DEPARTMENT OF ECOLOGY Toxics Cleanup Program

DATE: November 2018

TO: Camp Bonneville Military Reservation (CBMR) RAU 3 File

Facility Site ID: 5125990

FROM: Ben Amoah-Forson

SUBJECT: Proposed Changes to the 2010 Cleanup Action Plan for Remedial Action Unit 3,

Site-Wide Munitions Contamination

This memo presents a proposed change to recommended cleanup actions for the Regional Park Western Slopes Area, as described in section 5.2 of the Cleanup Action Plan (CAP) for site-wide munitions contamination, Remedial Action Unit (RAU) 3 for the Western Slopes Area. This change will amend the 2010 Cleanup Action Plan for RAU 3.

Regional Park Western Slopes Area Background

The Western Slopes area contained a wide variety of troop training areas. Training Areas 1-5, 11, 12 and a portion of 13 are located in this area. The Western Slopes area is described as a "Limited Access Medium Intensity Reuse" area in the RAU 3 RI/FS. Usage of the Western Slopes area was listed by the U. S. Army as limited to non-live fire exercises such as troop movement, hand-to-hand combat, practice assaults/defense bayonet and obstacle courses. The area covers roughly 600 acres along the western portion of the CBMR and are part of the regional park (see Figure 5.2). Pyrotechnics and blank ammunition were typically employed to evaluate the reactionary responses of troops and convoys to an ambush and to train in tactics. Military munitions containing high explosives were not used for reactionary training.

Hazard Severity Ranking

The Western Slopes Area was primarily used for troop training and the historical documentation on the CBMR suggests a low probability of encountering Munitions of Explosive Concern (MEC). However, during transect investigations conducted in Training Areas 4, 5 and 12, 2Stokes mortars (fired, unfused) were recovered from the northeastern corner of Training Area 12. There is also a possibility that pyrotechnic devices (i.e. flares, smoke grenades) may be present as a result of abandonment, mishandling, or loss while troops were training in this area. Any residual non-deployed pyrotechnics that may be present are potentially flammable, and may contain a small, low-order explosive charge that may cause bodily injury.

However, large portions of the pyrotechnics were constructed with fiberboard containers and are therefore extremely susceptible to exposure to the elements and resultant weathering. Over time, the photo-flash powder has likely been exposed to moisture and deteriorated.

Accessibility and Reuse Intensity

The Western Slopes are classified as Limited Access Medium Intensity Reuse areas in the future Regional Park and have limited future reuse intensity due to terrain, vegetation and location outside the Central Valley in the Regional Park.

The existing recommended cleanup actions for the Western Slopes (2010 RAU 3 CAP) Area include the following:

- 1. Vegetation removal, and surface MEC clearance of all areas with a slope of 25 degrees or less, which is based on access limitations of steep slopes. Of the 609 acres in the Western Slopes Area, about 425 acres will be MEC surface cleared.
- 2. Step-Out procedure, as described in section 4.9 of the RAU 3 CAP applies.
- 3. Institutional controls including engineering controls signage to inform the public about this area's past usage, fencing to restrict access, and land use controls (restrictive deed covenants) to prohibit any future development and/or forestry and intrusive activities at this site.

Proposed Changes to 2010 Cleanup Action Plan

- Change: Vegetation removal, and surface MEC clearance of all areas with a slope of 14 degrees or less, which is based on new information including recent 2017 pilot test and access limitations of steep slopes and vegetation. Of the original 425 acres marked for clearance in the Western Slopes Area, about 195 acres will be MEC surface cleared.
- 2. No Change: Step-Out procedure, as described in section 4.9 of the 2010 RAU 3 CAP applies (no change to 2010 RAU 3 CAP).
- 3. No Change: Institutional controls including engineering controls signage to inform the public about this area's past usage, fencing to restrict access, and land use controls (restrictive deed covenants) to prohibit any future development and/or forestry and intrusive activities at this site (no change to 2010 RAU 3 CAP).