



## **4.0 APPLICABLE LAWS, REGULATIONS, STANDARDS, AND CLEANUP STANDARD**

### **4.1 Applicable Laws, Regulations, and Standards**

#### **4.1.1 Washington State Model Toxics Control Act**

Washington's hazardous sites cleanup law is titled the MTCA [Chapter 70.105D Revised Code of Washington (RCW)]. Taken together, this statute, and the regulations promulgated under it [Washington Administrative Code (WAC) Chapter 173-340] govern cleanups at hazardous waste and other contaminated sites in the State of Washington and mandate that those cleanup be done in a manner that is adequately protective of the public and the environment. Accordingly, this statute and these regulations constitute the principal framework defining this cleanup action at RAU 2A – Small Arms Ranges. The regulations specifically address and govern the design and implementation of the current cleanup action and pertinent, applicable sections of these regulations include the following:

- Selection of the cleanup action (WAC 173-340-360)
- Content of the CAP (WAC 173-340-380)
- Implementation of the cleanup action (WAC 173-340-400)
- Compliance with monitoring requirements (WAC 173-340-410)
- Public notice and participation (WAC 173-340-600)
- Cleanup standards (WAC 173-340-700 et seq.)
- Worker safety and health (WAC 173-340-810)
- Sampling and analysis plans (WAC 173-340-820)
- Analytical procedures (WAC 173-340-830)
- General submittal requirements (WAC 173-340-840)
- Recordkeeping requirements (WAC 173-340-850)
- Other sections of this regulation as applicable and relevant to the current cleanup action

The specific cleanup levels applicable to this cleanup action are found in Tables 740-1 for human health protection and Table 749-3 for protection of ecological receptors.

This CAP and the implementation thereof will comply with and be governed by the applicable and relevant sections of the MTCA statute and regulations.

#### **4.1.2 Comprehensive Environmental Response, Compensation, and Liability Act**

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) is the Federal statute which establishes requirements concerning closed hazardous waste sites. This statute is specifically applicable to cleanup funded, directly or indirectly, by the Army. The cleanup action at RAU 2A – Small Arms Ranges at



CBMR is being funded by the Army under the ESCA that was part of the conveyances from the Army to the County and from the County to BCRRT (U.S. Army, 2006). The provisions of CERCLA applicable to this cleanup action are procedural and require certification that the applicable provisions of state law (in this case, MTCA) have been met. At that time, a CERCLA Liability Release will be issued by the Army to Clark County and BCRRT.

#### **4.1.3 Resources Conservation and Recovery Act**

The Resources Conservation and Recovery Act (RCRA) is the Federal statute controlling hazardous waste management from "cradle-to-grave" – that is from generation through transportation, treatment, storage, to final disposition of hazardous waste. RCRA also sets forth the framework for the management of non-hazardous or solid wastes. RCRA amendments (known as the Hazardous and Solid Waste Amendments (HSW)) specify treatment levels for hazardous wastes (including lead) before land disposal is permissible. RCRA and the amendments thereto are applicable to the offsite disposal of lead-contaminated soils and other wastes resulting from this cleanup action.

Under RCRA, the USEPA is authorized to delegate hazardous and solid waste disposal regulatory enforcement authority to states with their own regulatory programs meeting or exceeding RCRA standards. Washington and Oregon – the two states likely to be the sites of the disposal facilities receiving the soils and other wastes from this cleanup action – are "delegated states" under these provisions of RCRA. Accordingly, the hazardous and solid waste management regulations of those states will govern waste disposal activities for this cleanup action.

#### **4.1.4 Host-State Hazardous and Solid Waste Management Acts**

As noted above, the hazardous and solid wastes produced during this cleanup action may be disposed in either Washington or Oregon. Both of these potential host states have hazardous and solid waste management statutes and regulation. These statutes will govern any hazardous or solid waste disposal in those states under this cleanup action. The applicable and relevant portions of these statutes and regulations in provisions governing the following:

- Hazardous and solid waste acceptance criteria at disposal facilities in each state,
- Sampling and analytical procedures required to demonstrate compliance with those acceptance criteria,
- Waste shipping and documentation procedures, and
- Waste disposal operations.



#### **4.1.5 Explosives Safety Programs**

Federal explosives safety regulations and guidance are applicable to all military munitions including those remaining at CBMR. Compliance with these regulations is being addressed through the development of an Explosives Safety Submittal (ESS; MKM, 2006) along with the Interim Action Work Plan (IAWP; BCRRT, 2007a) for the Roads and Trails and Small Arms Ranges. This IAWP has been approved by WDOE. The ESS has been reviewed and approved by the United States Army Technical Center for Explosives Safety (USATCES). This IAWP will have been implemented before this lead-related cleanup action is initiated. Therefore, explosives safety is not anticipated to be an issue during implementation of the cleanup action covered by the current work plan.

#### **4.1.6 Occupational Safety and Health Act (OSHA)**

This Cleanup Action at RAU 2A – Small Arms Ranges will comply with the applicable provisions of the Federal Occupational Safety and Health Act (as amended) and the regulations thereunder. This includes, but is not limited to, the OSHA Construction and Hazardous Waste Operations and Emergency Response (HAZWOPER) standards found in the OSHA regulations in the Code of Federal Regulation (CFR). The applicable regulations include the following:

- OSHA General Industry Standards (29 CFR 1910),
- OSHA Construction Industry Standards (29 CFR 1926), and
- OSHA HAZWOPER Standards (29 CFR 1910.120 and 1926.120).

In addition, this cleanup action will follow the procedures of the National Institute of Occupational Safety and Health publication titled “Occupational Safety and Health Guidance for Hazardous Site Activities (NIOSH, 1985).

#### **4.1.7 Washington State Environmental Policy Act**

The Washington State Environmental Policy Act (SEPA) [Chapter 43.21C RCW] is the state statutory program to prevent or control and mitigate ecological impacts arising from public or private actions, specifically including cleanup actions conducted under MTCA. It requires any agency of state government to assess possible environmental impacts that may result from its decision or actions. SEPA clearly applies to the Cleanup Action at RAU 2A – Small Arms Ranges. However, this Cleanup Action Plan provides adequate and appropriate safeguards and/or restoration of potentially impacted ecological resources at and around the nine small arms ranges subject to this cleanup action. SEPA provides for a “Determination of Nonsignificance (DNS)” for cleanup actions under MTCA where the absence of significant negative ecological impact is demonstrated by



the party conducting the cleanup. BCRRT has submitted the SEPA Environmental Checklist to the Clark County Department of Environmental Services (CCDES) with a request for a DNS finding (see **Appendix B**).

#### **4.1.8 Clean Water Act**

Several portions of the Federal Clean Water Act (as variously amended and updated since original enactment and codification) and the state and county clean water programs thereunder are applicable to the implementation of the Cleanup Action Plan for RAU 2A – Small Arms Ranges. These provisions include the following:

- **Sedimentation and Erosion Control:** This cleanup action will include appropriate measures to prevent erosion or sediment migration to streams, wetlands, or other surface water bodies adjacent to the excavation areas at the nine small arms ranges being cleaned up under this plan. The required Grading and Erosion Control Plan has been submitted to the CCDES for approval before work is initiated as required by the applicable laws, regulations, and ordinances (see **Appendix B**).
- **Wetlands Management:** This cleanup action will temporarily disturb certain wetlands that are in and immediately adjacent to the excavation areas. Under Section 404 of the Federal Clean Water Act, the United States Army Corps of Engineers (USACE) has established Nationwide Permit No. 38 authorizing cleanup action work to be conducted in regulated wetlands. This permit is applicable to the implementation of this cleanup action. The required pre-construction notification has been submitted to USACE, Ecology, and CCDES. These wetlands have been mapped and will be restored at the completion of this cleanup action (see **Appendix B**).
- **Stormwater Management:** The Federal Clean Water Act and the paralleling state law and regulations and county ordinances governing stormwater management during excavation and related activities are applicable to this cleanup action and are addressed in the Grading and Erosion Control Plan mentioned above.
- **Pollution Prevention:** The Federal Clean Water Act and the paralleling state law and regulations and county ordinances governing pollution prevention during excavation and related activities are applicable to this cleanup action. The principal contaminant of concern is lead, which is present at this site in non-soluble metallic form. The erosion and sedimentation control measures described in the Grading and Erosion Control Plan mentioned above will effectively meet these applicable pollution prevention requirements.



#### **4.1.9 Clean Air Act**

Portions of the Federal Clean Water Act (as variously amended and updated since original enactment and codification) and the state and county clean water programs thereunder are applicable to the implementation of the Cleanup Action Plan for RAU 2A – Small Arms Ranges. The applicable provisions govern emissions of fugitive dust and airborne lead at the perimeter of the work area during excavation and soil handling. Compliance with these provisions is addressed in this Cleanup Action Plan which includes the following:

- Worker breathing zone monitoring for dust and airborne lead
- Work area perimeter monitoring for dust and airborne lead
- Measures, to be implemented on an as-needed basis depending on weather and dust monitoring results for dust suppression
- A requirement to temporarily stop excavation and soil handling activities should the dust suppression measures be inadequate during times of dry weather and/or low humidity.

#### **4.1.10 Protection of Rare, Threatened or Endangered Species and Sensitive Habitat**

Federal and state laws and regulations mandate protection of Rare, Threatened, or Endangered Species and sensitive habitat areas. No Federal or state endangered species have been identified at CBMR. State threatened plant species have been identified at the CBMR. However, no special-status species have been observed in the areas to be impacted by the Cleanup Action at RAU 2A – Small Arms Ranges. The areas to be impacted may include up to 5.6 acres of riparian habitat, although the actual area of riparian habitat impacted by the planned cleanup is expected to be less. Any riparian habitat impacts will be mitigated by regrading and replanting after the cleanup action has been completed.

#### **4.1.11 Archaeological, Cultural, and Historic Resources Protection**

As required by the PPCD (Section X-E, Paragraph 112), BCRRT prepared a Cultural and Historical Resources Protection Plan (Michael Baker Jr., Inc. 2006b) This Plan will be in effect during throughout the implementation of the cleanup actions detailed in this CAP. This plan includes information and guidance to prepare workers in identifying and protecting any cultural and historical resources which may be encountered during CAP implementation.

All workers involved in implementing this CAP will receive review videotapes of Cultural and Historical Resources Protection training previously provided to BCRRT by representatives of the Cowlitz tribe and associated archaeological experts. This training addressed the history of Native American cultures at the CBMR and provided guidance



relating to identification and protection of any cultural or historical artifacts which might have been encountered during CAP implementation.

## 4.2 Controlling Documents

- Prospective Purchaser Consent Decree (PPCD; WDOE, 2006) and the attached Conceptual Remedial Action Plan (CRAP), including the following specific sections:
  - Section 57 (B)(1) – Definition of RAU 2A – Small Arms Ranges
  - Sections 67, 68 and 69 – Status of RAU 2A
  - Section 96 – Deliverables and Schedules for the Final Action at RAU 2A
  - Section titled “Remedial Action Unit 2A” in the CRAP
  
- Environmental Services Cooperative Agreement (ESCA; U.S. Army, 2006a)
  - Table 1 of the Technical Specifications and Requirements Statement, which is Attachment E.1 to the ESCA, establishes the Army’s specification and requirements for the Cleanup Action at RAU 2A – Small Arms Ranges.
  
- Accident Prevention Plan (APP; Michael Baker) and attachments as follows:
  - Site-Wide Health and Safety Plan (HASP)
  - Site-Wide Explosives Safety Submittal (ESS)
  - Project Hazard Analysis (PHA) attached thereto.

Note 1: A task-specific health and safety plan is included with this Cleanup Action Plan (see **Section 6**).

Note 2: Explosives safety at these small arms ranges will have been addressed before work is initiated under this Cleanup Action Plan. Explosives safety will have been addressed by a munitions and explosives of concern clearance program conducted at all nine small arms ranges under the Interim Action Work Plan for Roads and Trails and Small Arms Ranges.