic inspections of dispensing areas to identify leakage and initiate corrective action shall be performed and documented. This documentation will be periodically reviewed by the Government. Chemical waste shall be collected in corrosion resistant, compatible containers. Collection drums shall be monitored and removed to a staging or storage area when contents are within 150 mm (6 inches) of the top. Wastes shall be classified, managed, stored, and disposed of in accordance with Federal, State, and local laws and regulations.

Contractor Generated Hazardous Wastes/Excess Hazardous Materials

Hazardous wastes are defined in 40 CFR 261, or are as defined by applicable State and local regulations. Hazardous materials are defined in 49 CFR 171 - 178. The Contractor shall, at a minimum, manage and store hazardous waste in compliance with 40 CFR 262 [and shall manage and store hazardous waste in accordance with the [Installation] [Project Office] hazardous waste management plan]. The Contractor shall take sufficient measures to prevent spillage of hazardous and toxic materials during dispensing. The Contractor shall segregate hazardous waste from other materials and wastes, shall protect it from the weather by placing it in a safe covered location, and shall take precautionary measures such as berming or other appropriate measures against accidental spillage. The Contractor shall be responsible for storage, describing, packaging, labeling, marking, and placarding of hazardous waste and hazardous material in accordance with 49 CFR 171 - 178, State, and local laws and regulations. The Contractor shall transport Contractor generated hazardous waste off Government property within [60] days in accordance with the Environmental Protection Agency and the Department of Transportation laws and regulations. The Contractor shall dispose of hazardous waste in compliance with Federal, State and local laws and regulations. Spills of hazardous or toxic materials shall be immediately reported to the Contracting Officer[ and the Facility Environmental Office]. Cleanup and cleanup costs due to spills shall be the Contractor's responsibility. [The disposition of Contractor generated hazardous waste and excess hazardous materials are the Contractor's responsibility.] [The Contractor shall coordinate the disposition of hazardous waste with the [Facility's] [Project Office's] Hazardous Waste Manager and the Contracting Officer.]

Fuel and Lubricants

Storage, fueling and lubrication of equipment and motor vehicles shall be conducted in a manner that affords the maximum protection against spill and evaporation. Fuel, lubricants and oil shall be managed and stored in accordance with all Federal, State, Regional, and local laws and regulations. Used lubricants and used oil to be discarded shall be stored in marked corrosion-resistant containers and recycled or disposed in accordance with 40 CFR 279, State, and local laws and regulations. [There shall be no storage of fuel on the project site. Fuel must be brought to
the project site each day that work is performed. [Storage of fuel on the project site shall be accordance with all Federal, State, and local laws and regulations.]

**Waste Water**

**************************************************************************

NOTE: Edit the following paragraphs after coordination with the Facility, Installation, or Project Office. Usually, a permit to discharge is not required for Land Application but the Designer will be responsible for identifying and including the requirements of the governing agencies. Insert or delete the brackets with the name of process producing the wastewater. If there is an area on the project site for a retention pond, a choice may be given for disposal in a retention pond. If there is a possibility that the water is contaminated, then appropriate analytical testing should be identified by the Designer.

**************************************************************************

Disposal of waste water shall be as specified below.

a. Waste water from construction activities, such as onsite material processing, concrete curing, foundation and concrete clean-up, water used in concrete trucks, forms, etc. shall not be allowed to enter water ways or to be discharged prior to being treated to remove pollutants. The Contractor shall dispose of the construction related waste water [off-Government property in accordance with all Federal, State, Regional and Local laws and regulations.] [or by collecting and placing it in a retention pond where suspended material can be settled out and/or the water can evaporate to separate pollutants from the water. The site for the retention pond shall be coordinated and approved with the Contracting Officer. The residue left in the pond prior to completion of the project shall be removed, tested, and disposed off-Government property in accordance with Federal, State, and local laws and regulations. The area shall be backfilled to the original grade, top-soiled and seeded/sodded. [The water in the retention pond shall be tested for [_____] and the results reviewed and approved by the Contracting Officer, prior to being discharged or disposed off-Government property].]

b. For discharge of ground water, the Contractor shall [obtain a State or Federal permit specific for pumping and discharging ground water prior to surface discharging.] [surface discharge in accordance with all Federal, State, and local laws and regulations.] [surface discharge in accordance with the requirements of the NPDES or State STORM WATER DISCHARGES FROM CONSTRUCTION SITES permit.] [land apply on the project site. Land application shall be in accordance with all Federal, State, Regional, and/or Local laws and regulations for pumping and land applying ground water.]
c. Water generated from the flushing of lines after [disinfection or disinfection in conjunction with hydrostatic testing] [hydrostatic testing] shall be [land applied in accordance with all Federal, State, and local laws and regulations for land application] [discharged into the sanitary sewer with prior approval and/or notification to the Waste Water Treatment Plant's Operator].

RECYCLING AND WASTE MINIMIZATION

NOTE: See Executive Order 13101, September 14, 1998, GREENING THE GOVERNMENT THROUGH WASTE PREVENTION, RECYCLING, AND FEDERAL ACQUISITION and DoD Instruction 4715.4 Pollution Prevention. For Air Force projects, the Designer should see Non-Hazardous Solid Waste Diversion Rate Measure of Merit (MoM) dated 26 JAN 1999. For Military Construction projects, the Designer should contact the Using Service's Environmental Office for additional recycling requirements.

Consider the following items to be include in the paragraph:

(1) Generally, fallen trees should not be openly burned or buried. Consider requiring the Contractor to shred and use as mulch in a metropolitan area. (If trees are to be piled in lakes or on land as refugia for fish or wildlife, this should be shown on the drawings and specified elsewhere and may be referenced in this paragraph.)

(2) Composting.

(3) Recovery of metal from debris and sale to recycling operation with Contractor retaining any money derived from the sale.

(4) Collection of aluminum cans at the job site for recycling.

(5) Old concrete to be recycled as riprap, road base etc.

Coordinate the requirements in this paragraph with CEGS 02 42 00 CONSTRUCTION WASTE MANAGEMENT and CEGS 02 41 00 DEMOLITION.

The Contractor shall participate in State and local government sponsored recycling programs. [The Contractor is further encouraged to minimize solid
waste generation throughout the duration of the project.] [The Contractor shall participate in the following recycling and waste minimization activities to divert non-hazardous solid waste: [______]].

**NON-HAZARDOUS SOLID WASTE DIVERSION REPORT**

******************************************************************************
NOTE: The Designer must edit the Non-hazardous Solid Waste Diversion Report to reflect the Using Service's requirements.
******************************************************************************

The Contractor shall maintain an inventory of non-hazardous solid waste diversion and disposal of construction and demolition debris. The Contractor shall submit a report to [_____] through the Contracting Officer on the first working day after each fiscal year quarter, starting the first quarter that non-hazardous solid waste has been generated. The following shall be included in the report:

a. Construction and Demolition (C&D) Debris Disposed = [_____] in [cubic meters] [cubic yards or tons], as appropriate.

b. Construction and Demolition (C&D) Debris Recycled = [_____] in [cubic meters] [cubic yards or tons], as appropriate.

c. Total C&D Debris Generated = [_____] in [cubic meters] [cubic yards or tons], as appropriate.

d. Waste Sent to Waste-To-Energy Incineration Plant (This amount should not be included in the recycled amount) = [_____] in [cubic meters] [cubic yards or tons], as appropriate.

**HISTORICAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES**

******************************************************************************
NOTE: If there are known historical, archaeological, or cultural resources on the project site, the bracketed paragraph should be included and the resource(s) should be shown on the drawings along with their required protection measures.
******************************************************************************

[Existing historical, archaeological, and cultural resources within the Contractor's work area are shown on the drawings. The Contractor shall protect these resources and shall be responsible for their preservation during the life of the contract.] If during excavation or other construction activities any previously unidentified or unanticipated historical, archaeological, and cultural resources are discovered for found, all activities that may damage or alter such resources shall be temporarily suspended. Resources covered by this paragraph include but are not limited to: any human skeletal remains or burials; artifacts; shell, midden, bone charcoal, or other deposits; rock or coral alignments, pavings, wall, or
other constructed features; and any indication of agricultural or other human activities. Upon such discovery or find, the Contractor shall immediately notify the Contracting Officer so that the appropriate authorities may be notified and a determination made as to their significance and what, if any, special disposition of the finds should be made. The Contractor shall cease all activities that may result in impact to or the destruction of these resources. The Contractor shall secure the area and prevent employees or other persons from trespassing on, removing, or otherwise disturbing such resources.

BIOLOGICAL RESOURCES

**************************************************************************
NOTE: The Designer must specify any special protection requirements and specifically describe how the Contractor is to protect the resources. This paragraph should be used when the Government knows of resources which should be protected and there are no requirements under Federal, State or local laws or regulations which would ensure that the Contractor would provide protection. If there are known Endangered or Threatened Species onsite or in the area including their habitat, this paragraph must identify the species and/or their habitat and must include any requirements or methods for protection.
**************************************************************************

The Contractor shall minimize interference with, disturbance to, and damage to fish, wildlife, and plants including their habitat. The Contractor shall be responsible for the protection of threatened and endangered animal and plant species including their habitat in accordance with Federal, State, Regional, and local laws and regulations.

INTEGRATED PEST MANAGEMENT

**************************************************************************
NOTE: DoD Installations are required under DoDI 4150.7 to develop an integrated pest management plan (IPMP). The Facility IPMP has been developed by the installation to identify potential pest-related risks of damage to installation properties as well as approaches to be used to limit these risks. The Designer should coordinate with the Installation Pest Management Coordinator early in the design process to address structural, landscaping and other pest damage reduction alternatives to pesticide applications when cost effective. This effort may be multidisciplinary in scope (i.e. planner/landscape architect, natural resource manager etc.). The pest management plans and strategies developed during design and construction should be reviewed and approved by DoD
pest management professionals and coordinated with IPMC as required by AR 200-5 and DoDI 4150.7.

The following paragraph is to be used when the application of pest management chemicals is OR is NOT anticipated. These requirements must be included as a plan within the Environmental Protection Plan. When a pest is known to be in the soil, the Designer should identify the pest and the area to be treated. This paragraph should be left intact to cover pesticide applications not anticipated by the Designer. When termicide is required, the Designer should include the bracketed sentence and include Section 31 31 16 TERMITICIDE TREATMENT MEASURES FOR SUBTERRANEAN TERMITE CONTROL in the contract specifications. Delete last sentence when not applicable. The "installation pest management coordinator" is a term used in AR 200-5 Pest Management. AR 200-5 is not applicable to USACE Civil Works activities. Appropriate USACE personnel should be referenced when this specification is used for civil works. See CECW-ON EP 1130-2-540 ENVIRONMENTAL STEWARDSHIP OPERATIONS AND MAINTENANCE GUIDANCE AND PROCEDURES, Chapter 3 - Pest Control Program for Civil Works Projects.

In order to minimize impacts to existing fauna and flora, the Contractor, through the Contracting Officer, shall coordinate with the [Installation Pest Management Coordinator (IPMC)] [Project Pesticide Coordinator (PPC)] at the earliest possible time prior to pesticide application. The Contractor shall discuss integrated pest management strategies with the [IPMC] [PPC] and receive concurrence from the [IPMC] [PPC] through the COR prior to the application of any pesticide associated with these specifications. [Installation] [Project Office] Pest Management personnel shall be given the opportunity to be present at all meetings concerning treatment measures for pest or disease control and during application of the pesticide. [For termicide requirements see Section 31 31 16 TERMITICIDE TREATMENT MEASURES FOR SUBTERRANEAN TERMITE CONTROL.] The use and management of pesticides are regulated under 40 CFR 152 - 186.

**Pesticide Delivery and Storage**

Pesticides shall be delivered to the site in the original, unopened containers bearing legible labels indicating the EPA registration number and the manufacturer's registered uses. Pesticides shall be stored according to manufacturer's instructions and under lock and key when unattended.

**Qualifications**

For the application of pesticides, the Contractor shall use the services of a subcontractor whose principal business is pest control. The subcontractor
shall be licensed and certified in the state where the work is to be performed.

**Pesticide Handling Requirements**

The Contractor shall formulate, treat with, and dispose of pesticides and associated containers in accordance with label directions and shall use the clothing and personal protective equipment specified on the labeling for use during all phases of the application. Material Safety Data Sheets (MSDS) shall be available for all pesticide products.

**Application**

Pesticides shall be applied by a State Certified Pesticide Applicator in accordance with EPA label restrictions and recommendation. The Certified Applicator shall wear clothing and personal protective equipment as specified on the pesticide label. Water used for formulating shall only come from locations designated by the Contracting Officer. The Contractor shall not allow the equipment to overflow. Prior to application of pesticide, all equipment shall be inspected for leaks, clogging, wear, or damage and shall be repaired prior to being used.

**PREVIOUSLY USED EQUIPMENT**

The Contractor shall clean all previously used construction equipment prior to bringing it onto the project site. The Contractor shall ensure that the equipment is free from soil residuals, egg deposits from plant pests, noxious weeds, and plant seeds. The Contractor shall consult with the USDA jurisdictional office for additional cleaning requirements.

**MAINTENANCE OF POLLUTION FACILITIES**

The Contractor shall maintain permanent and temporary pollution control facilities and devices for the duration of the contract or for that length of time construction activities create the particular pollutant.

**MILITARY MUNITIONS**

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NOTE: Albuquerque District requires that this section be included with every project

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In the event the Contractor discovers or uncover military munitions as defined in 40 CFR 260, the Contractor shall immediately stop work in that area and immediately inform the Contracting Officer.

**TRAINING OF CONTRACTOR PERSONNEL**
The Contractor's personnel shall be trained in all phases of environmental protection and pollution control. The Contractor shall conduct environmental protection/pollution control meetings for all Contractor personnel prior to commencing construction activities. Additional meetings shall be conducted for new personnel and when site conditions change. The training and meeting agenda shall include: methods of detecting and avoiding pollution; familiarization with statutory and contractual pollution standards; installation and care of devices, vegetative covers, and instruments required for monitoring purposes to ensure adequate and continuous environmental protection/pollution control; anticipated hazardous or toxic chemicals or wastes, and other regulated contaminants; recognition and protection of archaeological sites, artifacts, wetlands, and endangered species and their habitat that are known to be in the area.

CONTAMINATED MEDIA MANAGEMENT

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NOTE: Remove this paragraph if not needed in the project.
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Contaminated environmental media consisting of, but not limited to, ground water, soils, and sediments shall be managed in accordance with Section [______].

POST CONSTRUCTION CLEANUP

The Contractor shall clean up all areas used for construction in accordance with Contract Clause: "Cleaning Up". The Contractor shall, unless otherwise instructed in writing by the Contracting Officer, obliterate all signs of temporary construction facilities such as haul roads, work area, structures, foundations of temporary structures, stockpiles of excess or waste materials, and other vestiges of construction prior to final acceptance of the work. The disturbed area shall be graded, filled and the entire area seeded unless otherwise indicated.

-- End of Section --