



IN REPLY REFER TO:

United States Department of the Interior

NATIONAL PARK SERVICE
WHISKEYTOWN NATIONAL RECREATION AREA
WHISKEYTOWN-SHASTA-TRINITY NATIONAL RECREATION AREA
P.O. BOX 188
WHISKEYTOWN, CA 96095-0188



1.A.1 WHIS

Memorandum

To: Stan Austin, Director, Pacific West Region

From: Josh Hoines, Superintendent, Whiskeytown National Recreation Area

Through: Stephen J. Mitchell, PE, Operations/Environmental Programs Branch Chief, Pacific West Region

Subject: Approval for CERCLA Time-Critical Removal Action for the Burned Building Sites Emergency Clean Up, Whiskeytown National Recreation Area

1.0 PURPOSE AND AUTHORITY

The purpose of this Action Memorandum (AM) is to request approval of and document the basis for the proposed time-critical removal action (TCRA) described herein for the emergency cleanup of burned building sites located within the Whiskeytown National Recreation Area (Site) in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, (CERCLA), 42 U.S.C. §§ 9601 *et seq.* The President has delegated response authority under CERCLA Section 104 to the Secretary of the United States Department of the Interior (DOI) by Executive Order 12580, 52 Fed. Reg. 2923 (1987), as amended by Executive Order 13016, 61 Fed. Reg. 45871 (1996), to respond to the release or substantial threat of release of hazardous substances on or from land under the jurisdiction, custody, or control of DOI. The National Park Service (NPS) Pacific West Regional Director, through further delegations, has CERCLA Section 104 response authority for the Site.

2.0 SITE CONDITIONS AND BACKGROUND

The following sections provide an overview of the Site's description, including the removal Site evaluation, physical location, Site characteristics, and the potential release of hazardous contaminants.

2.1 Site Description

2.1.1 Removal Site Evaluation

The Site is comprised primarily of 28 buildings and outbuildings that were destroyed during the Carr Fire in the summer of 2018 at eight locations throughout the Whiskeytown National Recreation Area (WHIS), Shasta County, California (see Site Map in Attachment 1). An assessment completed by the NPS following the Carr Fire found that the debris fields on the ground surface surrounding the structures may

contain vegetation, ash, remnant structures, concrete, metal, trees, stumps, household hazardous waste, hazardous and toxic waste, electronic waste, small motorized equipment, white goods, etc. Soil in approximately the same area as the debris fields also was impacted by the fire, primarily by airborne fallout during the burning of the building structures. Post fire sampling has not been conducted. The terrain surrounding the building sites is generally mountainous and road access is available to each location.

2.1.2 Physical Location

The Site is located within WHIS, in Shasta County, California and is located approximately 8 miles west of downtown Redding. The park is within California's Second Congressional District.

The park contains approximately 42,500 acres of land and water. Elevations range from 800 feet in lower Clear Creek below Whiskeytown Dam to over 6,200 feet atop Shasta Bally. Whiskeytown Reservoir supplies drinking water to several municipalities, provides recreational opportunities to park visitors, provides critical habitat for federally listed species and other species of concern, and is a critical part of the Central Valley Project, which supplies water to downstream areas of the Sacramento and San Joaquin valleys.

2.1.3 Site Characteristics

The burned buildings that comprise the Site were built between approximately 1945 and 2011. The uses of the buildings included residences, offices, cabins, historic exhibits, and equipment storage. A list of burned building sites including the characteristics of the buildings is provided in Attachment 2. The buildings were mostly completely burned during the 2018 Carr Fire; some structures are partially still standing and some have completely burned. As a result of the burning of the buildings, debris fields consisting of burn ash and charred construction materials remain at each location. The NPS has covered the debris and ash piles at each site with plastic to prevent rain infiltration and runoff from the sites during the winter and airborne transport of ash.

The burned structures are located on land that is owned by the United States and managed by the NPS.

2.1.4 Release or Substantial Threat of Release into the Environment of a Hazardous Substance, or Pollutant or Contaminant

NPS conducted an initial field reconnaissance soon after the Carr Fire in fall 2018. The reconnaissance preliminarily evaluated the debris fields surrounding the burned buildings, which were found to contain the charred construction materials described above. In addition to the debris, soil in the immediate area of the burn sites was suspected to possibly be contaminated by the airborne fallout during the burning of the building structures.

2.1.5 National Priorities List (NPL) Status

The Site is not listed or proposed for listing on the NPL.

2.2 Previous and Current Actions to Date

Due to the close proximity of the sites to Whiskeytown Reservoir and its tributaries, the NPS took action to cover the burned debris and ash at each site with plastic to prevent or reduce mobilization of the debris fields and surrounding soils and the associated potential contaminants of concern. There have been no other government or private actions undertaken on Site.

2.3 State and Local Authorities Role and Actions to Date

The NPS is the lead agency for this Site. No State or local actions have been performed at the Site to date.

3.0 THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT AND STATUTORY AND REGULATORY AUTHORITIES

As a result of the Carr Fire, scattered debris fields of charred remains of the burned buildings remain at each building location. The materials include burned construction materials such as paint, mastic coating, electrical cables/insulation, lighting, molten/re-solidified metal roof shards, and unidentified materials. The scattered burned debris is primarily on the ground surface at each location and remains a potential source of ongoing contamination to Whiskeytown reservoir and its tributaries. The soil in generally the same areas as the debris fields is possibly also impacted by the fire, likely by airborne deposition of hazardous substances resulting from the burning of the building structures.

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) is the implementing regulations for CERCLA, and 40 C.F.R. Section 300.415(b)(2) sets forth the factors the NPS shall consider to determine whether a removal action is appropriate. Those factors applicable to this TCRA include the following:

- **High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate.**

Potential site contamination is largely concentrated near the surface of the Site and is likely to migrate. Soil disturbance and removal associated with this TCRA should be completed outside the season of heavy rains (between November and April) to prevent the migration of contaminated surface soils and potential exposure to sensitive aquatic species.

- **Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.**

The Site receives an average of 60 inches of precipitation annually, with 75 to 90 percent of total precipitation occurring between November and April. Winter rains combined with steep terrain and

potential near-surface soil contamination likely will cause contaminants in disturbed soils and debris to migrate into surface water if excavation is conducted during the rainy season or if delayed through another winter. Action during the spring and summer of 2019 is necessary to reduce migration of contaminants.

4.0 ENDANGERMENT DETERMINATION

An actual release or substantial threat of release of hazardous substances at the Site, if not addressed by implementing the response action selected in this action memorandum, pose a threat to public health and the environment. This TCRA is necessary in order to abate, prevent, mitigate or eliminate the threat posed by the release or substantial threat of release of these substances.

Due to the steep terrain surrounding the burned building sites, there is, in particular, a potential for erosion and movement of disturbed contaminated soil downslope toward either Whiskeytown Reservoir or one of its tributaries. The removal of debris and contaminated soil from the burned building sites is expected to mitigate, if not eliminate, all threats to human health and the environment associated with the Site.

5.0 PROPOSED ACTIONS AND ESTIMATED COSTS

Preliminary cleanup goals for the Site have been established by NPS and are included in Attachment 3. The cleanup goals were established in 2018 during the Engineering Evaluation/Cost Analysis for the nearby Coggins Flat Area Placer Mine.

As part of the TCRA, burned debris and building remnants at each location will be removed for disposal at an approved disposal facility.

After completion of the TCRA, soil confirmation sampling will be conducted to ensure the Site soil concentrations are at or below the cleanup goals. The TCRA will be completed by covering the burn sites with a 2 to 3 inch layer of bark mulch.

Work is planned to be initiated in March 2019. Overall construction, materials transport, and disposal is estimated to take approximately 11 weeks and is planned to occur between March and May 2019.

5.1 Description of Proposed Action

Construction Project

NPS will work through a contractor to remove burned debris and contaminated soil, if necessary, from the Site, and undertake actions to restore the Site to its pre-removal condition. The main elements of the TCRA include:

- Remove ash and debris from the 28 burned building sites destroyed by the Carr Fire;
- Load, transport, and properly dispose of ash and debris at an approved disposal facility;
- Collect confirmation soil samples at each burned building site;
- Excavate and dispose of contaminated soil, if necessary; and

- Apply a layer of bark mulch to each burned building site.

Removal of Ash and Debris

The total square footage of the burned building sites is approximately 34,925 square feet. Approximately 1,775 tons of ash and debris are planned to be excavated for disposal. The ash and debris will be directly loaded to trucks for transport and disposal at an approved facility. During removal and hauling, appropriate erosion control measures shall be implemented to minimize erosion from exposed soils.

The areas delineated for ash and debris removal are based on visual evidence of ash and debris. Following removal, confirmatory soil samples will be collected to verify that soils remaining after the removal are at or below cleanup goals.

Materials will be disposed of in an approved, USEPA-compliant landfill licensed to accept the material based on designation and classification of the contaminated materials. Removed material will be managed in accordance with all applicable federal, state, and local requirements.

Factors Affecting Removal

The Site presents no significant challenges to the use of conventional heavy equipment for the removal action.

Risks to Human Health and the Environment Associated with the Work

A small increase in short-term risk to human health and the environment may be encountered during the excavation and transport phase of this work. Work will be conducted in accordance with OSHA health and safety protocols for working with hazardous substances. Impacts associated with construction activities are considered short term, and should not significantly impact human health.

Short-term air quality impacts to the immediate vicinity may occur during removal of debris and contaminated soils. Control of fugitive dusts may be required on-Site and will be conducted by wetting soils as required. Additional TCRA activities that could cause the spread of contamination within or from the contaminated zone will need to be mitigated, including foot traffic on steep slopes, excavation activities, transport of materials and other removal work activities.

All materials removed from the Site will be transported in covered trucks and/or containers.

5.2 Contribution to Remedial Performance

In evaluating the appropriateness of a TCRA, the NPS must consider whether the removal action would contribute to the efficient performance of any anticipated long-term remedial action with respect to the release concerned [NCP § 300.41 5(d)], as well as the availability of other appropriate federal or state response mechanisms to respond to the release of hazardous substances [NCP § 300.41 5(b)(2)(vii)]. This TCRA will entail excavation and disposal of burned debris and contaminated soil (if present) at the burned building sites, thereby minimizing risks to human health and the environment and mitigating, if not eliminating, the source of the contamination (determined based on post-remediation confirmation sampling). Future response actions at the Site are not expected based upon available information.

5.3 Applicable or Relevant and Appropriate Requirements

In the context of a TCRA, off-site activities are subject to all applicable federal, state, and local laws and regulations, and all on-site project activities must attain “applicable or relevant and appropriate requirements” (ARARs) under federal and state environmental laws and facility siting laws that the NPS determines to be practicable considering the exigencies of the situation (CERCLA Section 121(d); NCP Section 300.415(j)).

In order to determine whether a particular ARAR is applicable under the exigencies of the situation, the NPS has considered the scope of the response action to be conducted, the urgency of the situation, and other appropriate factors (40 C.F.R. § 300.415(j)). The NPS has identified the federal and state ARARs set forth below for this TCRA and will advise any contractors working at the Site that additional federal and state ARARs may be identified and added to project requirements.

1. The TCRA must be conducted in compliance with the NPS Organic Act of 1916 (codified at 16 U.S.C. §§ 1-3), which requires management of units of the National Park System so as to leave them “unimpaired” for future generations. *See* the implementing regulations (36 CFR Parts 1-79), and in particular, *see* 36 CFR Part 2 regarding preservation of natural, cultural, and archeological resources.
2. Treatment, storage, and disposal of waste and excavated soils must comply with all applicable state and federal laws, including applicable provisions in the Resource Conservation and Recovery Act (42 U.S.C. §§ 7401-7642; 40 CFR §§ 264 and 265), California Hazardous Waste Control Law and Hazardous Waste Disposal Regulations; Title 22, CCR 66262.1 *et seq.*, and provisions governing solid waste disposal in National Parks (codified at 16 U.S.C. §§ 4601-22(c) *et seq.*) and related implementing regulations (codified at 36 CFR Part 6). This project must comply with CERCLA Section 121(d)(3) (“off-site rule”), which requires that hazardous substances, pollutants, and contaminants that must be transferred off-site as a result of CERCLA response activities must be managed at a facility operating in compliance with federal and state laws. The NCP’s “off-site rule” implementing regulations (40 CFR § 300.440) define facility acceptability and create procedures for obtaining and reviewing acceptability determinations.
3. California State Water Resources Control Board Construction General Permit Order 2009-0009-DWQ for discharges of storm water associated with construction activity.
4. Laws and regulations protecting threatened and endangered species present at the Site, including the Endangered Species Act (e.g., 16 U.S.C. §§ 1531-1544, 50 CFR Part 402).
5. The TCRA is required to avoid, minimize, or mitigate impacts to historic sites or structures and must be conducted in compliance with the National Historic Preservation Act (16 U.S.C. § 470f; 36 CFR Parts 60, 63, and 800), the Archeological Resources Protection Act (43 CFR Part 7), the American Indian Religious Freedom Act (42 U.S.C. § 1996), the Native American Graves Protection and Repatriation Act (43 CFR Part 10), and Executive Order 13007.

6. Additionally, the following are other factors “to be considered” (TBCs) that provide useful standards or policy direction for this TCRA.
7. Section 4.1.5 of the *2006 NPS Management Policies* provides: “The Service will reestablish natural functions and processes in parks unless otherwise directed by Congress Impacts on natural systems resulting from human disturbances include the introduction of exotic species; the contamination of air, water, and soil; changes to hydrologic patterns and sediment transport; the acceleration of erosion and sedimentation; and the disruption of natural processes. The Service will seek to return such disturbed areas to the natural conditions and processes characteristic of the ecological zone in which the damaged resources are situated. The Service will use the best available technology, within available resources, to restore the biological and physical components of these systems, accelerating both their recovery and the recovery of the landscape and biological community structure and function.” Section 4.8.2.4 of the *2006 NPS Management Policies* allows importation of off-site soil or soil amendments to restore damaged sites. It provides that “off-site soil normally will be salvaged soil, not soil removed from pristine sites, unless the use of pristine site soil can be achieved without causing any overall ecosystem impairment. Before using any off-site materials, parks must develop a prescription and select the materials that will be needed to restore the physical, chemical, and biological characteristics of original native soils without introducing exotic species.”
8. Section 9.1.3.2 of the *2006 NPS Management Policies* requires that, to the maximum extent possible, plantings selected for revegetation will consist of species that are native to the park, and that low water use practices should be employed. This provision also addresses use of fertilizers and other soil amendments.
9. NPS Reference Manual (RM) #77 offers comprehensive guidance to NPS employees responsible for managing, conserving, and protecting the natural resources found in park units. It addresses management of natural resources (including air; disturbed land; endangered, threatened and rare species; geologic resources; vegetation; etc.), resource uses, and planning (e.g., emergency management, and environmental compliance).
10. *NPS-28: Cultural Resource Management Guidelines* addresses park cultural resource management programs, compliance with Section 106 of the National Historic Preservation Act, and issues related to archaeological resources, cultural landscapes, structures, museum objects, and ethnographic resources.
11. The *Whiskeytown Unit Whiskeytown-Shasta-Trinity National Recreation Area General Management Plan and Environmental Impact Statement (1999)* and *Foundation Document Whiskeytown National Recreation Area (2014)* identifies practicable and appropriate mitigation measures to avoid and/or minimize harm to natural and cultural resources, visitors and the visitor experience within WHIS. These mitigation measures have been developed using existing laws and regulations, best management practices, conservation measures, and other known techniques from past and present work in and around WHIS.

5.4 Project Schedule

Planning documents associated with this TCRA will be completed between January and March 2019. The removal action work for this TCRA is scheduled to be conducted between March and June of 2019.

5.5 Estimated Costs

Projected total costs for the TCRA, including planning documents, contracting, oversight, and contingency are estimated as \$1,428,000. This estimate does not include any cost of oversight by the NPS. The NPS is exercising its lead agency authority to perform or oversee performance of response actions under CERCLA, including this proposed TCRA, which is being conducted and funded by NPS.

6.0 EXPECTED CHANGE IN SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

If the proposed TCRA is delayed or not taken, hazardous substances will continue to be released, or there is a substantial threat of such release at the Site that continues to pose a risk to ecological receptors in particular, and, to a lesser extent due to the remote locations of the burned building sites, NPS employees or the public.

7.0 OUTSTANDING POLICY ISSUES

No outstanding policy issues exist for this TCRA.

8.0 RECOMMENDATION

This decision document presents the selected TCRA for the burned building sites located within the Whiskeytown National Recreation Area, which was developed in accordance with CERCLA, as amended, and is not inconsistent with the NCP.

Conditions at the Site meet the NCP section 300.415(b) criteria for time-critical removal action and through this document, I am approving the proposed TCRA.

On the basis of the evaluation conducted and the factors outlined in the NCP, the NPS has determined that the release or substantial threat of release of hazardous substances at the Site pose a risk to human health and the environment, and that a TCRA is necessary and appropriate in order to abate, prevent, mitigate or eliminate the threat posed by the release or substantial threat of release of these substances. Because conditions at the Site meet all applicable CERCLA and NCP criteria for undertaking a TCRA, I recommend/concur/approve that the NPS implement the TCRA as proposed herein.

Recommended: _____ [signed on file] _____ Date: _____
Gary J. Riley, PE, BCEE
LCDR, U.S. Public Health Service
Environmental Engineer
National Park Service, Pacific West Region

Concurred: _____ [signed on file] _____ Date: _____
Josh Hoines
Superintendent
Whiskeytown National Recreation Area

Concurred: _____ [signed on file] _____ Date: _____
Stephen J. Mitchell, PE
Operations/Environmental Programs Branch Chief
National Park Service, Pacific West Region

Approved: _____ [signed on file] _____ Date: _____
Stan Austin
Regional Director
National Park Service, Pacific West Region