

CERCLA requires each alternative be evaluated using nine criteria.

Threshold Criteria

The selected alternative must meet these criteria. Will human health and the environment be protected from the hazard at the site by implementing this alternative? Can the alternative be implemented in compliance with all existing laws and regulations?

Balancing Criteria

Each alternative is compared to the others using these criteria.

Long-term Effectiveness and Permanence

Will the alternative provide a permanent, long-term solution to the problem?

Reduction in Toxicity, Mobility and Volume through Treatment
Will the alternative reduce the harmful effects of the hazard at the site.

Short-term Effectiveness

May be better defined as "short-term impact." What impact would implementing the alternative have on the community and workers?

Implementability

Can the alternative be practically, safely and successfully implemented?

Cost

What is the cost to design, implement and maintain the remedy for 30 years?

State and Community Acceptance

Regulatory agencies must accept the preferred alternative as well as the community as a whole. The purpose of the public comment period is to determine whether or not the community accepts the preferred alternative.

Complete copies of the Proposed Plans can be obtained at the Salt Lake County Library, Herriman Branch; Herriman City Offices and Bluffdale City Offices. They can also be accessed on-line at www.campwilliamsrab.org.

Property Access

Before work crews can access a privately-owned parcel to conduct cleanup activities, UTNG must receive permission from the landowner in the form of a right-of-entry (ROE) agreement. Previously-obtained ROE agreements are not valid for the upcoming cleanup work, so new ROE agreements will be required in order for clearance to be performed on private parcels. Efforts to obtain new ROE agreements will begin in the fall of 2013. If ROE is not granted for a parcel, then no cleanup work will be done on that land, and it will remain uncleared. A notice will be attached to the deed of any parcels in the MRS for which ROE is not granted to warn current and future landowners about the potential for munitions on uncleared land.

Evacuations

When MEC is discovered, the preferred method of disposal is to remove the item and transport it to a location where it can be safely detonated. In some circumstances, however, it is not possible to safely move a MEC item. Detonations are performed by trained Unexploded Ordnance experts, who make every effort to contain the detonations so property is not damaged as a result of the detonation. Even so, detonation procedures require that everyone within a specified radius be evacuated as an added safety precaution. Road and trail closures may also be required if on-site detonations are required.

While inconvenient, it is important that residents cooperate with the detonation teams to ensure no one is hurt and that the detonation can occur as quickly as possible. UTNG will make every effort minimize the inconvenience to residents, should an evacuation be necessary.

Public Meeting
Thursday, April 18, 2013
6 to 8 p.m.
Silver Crest Elementary School
12937 S. Elementary Drive (5300 W), Herriman

Come and discuss these Proposed Plans with representatives of the Utah National Guard, the Utah Department of Environmental Quality and the contractors who performed the work.

Copies of the Proposed Plans will be available for review.

A transcriptionist will be available to transcribe your comments for the official record.

This meeting is an Open House format meeting, meaning attendees can come any time after 6 p.m. and stay as long as they wish, until 8 p.m.



UTAH NATIONAL GUARD

MUNITIONS RESPONSE

Proposed Plan Fact Sheet

Proposed Plans for Wood Hollow and Artillery Impact Area Buffer Zone Munitions Response Sites

The Utah National Guard (UTNG) at Camp Williams, UT, has prepared Proposed Plans to address unexploded munitions and munitions-related materials at two areas near the installation that were once used for military training, but are now on private property. The cleanup is being conducted as part of the Department of Defense's Military Munitions Response Program (MMRP). The Proposed Plans outline the UTNG's preferred alternatives for cleanup actions at the sites and represent the culmination of a thorough investigation that began with the start of the MMRP in 2002.

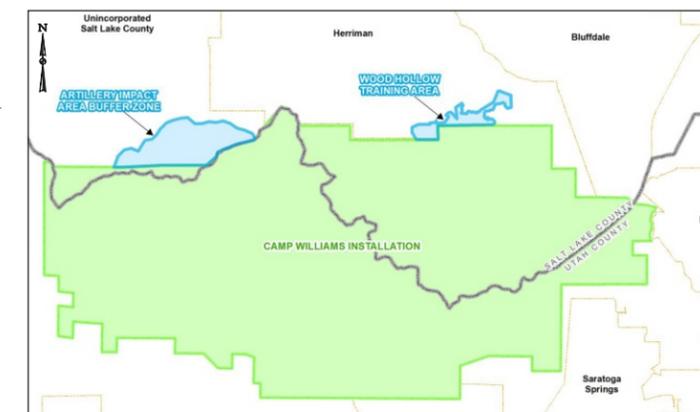
The UTNG is seeking public comment on the Proposed Plans. A public comment period begins April 8, 2013 and runs through May 7, 2013. During this time, the public is encouraged to read and comment on the proposals. Along with the public comment period, a public meeting will be held April 18, 2013, from 6 to 8 p.m. at Silver Crest Elementary School in Herriman (see back page for more information on the meeting).

MMRP investigations are conducted according to the process outlined in the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), which forms the basis of most environmental cleanup actions. All investigations and studies under the Camp Williams MMRP have been conducted in cooperation with the Utah Department of Environmental Quality.

MMRP focuses on properties that are not currently owned by the military, but were either once owned or used by the military for training. The program's goal is to remove munitions-related hazards from lands that are accessible to the public.

Preliminary investigations in the areas surrounding Camp Williams began in 2002, the purpose of which was to identify areas where munitions-related materials might be found. By searching existing records, interviewing people involved in training at Camp Williams and performing basic site inspections, six areas that could require cleanup action were identified.

A Remedial Investigation was conducted at those six sites in 2011. The purpose of this investigation was to determine if military items present at the site posed a threat to human health or the environment. After the Remedial Investigation, the UTNG determined that four sites did not require any cleanup action, but two sites did. A Feasibility Study was conducted for these two sites to determine what cleanup actions would be



appropriate for the sites and a preferred alternative was selected for each site. Those preferred alternatives are found in the Proposed Plans.

The alternatives were evaluated using nine criteria specified by CERCLA. Any selected remedy must protect human health and the environment from munitions hazards and must comply with all laws and regulations. Other criteria such as cost, long-term effectiveness, short-term impacts to the community and workers, and how easily the remedy could be implemented were also considered. The alternative which offered the best overall option was selected as the preferred alternative.

As part of the study, a "No Action" alternative was evaluated and used as a basis of comparison for the other alternatives. The "No Action" alternative evaluates what would happen if the UTNG decided to do nothing to clean up the site.

For the UTNG to move forward on cleanup, the preferred alternatives must gain State and community acceptance. UDEQ has reviewed the Proposed Plans and has determined the preferred alternatives are acceptable. The final step is to gain community acceptance, which is the purpose of the public comment period.

All comments received on the Proposed Plans will be evaluated and addressed. The Record of Decision (ROD) will contain a responsiveness summary, which will include all comments received and the UTNG's response to those comments. Based on the comments received, the preferred alternative will be either accepted, rejected or modified to address concerns. The UDEQ will work with the UTNG to ensure public comments are adequately addressed in the final remedy.

How to comment on the proposals

In writing Mail written comments to Robert Price
Environmental Resources Management
Utah National Guard
12953 S. Minuteman Drive
Draper, UT 84020

By email robert.price51.nfg@mail.mil

Verbally Verbal comments for the record can be made at the public meeting.

The public comment period begins April 8, 2013, and ends May 7, 2013. Written comments must be postmarked by May 7, 2013. Emailed comments must be sent by midnight May 7, 2013. Comments submitted after the deadline will not be considered.

Wood Hollow Training Area Munitions Response Site

The Wood Hollow MRS is a 241-acre site located in Salt Lake County along the northeastern boundary of Camp Williams. While no formal documentation exists of this area being used for military training, numerous expended 75mm and 37mm shells were found at the site, indicating the site was likely used as a target for light-artillery training some time between 1919 and 1941. Among the shells discovered were a number of unexploded shells, which pose a hazard to people who may come into contact with them.

During the course of the investigations performed at the MRS, Munitions and Explosives of Concern (MEC) and related debris were found outside of the original site boundary which encompassed 59 acres. The investigation area was successively broadened to its current size to ensure a complete cleanup of the site.

A total of 11 MEC items were discovered during the RI. The items were confined to the surface or shallow subsurface. No MEC items were found deeper than 10 inches below the surface and most were found in the top three inches of the soil. All

Evaluation Criteria	Alternatives	
	No Action	Surface and Subsurface Clearance of MEC to a depth of 2 feet.
Threshold Criteria	Protective of human health and environment	●
	Complies with laws and regulations	●
Balancing Criteria	Long-term effectiveness and permanence	●
	Reduction in toxicity, mobility or volume through treatment.	●
	Short-term effectiveness	●
	Implementability	●
	Cost	●
Acceptance	State Acceptance	●
	Community Acceptance	●

● Meets criteria ● Does not meet criteria
● Expected to meet criteria ● Criteria not yet evaluated

MEC items found to-date have been removed from the site or destroyed on-site. However, there is a strong likelihood that additional MEC items remain at the site, which is why this site was recommended for cleanup action.

A hazard assessment performed at the site indicates that a potential hazard exists for people who may work or recreate in the area. Currently, the land is not developed for residential or recreation purposes, but a gravel mine does exist within and adjacent to the site boundaries.

The overall cleanup strategy for this site is to reduce the potential for exposure to MEC by locating and removing all MEC items on the ground surface and in the shallow subsurface, where they are most likely to be found.

Alternatives

The Feasibility Study eliminated a number of alternatives that would be ineffective or not suitable for use at this site. The remaining alternative was evaluated based on the nine CERCLA criteria (see sidebar) and compared to a “No Action” alternative, which is required by CERLCA. The alternatives are summarized in the table to the left.

The Preferred Alternative

The UTNG is proposing a surface and subsurface clearance of the site to a depth of two feet. This alternative compares favorably to the “No Action” alternative.

To ensure a complete clearance of MEC, the UTNG will perform a visual surface clearance over 100 percent of the ground surface with the aid of handheld metal detectors followed by a comprehensive survey of the subsurface using digital geophysical mapping (DGM) to identify buried MEC items. DGM combines a sophisticated metal detector with highly accurate GPS technology to not only show metallic items in the soil, but also precisely map their location. Once the DGM survey is completed, crews will return to the indicated locations to excavate and identify buried metallic items. If MEC is found, it will be removed or safely destroyed on-site if unsafe to move.

In addition to field work, the UTNG will institute a public-awareness and education program to ensure people understand the potential for explosive hazards in the area and know what to do if suspected explosive items are found. Finally, every five years the site will be evaluated to ensure the cleanup remains protective of human health and the environment.

This alternative is estimated to cost a little more than \$4 million. Field work is expected to cost approximately \$3 million and take approximately six to eight months of on-site work to complete, with site closure expected in 2015. Follow-on costs, including public-awareness activities and five year reviews for a period of 30 years, are expected to be about \$1 million.

Artillery Impact Area Buffer Zone Munitions Response Site

The Artillery Impact Area Buffer Zone MRS is an 800-acre site located in Salt Lake County along the northern boundary of Camp Williams and includes a portion of the Hi-Country Estates II development. This site includes land that was once part of Camp Williams, but transferred to private hands. Investigations at the site found a number of unexploded artillery rounds, which likely came from historical military training exercises conducted at Camp Williams in the past.



This 155 shell is typical of what could be found at the site. Although this is just a shell casing, unexploded shells look nearly identical.

To date, eight MEC items have been found at the site, primarily unexploded 8-inch and 155mm rounds found on the ground surface. These MEC items have since been removed from the site or destroyed on-site. A number of expended illumination rounds were also

found at the site. Illumination rounds were specially designed rounds used to illuminate artillery targets during night training. They contain a small explosive charge that detonates in flight and releases a parachute with a flare-like illumination device. Unexploded illumination rounds pose an especially potent hazard, due to their very sensitive fuse, which could cause the round to detonate if disturbed. While the investigations conducted at the site did not find any unexploded illumination rounds, the presence of empty casings indicates that unexploded rounds could exist.

A hazard assessment performed at the site indicates that a potential munitions hazard exists for people who may live, work or recreate at the MRS. This site includes 114 privately-owned parcels, the majority of which are in the Hi-Country Estates II, primarily in Area D, making clearing this site extremely important to the safety of residents.

Alternatives

The Feasibility Study eliminated a number of alternatives that would be ineffective or not suitable for use at this site. Information on the alternative screening process is available in the Feasibility Study Report. The remaining alternative was evaluated based on the nine CERCLA criteria (see sidebar) and compared to a “No Action” alternative, which is required by CERLCA. The alternatives are summarized in the table to the right.

The Preferred Alternative

The UTNG is proposing a full surface clearance at the MRS. To accomplish this, crews will visually inspect 100 percent of the

ground surface to find munitions, using handheld metal detectors to assist them in their search. Based on concerns expressed by residents, crews will take extra care to preserve native brush and vegetation, with minimal trimming of lower branches where dense brush makes visual inspection impossible.

No subsurface removal will be done at this site. Munitions were not found below the ground surface during previous investigations, and due to the nature of the training activities done at the site and the rocky terrain, it is unlikely that any rounds exist beneath the surface.

In addition to field work, the UTNG will institute a public-awareness and education program to ensure people understand the potential for explosive hazards in the area and know what to do if suspected explosive items are found. Finally, every five years the site will be evaluated to ensure the cleanup remains protective of human health and the environment.

This alternative is estimated to cost about \$3 million. Field work is expected to cost approximately \$2 million and take approximately six months of on-site work to complete, with site closure expected in 2015. Follow-on costs, including public awareness activities and five year reviews for a period of 30 years, are expected to be about \$1 million.

Evaluation Criteria	Alternatives	
	No Action	Surface Clearance
Threshold Criteria	Protective of human health and environment	●
	Complies with laws and regulations	●
Balancing Criteria	Long-term effectiveness and permanence	●
	Reduction in toxicity, mobility or volume through treatment.	●
	Short-term effectiveness	●
	Implementability	●
	Cost	●
Acceptance	State Acceptance	●
	Community Acceptance	●

● Meets criteria ● Does not meet criteria
● Expected to meet criteria ● Criteria not yet evaluated