

Final
Proposed Plan

Pocatello Bombing Range Number 3 (PBR3)
Munitions Response Site (MRS)

Military Munitions Response Program

FUDS Project Number F10ID012801
Bingham County, Idaho



March 2019



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Prepared For:



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March 2019

Proposed Plan – Pocatello Bombing Range Number 3 MRS

Important Information

PUBLIC COMMENT PERIOD:

11 March 2019 – 15 April 2019

The U.S. Army Corps of Engineers will accept written comments on the Proposed Plan during the public comment period.

PUBLIC MEETING

A public meeting on the Proposed Plan will be held during the public comment period.

For more information, please see the Information Repository at the following location:

Portneuf District Library

5210 Stuart Avenue
Chubbuck, ID 83202

Hours of Operation:

Monday – Friday from 9:00 am to 7:00 pm
Saturday – 10:00 am to 6:00 pm

Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986, in accordance with the **National Oil and Hazardous Substances Pollution Contingency Plan (NCP)**. The USACE is the lead agency responsible for the implementation of the DERP at the PBR3 MRS, with regulatory support from the Idaho Department of Environmental Quality (IDEQ) and the Bureau of Land Management (BLM).

Military Munitions Response Program (MMRP)

A program established by the DoD to manage and address environmental impacts and health and safety concerns at former military ranges.

The Proposed Plan is part of the community relations program, which is a component of the requirements of Section 117(a) of the CERCLA. It follows the requirements of the U.S. Environmental Protection Agency (USEPA) guidance provided in *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents*, EPA 540-R-98-031 (USEPA, 1999). This Proposed Plan provides a summary of the site characteristics, risks, removal actions implemented to date, and the USACE’s rationale for recommending the stated Preferred Alternative of Surface Clearance and Subsurface Clearance (see page 18).

1.0 Introduction

This **Proposed Plan** is presented by the U.S. Army Corps of Engineers (USACE) to involve the public in the remedial action selection process for the Pocatello Bombing Range Number 3 (PBR3) **Munitions Response Site (MRS)** in Bingham County, Idaho (**Figure 1**). [Note: Key terms are introduced in **bold type (excluding headings and table and figure call-outs)** and are defined in Section 12.0 Glossary].

The work conducted to date at the PBR3 MRS has been performed under the **Military Munitions Response**

Program (MMRP), a program initiated by the Department of Defense (DoD) in 2002 to address potential **munitions and explosives of concern (MEC)** and **munitions constituents (MC)** contamination. The investigation and subsequent remediation of DoD facilities is managed through its Defense Environmental Restoration Program (DERP), which encompasses the MMRP. The DERP strictly adheres to and complies with the **Comprehensive Environmental Response, Compensation and**

Munitions Response Site (MRS)

A discrete location within a munitions response area that is known to require a munitions response.

This Proposed Plan presents the Preferred Alternative of remedial action for the PBR3 MRS to the public and solicits comments on the

recommendation. Upon review and finalization of the Proposed Plan, a **Decision Document (DD)** will be prepared, which will formally document the final remedial alternative selected by the USACE.

This Proposed Plan highlights key information contained in the Final **Remedial Investigation (RI)** (USACE, 2017) and the Final **Feasibility Study (FS)** (USACE, 2018). These reports are included in the **Administrative Record** file and are available to the public in the **Information Repository**. The reader

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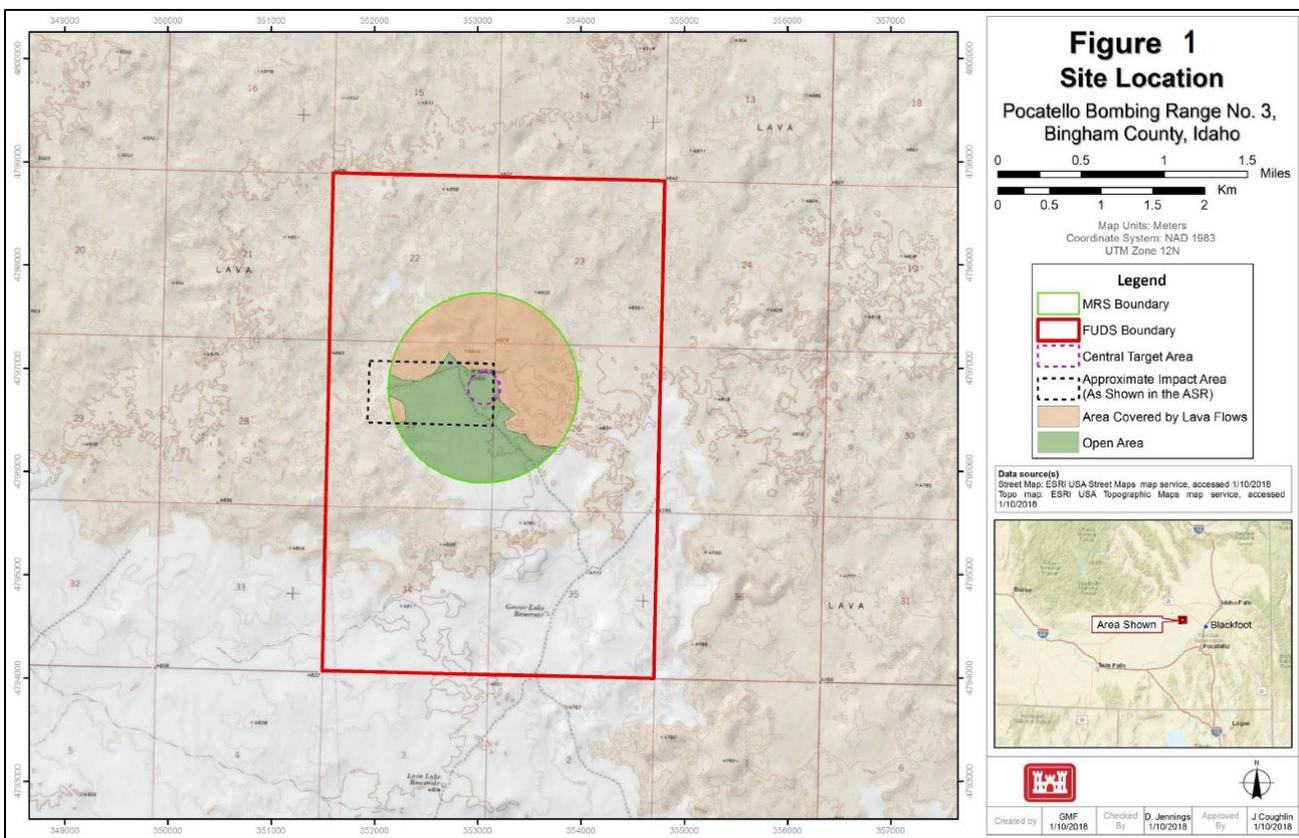


Figure 1. Pocatello Bombing Range No. 3 Site Location

should refer to the Information Repository for more information regarding investigation results and the remedial alternatives developed for the PBR3 MRS (beginning on page 10).

Public Involvement Process

Local community members, landowners, and other interested parties are encouraged to review this Proposed Plan and submit comments. A comment form is attached to the last page of this Proposed Plan. The USACE and IDEQ will consider comments from the public prior to final selection of a remedial action and approval of any action. Information on how to comment is provided in the Community Participation section (see page 18).

Public comments on the Proposed Plan will be accepted during a public review period. A public meeting will be held during the public review period to explain the Proposed Plan and the Preferred

Alternative. Public comments will be considered during preparation of the DD.

2.0 Site History and Background

Operational History

The PBR3 Formerly Used Defense Site (FUDS) (**Figure 1**) is comprised of 3,840 acres and is located approximately 25 miles northwest of Blackfoot, Idaho, in Bingham County. There is a single MRS at the FUDS property: the PBR3 MRS, which consists of 649 acres and is located entirely within the PBR3 FUDS. The PBR3 MRS location is based on the known location of a target ring, visible in a 1952 aerial photograph. The boundary of the PBR3 MRS is based on a 3,000-foot radius safety zone for the range (target ring), which equates to an area of 649 acres. The boundaries of the PBR3 FUDS and MRS are shown on a 1952 aerial photograph and a 2010 aerial photograph. These aerial photographs denote a

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rectangular area that was identified as an impact area in a real estate map (dated January 1944 and revised in May 1956) obtained during preparation of the Archive Search Report (ASR) (USACE, 2003). The rectangular area of the PBR3 FUDS is 3,840 acres and is entirely on land managed by the BLM (USACE, 2012).

The PBR3 MRS was built and used as a high explosive (HE) demolition and incendiary bombing range by the Pocatello Army Air Base. The property was also known as the Pocatello Precision Bombing Range No. 3 and the Pocatello Demolition and Incendiary Bombing Range. The Commanding General of the Second Air Force requested the construction of the range on April 21, 1943, and the boundaries were submitted to the Interdepartmental Air Traffic Control Board on April 24, 1943 (USACE, 2012). The range may have been in use as early as October 7, 1943 and use of the property continued until as late as May 1, 1947. Public Land Order 969, dated June 4, 1954, officially revoked DoD usage.

Improvements at the property included five frame pyramid targets, which suggest that there was one target area at the property with five smaller targets. The targets were left, while other unspecified improvements were removed (USACE, 2012).

According to historical documents and findings from previous investigations, the following conventional ordnance was used at the PBR3 MRS:

- Bomb, Practice, 100 lb., M38A2 and associated spotting charges;
- Bomb, General Purpose (GP), 100 lb., AN-M30 and associated fuzes;
- Bomb, Incendiary, 4 lb., AN-M54 and AN-M50; and
- Cartridge, .50 caliber small arms ammunition (SAA).

The total number of bombs dropped on the range during its period of usage is not specified in historical documents. According to the ASR, “during September 1943, the 382nd Bombardment Group, stationed at Pocatello Army Air Base dropped 1,706 practice bombs and 95 demolition bombs. The quantity of bomb craters is consistent with HE demolition bombs used in training by Bombardment Groups for the PBR3”. In addition, the Certificate of Clearance makes reference to “scrap from hundreds of practice bombs” and designates a 183-acre rectangular area as an impact area (USACE, 2003).

BLM currently manages the FUDS and PBR3 MRS, a portion of which is located within the Cedar Butte Wilderness Study Area (WSA), also managed by the BLM. The MRS is presently used for cattle grazing annually from April 8 to June 22 and occasional hunting. Recreational use is reportedly low in the area near the MRS. Wildlife surveys, cultural resource surveys, and geological surveys are performed on the PBR3 MRS on occasion. Other than a new fence and a guzzler (manmade watering hole for wildlife installed in 2016), there has been no recent construction on the MRS. Two Depression-era rock walls used to create seasonal ponds to provide water to wild game remain on the MRS. There are no physical access controls to the MRS or the larger



Depression-era rock wall

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FUDS. There are no residences or businesses located on the MRS or within the FUDS.

Previous Investigations

Inventory Project Report

A site visit conducted in 1986 in support of the Inventory Project Report (INPR) reported the observation of numerous bomb craters and bomb fragments. PBR3 was established as a FUDS in the INPR and it was recommended that a decision regarding further investigation to evaluate the presence of MEC was necessary (USACE, 1988).

Archive Search Report

The 2003 ASR presents the findings of a historical record search and the results of a site visit conducted in 2002. No MEC was observed during the site visit; however, **munitions debris (MD)** consisting of expended M38A2 practice bombs, M30 demolition bombs, and one incendiary device were observed. Additionally, a possible target marker and numerous craters from the use of demolition bombs were found (USACE, 2003).

Munitions Debris (MD)

Remnants of munitions (e.g., fragments, penetrators, projectiles, shell casings, links, fins) remaining after munitions use, demilitarization, or disposal.

Archive Search Report Supplement

The 2004 ASR Supplement, an addition to the ASR, described the munitions used at the MRS, calculated the acreage of the FUDS (3,840 acres), and established the existence of one MRS (PBR3) (USACE, 2004).

Site Inspection

The 2012 Site Inspection (SI) was conducted to evaluate potential MEC and MC present at the PBR3 MRS. **Qualitative reconnaissance (QR)** was focused on the central target area of the MRS and on the area identified as an “impact area” in the Certificate of Clearance. Bomb craters were observed throughout

the central target area, some up to approximately 20 feet in diameter and 4 feet deep. The craters were closely spaced near the target center. Potential wood target debris was observed on the ground throughout the MRS. Hundreds of pieces of MD from M38A2 practice bombs with expended M1A1 or M3 spotting charges; AN-M30 GP HE bombs and associated fuzes; and AN-M50 or AN-M54 incendiary bombs with cluster adapter components were

Munitions and Explosives of Concern (MEC)

Specific categories of military munitions that may pose unique explosives safety risks, specifically composed of a) unexploded ordnance (UXO), b) discarded military munitions, or c) munitions constituents (e.g., TNT, RDX) present in high enough concentrations to pose an explosive hazard.

observed. Debris from .50 caliber SAA were also observed throughout the MRS. A total of 37 MEC items (AN-M54 incendiary bombs) were discovered during the SI field effort. The MEC items were transported off-site and detonated by **explosive ordnance disposal (EOD)** personnel from Mountain Home Air Force Base in Mountain Home, Idaho. Additionally, five AN-M54 tail fins were observed protruding from the ground and were identified as potential MEC. EOD personnel utilized a remote pull technique to remove the items from the ground. When pulled, the tail fins broke free. An intrusive investigation was not conducted to determine whether the incendiary portions of the items were intact underground.

Munitions Constituents (MC)

Any material that originates from UXO, discarded military munitions, or other military munitions, including explosive and non-explosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions.

In addition to the QR, the SI data collection efforts focused on screening for MC contamination in surface soil. Surface soil samples were collected and

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analyzed for explosives, selected metals (aluminum and barium, present in incendiary bombs), and semi-volatile organic compounds (anthracene and hexachloroethane). An MC release was not established in surface soil at the PBR3 MRS. Based on the findings of the field inspection, the SI recommended a RI/FS with further investigation for MEC at the PBR3 MRS (USACE, 2012).

Remedial Investigation (RI)

A process undertaken by DoD to determine the nature and extent of the problem presented by the release. The RI emphasizes data collection and site characterization, and is generally performed concurrently and in an interactive fashion with the FS. The RI includes sampling and monitoring, as necessary, and includes the gathering of sufficient information to determine the necessity for remedial action and to support the evaluation of remedial alternatives.

Remedial Investigation

The 2017 RI was conducted to collect data needed to complete characterization of the MRS; to determine the nature and extent of MEC and MC; and to determine if there is an unacceptable risk from MEC hazards that requires a remedial action under the MMRP and the CERCLA to achieve these objectives. The approach to the RI leveraged previous data to develop survey methodologies conducive to both the soil and lava portions of the site, and to confirm findings from previous soil samples. Using Visual Sample Plan software as a basis for designing survey transect spacing to ensure that all potential target areas within the MRS were traversed, transect designs were created for assisted visual survey (AVS) and digital geophysical mapping (DGM). AVS occurred over the lava portions of the site, which were not conducive to DGM techniques. DGM was collected in a transect format over the remaining soil portions of the PBR3 MRS. Approximately 2.2% of

the overall MRS was covered using AVS, and approximately 12.29% of the overall MRS was covered using DGM. Although these surveys did not cover 100% of the MRS, based on their design, they are sufficient to characterize the nature and extent of the hazard posed by MEC at the PBR3 MRS. Following DGM, a target list consisting of 600 **anomalies** detected using metal detectors were intrusively investigated by **Unexploded Ordnance (UXO)** Technicians using shovels and, in some cases, a backhoe. In total, nine MEC items classified as UXO were discovered on the surface of the MRS during the RI and were disposed of using standard demolition techniques with the resulting material designated as safe (MDAS) recovered and disposed of. This confirms UXO presence on the surface of the MRS. The SI Report (USACE, 2012) indicates that MEC was discovered partially buried and, while no UXO was located in the subsurface during the RI, MD was discovered at depths of up to 48 inches below ground surface leading to the conclusion that there may be buried UXO within the soil portions of the site. Large quantities of MD, matching the description of the munitions items used at the site, and large volumes of general



UXO Technicians conducting surface sweep during the RI.

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MD item found during the RI.



Collecting soil sample at the AN-M54 cluster impact site during the RI.

munitions fragments from expended bombs, were located throughout the MRS. Biased soil sampling, analyzed for explosives and metals, did not indicate a release of MC, which is consistent with findings from the SI. Based on the findings of the RI, the following conclusions were drawn:

- There is MEC in the form of UXO on the surface of the MRS, and potentially in the subsurface. Human receptors have unrestricted access to UXO at this MRS.
- There is no current risk to human or ecological receptors from MC at the site.

- UXO, MD, and SAA were found throughout the MRS. Some MD, but no UXO, were located outside the MRS boundary. According to the RI, only sporadic MD, and no UXO, were found outside the MRS, and there was insufficient evidence to warrant expanding the MRS beyond its current boundary. The RI concluded that based on the dispersal of UXO and MD, the MRS should not be divided into hazardous and non-hazardous areas and should not be reduced or expanded.

Also during the RI, five warning signs were placed alongside unimproved roads, just south of the MRS. The signs warn that the area may contain UXO and provide a phone number to the BLM with instructions to call if any munitions items were located.

The RI recommended a FS for the PBR3 MRS due to the presence of UXO on the surface and potential presence for UXO in the subsurface, and complete exposure pathways to human receptors (USACE, 2017). **Figure 2** maps the dispersal of UXO and MD identified during the RI.

Feasibility Study (FS)

A study undertaken by the DoD to develop and evaluate options for remedial action. The RI data are used to define the objectives of the response action, to develop remedial action alternatives, and to undertake an initial screening and detailed analysis of the alternatives. The term also refers to a report that describes the results of the study.

Feasibility Study

The purpose of the 2018 FS (USACE, 2018) was to ensure appropriate remedial alternatives were developed and evaluated, and to provide the information necessary to select a permanent solution protective of human health and the environment at the PRB3 MRS due to the presence of MEC.

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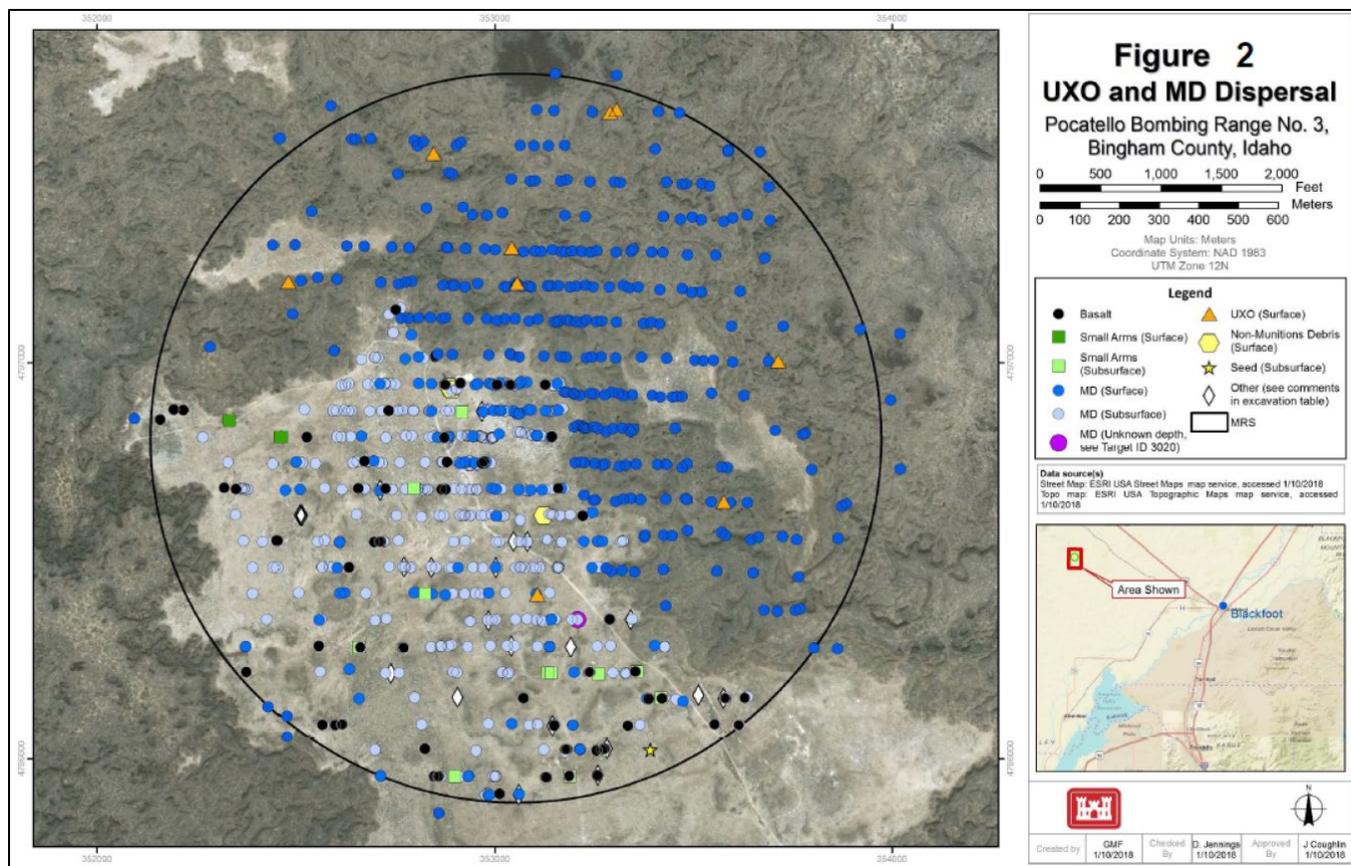


Figure 2. UXO and MD Dispersal Pocatello Bombing Range No. 3

Five alternatives were developed to meet the Remedial Action Objectives (RAOs) for the PBR3 MRS:

1. Alternative 1 *No Action*
2. Alternative 2 ***Land Use Controls (LUCs)***
3. Alternative 3 *LUCs and Surface Clearance*
4. Alternative 4 *LUCs, Surface Clearance and Targeted Subsurface Clearance*
5. Alternative 5 *Surface and Subsurface Clearance*

The five alternatives are detailed in Sections 7 and 8 of this Proposed Plan, beginning on page 10.

The SI, RI and FS findings are the basis for the information included in this Proposed Plan.

3.0 Site Characteristics

Land Use and Physical Characteristics

The PBR3 MRS is currently on public lands managed by the BLM and includes lands within the Cedar Butte WSA. There are no residences or businesses located on the MRS or within the FUDS. The MRS is accessible via a dirt road from the south. Land use at the MRS is both recreational (hiking, hunting, etc.) and professional. Professional activities performed at the PBR3 MRS include wildlife surveys, cultural resource surveys, geological surveys, etc. Cattle grazing occasionally occurs in the area as well, annually from April 8 to June 22. There are no expected changes to current or reasonably anticipated future land use at the PBR3 MRS, and future construction is not anticipated. There are no access restrictions to the MRS.

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The MRS consists of 649 acres and is generally flat, with minor topographical changes. The northeast portion of the MRS is at a slightly higher elevation than the southwest. There are two distinct ground types inside the MRS. A large portion of the MRS is covered with basaltic lava flows. These protected areas (part of the Cedar Butte WSA), where rock is present on the surface, preclude the burial of airdropped munitions into the substrate. The remaining portion of the MRS has a soil surface, with sporadic rock surfaces.

The direction of groundwater flow within the FUDS is toward the southwest. From well completion



details within 4 miles of the FUDS, it appears that the depth to groundwater in the area ranges from less than 65 to greater than 400 feet below ground surface. This indicates that wells are likely completed in both unconsolidated deposit and basaltic rock aquifers (USACE, 2017).

Surface water within the MRS is intermittent. Even when streams flow during the spring season, the water typically infiltrates into fractures in the exposed basalt bedrock and disappears. There is one such intermittent stream mapped in the southwest corner of the FUDS. Two lakes (Wood Road Lake and Grover Lake Reservoir) are located within the FUDS and are small depressions that only contain water intermittently. Wood Road Lake is located near the center of the PBR3 MRS. Grover Lake Reservoir is located to the south of the MRS (**Figure 3**).

The MRS contains an Important Ecological Place identified as a mapped wetlands/intermittent man-made watering hole area located at Wood Road Lake (**Figure 3**).

4.0 Scope and Role of Response Action

The remedial strategy for the PBR3 MRS reflects the public and IDEQ interest in mitigating risk and protecting the public where areas of historic MEC hazards have been present. In keeping with this objective, multiple remedial alternatives were evaluated for the MRS. These remedial alternatives took into account the extensive investigations previously performed. These remedial alternatives are explained in detail in Section 7.0 (beginning on page 10).

5.0 Summary of Site Risks

A baseline MEC explosive hazard risk assessment was conducted using information from previous studies and the RI to determine if an unacceptable risk is present at the PBR3 MRS. The pathway analysis considered the following factors:

- Presence and nature of MEC sources;
- Site characteristics that affect pathways between the MEC and humans; and
- Types of activities that may result in exposure.

Results of the baseline analysis determined there is an unacceptable risk for human receptors to access MEC in the form of UXO at the MRS in surface and subsurface soil. Nine UXO items were found during the RI field effort; consequently, all soil exposure pathways for access and exposure to MEC in this MRS are complete for all human receptors (USACE, 2018).

Regarding MC at the PBR3 MRS, MC were not identified during the SI or RI sampling activities,

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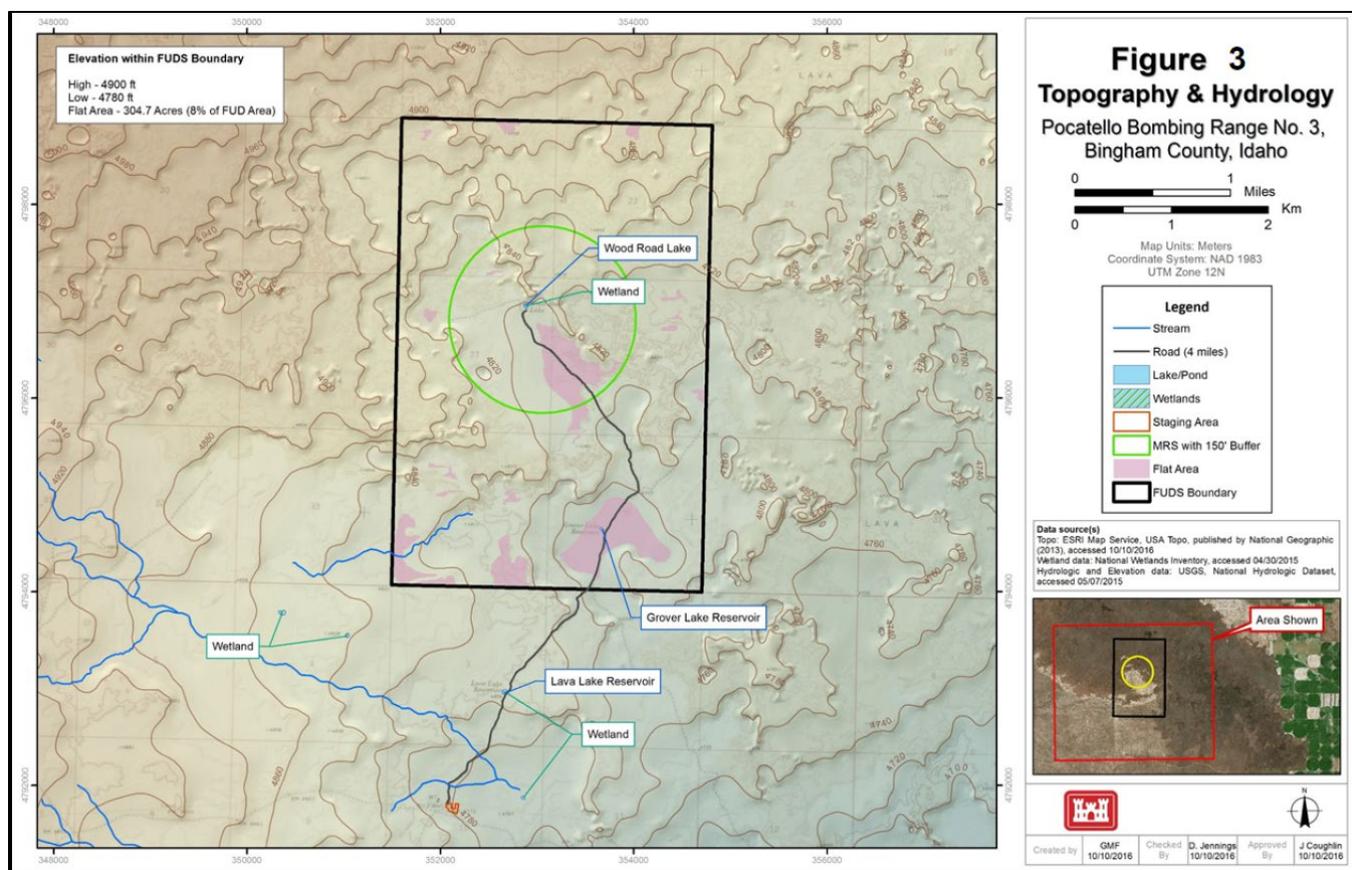


Figure 3. Topography & Hydrology Pocatello Bombing Range No. 3

therefore, there are no unacceptable MC risks to human health and the environment.

6.0 Remedial Action Objectives

There are multiple RAOs for the PBR3 MRS due to differences in UXO distribution caused by geology. The first RAO for the PBR3 MRS is to reduce the unacceptable risk due to the presence of AN-M54 4 lb. incendiary bombs, AN-M30 GP bombs, and bomb fuzes located on the surface of the PBR3 MRS in basaltic lava-flow covered areas. This RAO would address the likelihood of exposure to site visitors or recreational users while performing recreational activities, and commercial, governmental or industrial workers while accessing the surface of these areas for professional activities such as geological or cultural resource investigations, such that an acceptable condition of negligible risk is achieved.

The second RAO is to reduce the unacceptable risk due to the presence of AN-M54 4 lb. incendiary bombs, AN-M30 GP bombs, and bomb fuzes located on the surface of the PBR3 MRS in soil covered areas and to a depth of 3 feet below surface (the frost line). This RAO would address the likelihood of exposure to site visitors or recreational users while performing recreational activities, and commercial, governmental or industrial workers while accessing the surface or subsurface of the soil covered areas

Remedy/Remedial Action

Those actions consistent with permanent remedy taken instead of or in addition to removal actions in the event of a release or threatened release of a hazardous substance into the environment, to prevent or minimize the release of hazardous substances so that they do not migrate to cause substantial danger to present or future public health or welfare or the environment.

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for professional activities such as geological or intrusive cultural resource investigations (generally limited to 1-2 feet), such that an acceptable condition of negligible risk is achieved.

The RAOs will define the measure of success of the adopted remedial action.

Applicable or Relevant and Appropriate Requirements and “To Be Considered” Information

Applicable or Relevant and Appropriate Requirements (ARARs) are promulgated statutory and regulatory requirements that are substantive in nature and must be met or waived during the implementation of a remedial action. ARARs are identified based on site-specific factors such as contaminants present, location, site physical features, and remedial alternatives and are subdivided into three categories (chemical-specific, action-specific, and location-specific). The FS evaluated potential ARARs and to be considered (TBC) guidance. An analysis of Federal ARARs for the PBR3 MRS identify the following relevant and appropriate action-specific ARAR:

- 40 Code of Federal Regulations (CFR) 264.601; Subpart X, Environmental Performance Standards.

In addition to ARARs, TBC guidance includes non-promulgated advisories, proposed rules, criteria, or guidance documents issued by federal or state entities that do not have the status of potential ARARs. No TBC criteria were identified for the PBR3 MRS.

7.0 Summary of Remedial Alternatives

The following remedial alternatives for the PBR3 MRS were evaluated: 1) No Action; 2) LUCs (Governmental Controls and Signage); 3) Surface Clearance and LUCs; 4) Surface Clearance, Targeted Subsurface Clearance, and LUCs; and 5) Surface Clearance and Subsurface Clearance.

Note: For all alternatives, with the exception of Alternative 1, BLM has identified that some seasonal timing restrictions of blowing-in-place and surface disturbance may be required due to the presence of cultural resources and sage-grouse activities. Further, BLM requires a cultural survey prior to any subsurface disturbance or detonation of munitions in place.

Alternative 1 No Action

The No Action Alternative literally means taking no further action regarding the PBR3 MRS. This alternative has no additional actions, capital costs, operation and maintenance costs, or periodic costs. This alternative is required per the NCP to be included in the FS Report for comparison purposes.

Land Use Controls (LUCs)

Physical, legal, or administrative mechanisms that restrict the use of, or limit access to, real property, to prevent or reduce risks to human health and the environment. Physical mechanisms encompass a variety of engineered remedies to contain or reduce contamination and physical barriers to limit access to real property, such as fences or signs. The legal mechanisms used for LUCs are generally the same as those used for institutional controls as discussed in the NCP.

Alternative 2 Land Use Controls (Governmental Controls and Signage)

The LUC Alternative involves instituting LUCs (activity and access restrictions, public education) at the MRS. In order to reduce and/or manage the likelihood of human contact with MEC, the following LUCs would be enacted:

- LUCs, such as activity restrictions, will be implemented in addition to signage and public education. However, USACE does not have authority to implement, enforce, or maintain LUCs which restrict or limit real property rights at a FUDS without landowner or governmental agreement. Such LUCs

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would have to first be established by other parties using their rights or authorities to implement, enforce, and maintain such LUCs before proceeding with final remedy selection. USACE may monitor and report on these LUCs once established if they support or supplement a selected remedy.

- Additional signage (17 total) utilizing the Army's 3R messaging (signs warning of UXO on the surface and subsurface) would be emplaced at the PBR3 MRS to warn potential receptors of the risk of UXO contact and instructing receptors not to excavate within the MRS without approval from the BLM.
- One public notice would be run in local newspapers annually (initially for the 30 years included in the FS cost estimate) warning of the hazard associated with remaining UXO on the surface of the MRS.
- A LUC Implementation Plan will be developed that will document how LUCs will be established and implemented and define the entities responsible for managing and maintaining the LUCs.

Because this alternative does not provide unlimited use/unrestricted exposure (UU/UE) due to hazards remaining at the MRS, it would necessarily require five-year reviews to ensure that the governmental controls and signage are being implemented and maintained properly, and to ensure the governmental controls maintain applicability with any revisions to laws and regulations. All findings from each five-year review would be described in a Five-Year Review Report. The costs for the five-year reviews are included in the detailed analysis for the alternative.

This alternative would meet the RAOs by moving the MRS from an occasional encounter with modest severity to seldom encounters with modest severity, thus moving from an unacceptable risk to an acceptable risk.

[Alternative 3 Surface Clearance and LUCs](#)

In Alternative 3, all LUCs from Alternative 2 would be implemented at the MRS in order to reduce the potential for contact with possible subsurface UXO. To address surface UXO, an analog-AVS and surface clearance of UXO would occur throughout the MRS (100% coverage).

Field teams that would include UXO Technicians would perform the surface clearance. UXO Technicians, equipped with global positioning system and analog metal detectors, would perform a 100% coverage survey. A UXO Technician would operate a small off-road vehicle with a bed to collect transportable UXO to a consolidated site for disposition. The surface clearance would entail removing all munitions-related surface material, including MD (approximately 31,826 pounds estimated in the FS).

UXO would be disposed of on-site by qualified UXO Technicians performing a consolidated demolition, a blow-in-place, or a combination of both. MDAS, including MD, would be disposed of via recycling, as occurred during the RI.

Because the alternative does not provide UU/UE due to hazards remaining at the MRS, this alternative would require five-year reviews to ensure the remedy is still working. The costs for the five-year reviews are included in the detailed analysis for the alternative.

This alternative would meet the RAO by reducing the amount of UXO, reducing the likelihood of an encounter from occasional to unlikely, thereby moving from an unacceptable risk to an acceptable risk.

[Alternative 4 Surface Clearance, Targeted Subsurface Clearance, and LUCs](#)

In Alternative 4, all LUCs from Alternative 2 would be implemented at the MRS in order to reduce the potential for contact with subsurface UXO across the soil portion of the MRS. The surface clearance presented in Alternative 3 would also be

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implemented in full. To further address subsurface UXO, a targeted subsurface clearance would occur within the MRS. This subsurface clearance would be designed to remove all subsurface UXO from the area where subsurface UXO is most likely to be exposed to receptors (i.e., where exposure pathways are most likely to lead to contact). The dirt roadway leading into the MRS is rutted, and with vehicular traffic (i.e., personnel accessing the guzzler, the lava flow, or cultural resources sites within the MRS) can become more rutted, potentially exposing UXO buried in the subsurface. Vehicles may also move slightly off the roadway onto flatter terrain, potentially creating additional ruts and exposing buried UXO. Additionally, the potential buried UXO items left in place during the SI phase would be recovered.

A 100% coverage DGM survey using cart-based sensors would occur over the width of the roadway, and a 20-foot buffer on either side of the center of the roadway. The total area covered by this survey would be approximately 3.61 acres. The probability of **anomaly** detection would be 90%-100%. All anomalies meeting a defined threshold would be flagged for investigation and removal in real-time by UXO Technicians. Based on DGM results from the RI, it is estimated that the average anomaly density per acre needing investigation is approximately 46.

UXO would be disposed of on-site by qualified UXO Technicians performing a consolidated demolition, a blow-in-place, or a combination of both. MDAS would be disposed of via recycling, as occurred during the RI.

Because the alternative does not provide UU/UE due to hazards remaining at the MRS, this alternative would require five-year reviews to ensure the remedy is still working. The costs for the five-year reviews are included in the detailed analysis for the alternative.

This alternative would meet the RAO by reducing the amount of UXO, reducing the likelihood of an

encounter from occasional to unlikely and moving from an unacceptable risk to an acceptable risk.

[Alternative 5 Surface Clearance and Subsurface Clearance](#)

Alternative 5 includes a 100% surface and subsurface clearance. To address surface UXO, an analog-AVS and surface clearance of UXO would occur throughout the MRS (100% coverage) as detailed in Alternative 3. In addition to the 100% surface clearance a 100% DGM survey of the “surveyable” or soil portion of the MRS will be conducted. The “surveyable” portion of the MRS contains soil that is conducive to DGM and excavations (approximately 45% of the MRS). The remaining 55% of the MRS, surveyed using an analog-AVS, is covered with basaltic lava flows and rock present on the surface that preclude DGM and excavation. The area of rock and lava flows also preclude penetration of UXO into the subsurface. The DGM survey will utilize a combination of towed, carried and cart-based surveys similar to those performed during the RI and will be operated by Geophysicist(s). The probability of anomaly detection would be 90% to 100%.

Following initial DGM and data processing, advanced geophysical classification (AGC) would be implemented to reduce the total number of digs necessary at the MRS. Based on DGM results from the RI, it is estimated that the 100% coverage survey will result in 17,220 targeted anomalies for AGC based on the determination of an average anomaly density of 46 per acre at the MRS. AGC system(s) would be deployed to interrogate selected anomalies following DGM. Advanced classification would reduce the target anomaly list by an estimated 90%, resulting in an estimated 1,722 total digs. The probability of detection using AGC has been demonstrated up to 100%. The target anomaly list (potentially hazardous munitions) would be investigated/excavated, and items such as metal clutter and debris (non-hazardous) would be left in the ground.

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UXO would be disposed of on-site by qualified UXO Technicians performing a consolidated demolition, a blow-in-place, or a combination of both. MDAS would be disposed of via recycling, as occurred during the RI.

The alternative does not contain any LUC elements, as the MRS would reach UU/UE upon conclusion.

This alternative would meet the RAO by reducing the amount of UXO, reducing the likelihood of an encounter from occasional to unlikely, thus moving from an unacceptable risk to an acceptable risk.

8.0 Evaluation of Alternatives

The rationale for selecting the Preferred Alternative is based on a detailed analysis of all the remedial alternatives. As shown in **Table 1**, nine evaluation

criteria are used to evaluate and compare remedial alternatives in a detailed analysis (USEPA, 1988). These include threshold criteria, balancing criteria, and modifying criteria.

Selecting the Preferred Alternative involves evaluating the proposed alternatives against the evaluation criteria. Threshold criteria are requirements that each alternative must meet in order to be eligible for selection. Balancing criteria are used to weigh major trade-offs between the alternatives. Modifying criteria may be considered to the extent that information is available but can only be fully considered after public comment is received on this Proposed Plan.

In the final balancing of trade-offs among the alternatives upon which the final remedial action selection is based, modifying criteria are of equal importance to balancing criteria.

Table 1 shows the nine evaluation criteria used to evaluate each alternative. **Table 2** provides a summary of the alternatives and how each alternative was evaluated relative to the nine evaluation criteria shown in **Table 1**.



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Table 1. Nine Evaluation Criteria to Evaluate Remedial Alternatives

Threshold Criteria				
Overall Protection of Human Health and the Environment		Compliance with Applicable or Relevant and Appropriate Requirements (ARARs)		
Does the alternative protect human health and the environment from the hazards at the site?		Can the alternative be implemented in compliance with the ARARs identified for the site?		
Balancing Criteria				
Long-term Effectiveness and Permanence	Reduction of Toxicity, Mobility, or Volume (TMV) Through Treatment	Short-term Effectiveness	Implementability	Cost
How effective and permanent is the alternative over time?	How well does the alternative reduce the harmful effects of the hazard at the site?	How long will it take to complete the cleanup and follow on work? Can the community, site workers, and the environment be kept safe during cleanup operations?	Can the alternative be practically and successfully implemented, considering any technical and administrative issues that may need to be addressed?	What are the initial capital costs plus ongoing operation and maintenance costs estimated using current prices?
Modifying Criteria				
State Concurrence		Community Concurrence		
Do the state regulators approve of the alternative?		Does the public approve of the alternative?		



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Table 2. Comparative Analysis of Remedial Alternatives

	Alternative 1: No Action	Alternative 2: LUCs ¹	Alternative 3: Surface Clearance and LUCs	Alternative 4: Surface Clearance, Targeted Subsurface Clearance, and LUCs	Alternative 5: Surface Clearance and Subsurface Clearance
Threshold Criteria					
Protectiveness	FAIL	PASS	PASS	PASS	PASS
ARAR Compliance	PASS	PASS	PASS	PASS	PASS
Balancing Criteria					
Permanence and Long-Term Effectiveness	Low	Moderate to Low	Moderate	Moderate to High	High
Reduction in Mobility, Toxicity, or Volume Through Treatment	Low	Low	Moderate	Moderate to High	High
Short-Term Effectiveness	High	Moderate to High	Moderate	Moderate to Low	Low
Implementability	High	Moderate to High	Moderate	Moderate	Moderate to Low
Estimated Cost	Low (\$0)	Moderate to Low (\$411K estimated total)	Moderate (\$1.13M)	Moderate to High (\$1.26M estimated total)	High (\$2.50M estimated total)
Analysis	FAIL	PASS	PASS	PASS	PASS

¹ For the purpose of detailed analysis, the period of performance for evaluating costs will be a 30-year period (USEPA, 1988).

Summary of Each Alternative Relative to the Nine Evaluation Criteria

Threshold criterion are requirements each alternative must meet or have specifically waived to be eligible for selection. These criteria are evaluated on a “Pass/Fail” basis. Balancing criteria are those that form the basis for the comparison among alternatives that meet the threshold criteria (Army, 2009). For the alternatives analysis, the balancing criteria were assessed based on performance of the alternative to meet the criterion in relation to the performance of other alternatives using Low, Moderate, Moderate to High, and High descriptors.

Costs were assessed using a description on a scale (Low for lowest cost and increasing through High for the highest cost) in addition to presenting the actual cost (Table 2).

1. Overall Protection of Human Health and the Environment

Overall protection of human health and the environment addresses whether each alternative provides adequate protection of human health and the environment and describes how risks posed through each exposure pathway are eliminated, reduced, or controlled; through treatment,

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engineering controls, and/or institutional controls (USEPA, 1999).

Alternative 1 does not reduce UXO risk and therefore does not meet the threshold criterion for protectiveness; Fail.

Alternative 2 is protective of human health and the environment in the short-term, and if properly implemented, is permanent and effective at managing long-term risks. It achieves the RAO by reducing the likelihood of encounter and by reducing the likelihood of energy imparted to a UXO item potentially causing a detonation; Pass.

Alternative 3 is protective of human health and the environment in the short-term and is permanent and effective in managing long-term risks. It achieves the RAO by reducing the likelihood of encounter and by reducing the likelihood of energy imparted to a UXO item potentially causing a detonation; Pass.

Alternative 4 is protective of human health and the environment in the short-term and is effective in managing long-term-risks. Alternative 4 achieves the RAO by reducing the likelihood of encounter and by reducing the likelihood of energy imparted to a UXO item potentially causing a detonation; Pass.

Alternative 5 is protective of human health and the environment in the short-term and is effective in managing long-term risks. Alternative 5 achieves the RAO by eliminating the likelihood of encounter with UXO; Pass.

2. Compliance with ARARs

Section 121(d) of CERCLA and NCP 40 CFR §300.430(f)(1)(ii)(B) require that remedial actions at CERCLA sites at least attain legally applicable or relevant and appropriate Federal and State requirements, standards, criteria, and limitations which are collectively referred to as “ARARs,” unless such ARARs are waived under CERCLA section 121(d)(4) (USEPA, 1999).

Alternatives 1 and 2 are compliant with ARARs as the one established ARAR does not apply to them; Pass.

Alternatives 3 to 5 are compliant to the established ARAR; Pass.

3. Long-term Effectiveness and Permanence

Long-term effectiveness and permanence refers to expected residual risk and the ability of a remedy to maintain reliable protection of human health and the environment over time, once clean-up levels have been met. This criterion includes the consideration of residual risk that will remain on-site following remediation and the adequacy and reliability of controls (USEPA, 1999).

Alternative 1 has no permanence or long-term effectiveness as no action would be taken; Low.

Although Alternative 2 does not reduce UXO at the MRS, its correct and consistent implementation could reduce or eliminate the possibility of exposure to UXO over long periods; Moderate to Low.

Alternative 3 results in a permanent change to the condition of the MRS and would be effective in the long-term; Moderate.

Alternative 4 results in a permanent change to the condition of the MRS and would be effective in the long-term; Moderate to High.

Alternative 5 results in a permanent change to the condition of the MRS and would be effective in the long-term; High.

4. Reduction of Toxicity, Mobility, or Volume of Contaminants through Treatment

Reduction of toxicity, mobility, or volume (TMV) through treatment refers to the anticipated performance of the treatment technologies that may be included as part of a remedy (USEPA, 1999).

Alternatives 1 and 2 do not reduce TMV of UXO in any way. Alternative 2 is designed to control future activities which may lead to human exposure; Low.

Alternative 3 results in substantial reduction in volume of UXO through treatment from the MRS; Moderate.

Alternative 4 results in substantial reduction in volume of UXO through treatment from the MRS. It

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also eliminates the potential for contact with subsurface UXO in and around the roadway in the MRS; Moderate to High.

Alternative 5 results in reduction in volume of UXO through treatment from the MRS; High.

5. Short-term Effectiveness

Short-term effectiveness addresses the period of time needed to implement the remedy and any adverse impacts that may be posed to workers, the community and the environment during construction and operation of the remedy until cleanup levels are achieved (USEPA, 1999).

As there is no action associated with Alternative 1, there is no risk associated with short-term actions; High.

The implementation of Alternative 2 does not require any contact with UXO. As there is no surface or subsurface clearance, there is no risk to workers intentionally contacting UXO. There is a slight risk to workers installing warning signs that may be reduced by safety planning and anomaly avoidance provided by UXO Technicians; Moderate to High.

The implementation of Alternative 3 poses more short-term risks to workers than Alternative 2, though risks can be mitigated with standard safety precautions; Moderate.

The implementation of Alternative 4 poses more short-term risks to workers than Alternatives 2 and 3, though risks can be mitigated with standard safety precautions; Moderate to Low.

The implementation of Alternative 5 poses more short-term risks to workers than Alternatives 2, 3 and 4, though risks can be mitigated with standard safety precautions; Low.

6. Implementability

Implementability addresses the technical and administrative feasibility of a remedy from design through construction and operation. Factors such as availability of services and materials, administrative feasibility, and coordination with other

governmental entities are also considered (USEPA, 1999).

There are no hindrances to Alternative 1. Alternative 1 does not pass the protectiveness threshold criterion; High.

Alternative 2 is fully implementable at the MRS. In order to maximize the effectiveness of Alternative 2, it would be necessary for the general public to heed warnings posted at the MRS; Moderate to High.

Alternative 3 is fully implementable at the MRS. There is a large pool of available specialists equipped with the necessary UXO-related materials and equipment to perform the services; Moderate.

Alternative 4 is fully implementable at the MRS. There is a large pool of available specialists equipped with the necessary UXO and DGM-related materials and equipment to perform the services; Moderate.

Alternative 5 is fully implementable at the MRS. There is a small pool of available specialists equipped with the necessary UXO, DGM, and AGC (e.g., DoD Advanced Geophysical Classification Accreditation Program certification) materials and equipment to perform the services; Moderate to Low.

7. Cost

The estimated present value costs for the alternatives range from \$0.00 to \$2,499,875. The cost of the alternative increases as the degree of remediation increases.

There is no cost associated with the No Action Alternative; Low.

The total cost for Alternative 2 is projected to be \$410,869. Costs include administrative costs to establish LUCs as part of Alternative 2, and costs for five-year reviews, which are not an element of the alternative, but would still be required to verify whether the remedy is still working. For the purpose of detailed analysis, the period of performance for evaluating costs will be a 30-year period (USEPA, 1988); Moderate to Low.

Estimated total costs for Alternative 3 are \$1,126,242. These costs include surface clearance

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costs and costs associated with establishing and maintaining LUCs (these costs are the same as those proposed for Alternative 2); Moderate.

Estimated total costs for Alternative 4 are \$1,262,034. In addition to surface clearance costs and costs with establishing and maintaining LUCs (these costs are the same as those presented for Alternatives 2 and 3), there are additional costs associated with the DGM and subsurface clearance; Moderate to High.

Estimated total costs for Alternative 5 are \$2,499,875. This alternative consists of a complete surface clearance and 100% DGM of surveyable areas. As the MRS would reach UU/UE upon conclusion, it does not contain any LUC elements. Following initial DGM and data processing, AGC will be implemented to reduce the total number of digs needed at the MRS; High.

8. State Concurrence

The IDEQ concurrence of the Preferred Alternative will be evaluated after the public comment period for this Proposed Plan ends.

9. Community Concurrence

Community concurrence of the Preferred Alternative will be evaluated after the public comment period for this Proposed Plan ends. The DD that follows the concurrence of this Proposed Plan will address the degree of community concurrence.

9.0 Preferred Alternative

Based on the information to date, Alternative 5, the Surface Clearance and Subsurface Clearance Alternative, is the Preferred Alternative for the PBR3 MRS. Alternative 5 removes UXO risk and therefore meets the threshold criteria for protectiveness. It is fully compliant with the ARAR, scores high on balancing criteria for long-term effectiveness, and achieves a reduction of volume of UXO through treatment. While Alternatives 4 and 5 compare favorably to other alternatives when considering permanence, long-term effectiveness, and reduction in TMV through treatment, Alternative 5 does the

most to meet the RAO by eliminating the likelihood of an encounter with UXO. Although standard safety precautions would be taken to mitigate risks during the surface and subsurface clearance, there is a short-term effect upon workers. Finally, it is the only alternative that results in UU/UE.

Agency and community concurrence will be fully evaluated after presentation of the Preferred Alternative to the public in the Proposed Plan. Following public comment, a final remedy will be selected and documented in a DD.

10.0 Community Participation

The USACE is soliciting public comments on the Preferred Alternative proposed for the PBR3 MRS. A comment form is attached at the back of this Proposed Plan. The public is encouraged to comment, and comments received will be considered before any remedial action is selected and approved. Written comments on this Proposed Plan will be accepted by mail or email throughout a public comment period from 11 March 2019 through 15 April 2019. Please submit written comments to Mr. Adrian Goettemoeller, who can also be contacted for additional information:

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The public is invited to review and comment on the Proposed Plan.

The comment period includes a public meeting where the USACE will present more detailed site information. The public meeting will be held before the end of the public comment period. Representatives from the USACE and the IDEQ will be present at the meeting to explain this Proposed Plan, listen to concerns, answer questions, and accept public comments.

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Since the five alternatives presented are based on current information, they may be modified or changed in response to public comments received or significant new information. The USACE, in consultation with the IDEQ, will consider public comments received during the public meeting and comment period. After considering the public comments, the USACE will make a final decision concerning future action to be taken at the PBR3 MRS. This decision will be presented in a DD, which will include a “**Responsiveness Summary**” presenting responses to public comments on this Proposed Plan.

11.0 Acronyms and Abbreviations

AGC	Advanced Geophysical Classification
ARAR	Applicable or Relevant and Appropriate Requirement
ASR	Archive Search Report
AVS	Assisted Visual Survey
BLM	Bureau of Land Management
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
DD	Decision Document
DERP	Defense Environmental Restoration Program
DGM	Digital Geophysical Mapping
DoD	Department of Defense
EOD	Explosive Ordnance Disposal
FS	Feasibility Study
FUDS	Formerly Used Defense Site
GP	General Purpose
HE	High Explosive
IDEQ	Idaho Department of Environmental Quality
INPR	Inventory Project Report
LUC	Land Use Control
MC	Munitions Constituents
MD	Munitions Debris
MDAS	Materials Documented as Safe
MEC	Munitions and Explosives of Concern
MMRP	Military Munitions Response Program
MRS	Munition Response Site

NCP	National Oil and Hazardous Substance Pollution Contingency Plan
PBR3	Pocatello Bombing Range Number 3
QR	Qualitative Reconnaissance
RAO	Remedial Action Objective
RI	Remedial Investigation
SAA	Small Arms Ammunition
SI	Site Inspection
TBC	To Be Considered
TMV	Toxicity, Mobility, or Volume
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
UU/UE	Unlimited Use/Unrestricted Exposure
UXO	Unexploded Ordnance
WSA	Wilderness Study Area

12.0 Glossary

Administrative Record – The documents that form the basis for the selection of a response action compiled and maintained by the lead agency (in this case DoD).

Anomaly – Any item that is seen as a subsurface irregularity after geophysical investigation. This irregularity will deviate from the expected subsurface ferrous and non-ferrous material at a site (e.g., pipes, power lines).

Applicable or Relevant and Appropriate Requirements (ARARs) – *Applicable requirements* means those cleanup standards, standards of control, and other substantive requirements, criteria, or limitations promulgated under federal environmental or state environmental that specifically address a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance found at a CERCLA site. Only those state standards that are identified by a state in a timely manner and that are more stringent than federal requirements may be applicable. *Relevant and appropriate requirements* means those cleanup standards, standards of control, and other substantive requirements, criteria, or limitations promulgated under federal environmental or state

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environmental that, while not “applicable” to a hazardous substance, pollutant, contaminant, remedial action, location, or other circumstance at a CERCLA site, address problems or situations sufficiently similar to those encountered at the CERCLA site that their use is well suited to the particular site. Only those state standards that are identified in a timely manner and are more stringent than federal requirements may be relevant and appropriate.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986.

Decision Document (DD) – A public document explaining selected cleanup alternatives at a site. The DD is based on information and technical analysis, and on consideration of public comments and concerns. The DD is issued and signed by the lead agency and support agency.

Explosive Ordnance Disposal (EOD) – The detection, identification, on-site evaluation, rendering safe, recovery, and final disposal of UXO and other munitions that have become an imposing danger, for example, by damage or deterioration.

Feasibility Study (FS) – A study undertaken by the lead agency (DoD) to develop and evaluate options for remedial action. The RI data are used to define the objectives of the response action, to develop remedial action alternatives, and to undertake an initial screening and detailed analysis of the alternatives. The term also refers to a report that describes the results of the study.

Information Repository – A public file containing technical reports, reference documents, and other materials relevant to the site cleanup.

Land Use Controls (LUCs) - Physical, legal, or administrative mechanisms that restrict the use of, or limit access to, real property, to prevent or reduce risks to human health and the environment. Physical mechanisms encompass a variety of engineered remedies to contain or reduce contamination and

physical barriers to limit access to real property, such as fences or signs. The legal mechanisms used for LUCs are generally the same as those used for institutional controls as discussed in the NCP.

Munitions Constituent (MC) – Any materials originating from UXO, discarded military munitions, or other military munitions, including explosive and non-explosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions.

Munitions Debris (MD) – Remnants of munitions (e.g., fragments, penetrators, projectiles, shell casings, links, fins) remaining after munitions use, demilitarization, or disposal.

Munitions and Explosives of Concern (MEC) – Specific categories of military munitions that may pose unique explosives safety risks, specifically composed of a) UXO, b) discarded military munitions, or c) MC (e.g., TNT, RDX) present in high enough concentrations to pose an explosive hazard.

Military Munitions Response Program (MMRP) – A program established by the DoD to manage and address environmental impacts and health and safety concerns at former military ranges.

Munitions Response Site (MRS) – A discrete location within a munitions response area that is known to require a munitions response.

National Oil and Hazardous Substances Pollution Contingency Plan (NCP)- The plan revised pursuant to 42 United States Code 9605 and found at 40 CFR 300 that sets out the plan for hazardous substance remediation under CERCLA.

Proposed Plan – A public participation document detailing the preferred response action at a site.

Qualitative Reconnaissance (QR) – A non-intrusive visual inspection of the ground surface used to confirm the presence or absence of munitions. It is commonly conducted on foot with the use of a magnetometer for safety purposes.

Remedial Investigation (RI) – A process undertaken by the lead agency (DoD) to determine the nature and extent of the problem presented by the release. The RI emphasizes data collection and site

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characterization and is generally performed concurrently and in an interactive fashion with the FS. The RI includes sampling and monitoring, as necessary, and includes the gathering of sufficient information to determine the necessity for remedial action and to support the evaluation of remedial alternatives.

Responsiveness Summary – A section of the DD summarizing the significant public comments received and the responses to the comments.

Unexploded Ordnance (UXO) – Military munitions that: a) have been primed, fuzed, armed, or otherwise prepared for actions; b) have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel, or material; and c) remain unexploded whether by malfunction, design, or any other cause.

13.0 References

- Army, 2009. *United States Army Military Munitions Response Program Munitions Response Remedial Investigation/Feasibility Study Guidance*.
- USACE, 1988. *Inventory Project Report, Pocatello Bombing Range*.
- USACE, 2003. *Archives Search Report, Pocatello Bombing Range*.
- USACE, 2004. *Archives Search Report Supplement, Pocatello Bombing Range*.
- USACE, 2012. *Final Site Inspection Report for Pocatello Bombing Range No. 3, FUDS Property No. F10ID0128*.
- USACE, 2017. *Remedial Investigation Final Report at the Pocatello Bombing Range No. 3 Munitions Response Site*. July.
- USACE, 2018. *Final Feasibility Study Pocatello Bombing Range Number 3 (PBR3), FUDS Project Number F10ID012801, Bingham County, Idaho*. August.
- USEPA, 1988. *Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA*. Interim Final.
- USEPA, 1999. *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents, USEPA Office of Solid Waste and Emergency Response, EPA 540-R-98-031*. July.

