



United States Department of the Interior

NATIONAL PARK SERVICE
Death Valley National Park
P.O. Box 579
Death Valley, CA 92328



IN REPLY REFER TO:
DEVA 1.A.2
PMIS# 318313A, PEPC 104262

September 21, 2021

Memorandum

To: Cindy Orlando, Acting Director, NPS, Interior Regions 8, 9, 10, and 12

From: Mike Reynolds, Superintendent, Death Valley National Park

Through: Gary Riley, PE, Acting Operations/Environmental Programs Branch Chief,
Interior Regions 8, 9, 10 and 12

Subject: Scottys Castle Visitor Center Fire – Approval for CERCLA Time-Critical
Removal Action for the Burned Structures in Death Valley National Park
(DEVA)

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 Death Valley National Park (DEVA) (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) Regional Director, Interior Regions 8, 9, 10, and 12, 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 description, including the removal Site evaluation, physical location, Site characteristics, and the potential release of hazardous contaminants.

2.1 Site Description

2.1.1 Physical Location

The Site is located within Death Valley National Park, the largest national park in the contiguous United States. The Park encompasses 5,270 square miles and straddles the California–Nevada border, east of the Sierra Nevada. The nearest towns include Beatty, Nevada, and Lone Pine, California. The Park is within California's Eighth Congressional District and Nevada's Fourth Congressional District.

Scotty's Castle (also known as Death Valley Ranch) is a two-story Mission Revival and Spanish Colonial Revival style villa located in the Grapevine Mountains of northern Death Valley in the Park. The villa's Garage functioned as the Visitor Center. An unprecedented flood damaged this building and other buildings in 2015. Death Valley Scotty Historic District has been closed for ongoing repair work after the extensive flood damage. Repair to the impacted areas was underway at the time of the fire.

2.1.2 Site Characteristics

The Site is the historic Garage/Longshed/Bunkhouse building in Death Valley Scotty Historic District (Scotty's Castle). The Garage portion of the building was the modern-day Scotty's Castle Visitor Center. On April 22, 2021, a fire destroyed the Garage and damaged the Longshed and connecting breezeway. Upon arriving at the worksite in the morning, construction contractors reported active fire within the Garage/Longshed/Bunkhouse building. Contractors on scene attempted to stop the fire from spreading further into the Longshed. The main house and other surrounding historic structures were unharmed. The cause of the fire is unknown and under investigation.

The burned building was built between approximately 1922 to 1931. The Garage was undergoing construction to be used as a Visitor Center. The Longshed was used as offices and a storage area for the Park. Attachment 1 includes a figure of the approximate configuration of the buildings that were impacted.

The NPS conducted an initial field reconnaissance soon after the fire in late April and early May. The reconnaissance preliminarily evaluated the debris fields surrounding the burned building, which was found to contain charred construction materials. In addition to the debris, soil in the immediate area of the burn site was suspected to possibly be contaminated by the airborne fallout from the fire.

As a result of the building fire, debris fields consisting of fire ash and charred construction materials remain. In total, the impacted area by the fire ash and debris outside of the Longshed was approximately 12,250 square feet, centered around the footprint of the old Visitor Center/Garage and impacting more area to the north of the original building footprint than to the south. The fire impacting the Longshed did not cause the structure to collapse, and the ash and debris were limited

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to the western half of the western-most room at about 400 square feet of area. The Longshed stabilization work is being completed under a different contracting action.

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

2.1.3 Removal Site Evaluation

A Removal Site Evaluation was conducted in June and July 2021. The work included qualitative survey and measurement of burned debris, sampling and chemical analysis of ash, and inspections and analysis of asbestos-containing materials (ACM).

Key findings of the Removal Site Evaluation included:

- Debris at the Site was mostly comprised of fire-impacted building materials, including wall plasters, roofing materials, bricks and mortar, drywall, and insulation materials. The Site was under construction at the time of the fire and presumably empty of stored materials with the exception of some construction supplies.
- The concrete foundation was in place and intact under most of the debris. There were some areas (approximately 20%) where debris was sitting on soils surrounding the structure to the north, south, and west of the original building footprint.
- Ash depth varied from trace amounts to six inches in depth across the Site. Debris depth varied from trace amounts to approximately 3.5 feet in most areas. The southern-facing Garage wall was still partially intact at the time of the Site visit.
- The total approximate volume of ash, debris, and ACM is approximately 889 cubic yards. The ash is approximately 90 cubic yards of this total. There are also approximately 10 cubic yards of ACM debris in this total. The remaining building debris consists of metal laths, bricks, plaster, and other building materials.
- ACM was found in the debris, including two types of roofing felts. Asbestos was not detected in ash debris composite samples.
- Lead was the only metal in the sampled ash exceeding regulatory criteria for hazardous waste. All other metals sampled in the ash had concentrations below their respective calculated background threshold values (BTVs).
- Dioxin compounds and polycyclic aromatic hydrocarbon (PAH) compounds were also analyzed in representative ash samples. Certain compounds of each group can be formed as unintentional by-products of incomplete combustion. Compounds from each group were detected in the ash samples but in concentrations below respective regulatory criteria for characterization as hazardous waste.

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

The fire resulted in the substantial threat of release into the environment of the following hazardous substance, pollutant, or contaminant:

- ACM was found in the debris in roofing felts.
- Lead was found in the sampled ash exceeding regulatory criteria for hazardous waste was identified in some areas of the Site.
- Low concentrations of dioxin compounds and PAH compounds were also found in the ash samples. Certain compounds of each group can be formed as unintentional by-products of incomplete combustion.

2.1.5 National Priorities List Status

The Site is not listed or proposed for listing on the National Priorities List (NPL).

2.2 Previous and Current Actions to Date

The NPS conducted an initial field reconnaissance soon after the fire in late April and early May.

An environmental contractor retained by the NPS conducted a detailed characterization of the Site and prepared a Closure Evaluation Report that summarized the nature and extent of contamination, regulatory characterization of the burned debris and ash, and preliminary recommendations for time-critical removal.

The debris pile was stabilized by covering it with geotextile which was anchored with sand bags. This effort was completed on June 23, 2021.

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 fire, scattered debris fields of charred remains of the burned building remain at Site. The materials include burned construction materials such stucco, plaster, metal lath, drywall, bricks and mortar, roofing materials, and insulation materials. The scattered burned debris is primarily on the ground surface at the Site and remains a potential source of ongoing contamination to the surrounding area.

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The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) provides the implementation 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:

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

Potential site contamination is primarily concentrated near the surface of the Site and is likely to migrate. Soil disturbance and removal associated with this TCRA should be completed as soon as feasible to minimize airborne transport of contaminated ash to the surrounding unimpacted areas.

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

The Site experiences seasonal high-velocity winds that could entrain the ash and transport the contaminated material to the surrounding area.

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, poses a threat to public health and the environment. Therefore, this TCRA is necessary to abate, prevent, mitigate, or eliminate the threat posed by the release or substantial threat of release of these substances.

The Site experiences seasonal high-velocity winds that could entrain the ash and transport the contaminated material to the surrounding area. 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 2. The cleanup goals were based on those established for the Whiskeytown National Recreation Area Burned Building Sites Emergency Cleanup TCRA, and the background values were calculated from samples collected at the Scotty's Castle Historical District Site during the Removal Evaluation Study report dated August 2021.

As part of the TCRA, ACM will be removed from the Site, and burned debris, and building remnants will be removed for disposal at an approved disposal facility. The foundation of the building will remain in place. The Longshed is being stabilized under another contracting mechanism and is excluded from this TCRA.

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After completion of the TCRA, soil confirmation sampling of the areas around the building where debris was in contact with the soil will be conducted to ensure the Site soil concentrations are at or below the cleanup goals. The TCRA will be completed by providing the burn sites with appropriate erosion control for the excavation and perimeter to stabilize the site until reconstruction/reuse is complete.

Work is planned to begin in October 2021. Overall construction, materials transport, and disposal are estimated to take approximately four weeks and are planned to occur between October and November 2021.

5.1 Description of Proposed Action

5.1.1 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 all visible evidence and readily accessible ACM from the Site using hand methods;
- Remove ash and debris from the Visitor Center footprint impacted by the fire;
- Segregate the ash from grid areas 2 and 5 onsite and test for disposal requirements (See Attachment 3 – Sample Grid and Aliquot Locations);
- Load, transport, and properly dispose of ash and debris at an approved disposal facility;
- Collect confirmation soil samples from the soil surrounding the building foundation;
- Excavate and dispose of contaminated soil, if necessary, based on the results of the confirmation samples; and
- Provide appropriate erosion control for the excavation and perimeter to stabilize the site until reconstruction/reuse is complete.

Alternatively, the contractor may address the debris removal by:

- Remove ash and debris from the Visitor Center footprint impacted by the fire and treat as hazardous waste without segregation;
- Test for disposal requirements;
- Load, transport, and properly dispose of ash and debris at an approved disposal facility;
- Collect confirmation soil samples from the soil surrounding the building foundation;
- Excavate and dispose of contaminated soil, if necessary, based on the results of the confirmation samples; and
- Provide appropriate erosion control for the excavation and perimeter to stabilize the site until reconstruction/reuse is complete.

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5.1.2 Removal of Ash and Debris

The total square footage of the burned building sites is approximately 12,500 square feet. Approximately 890 cubic yards of ash and debris are planned to be excavated for disposal. ACM will be hand removed from the Site using hand tools and trained workers. This waste will be packaged and disposed of as California Hazardous Waste for friable ACM. The ash and debris from most of the Site will be directly loaded to trucks for transport and disposal at an approved facility. For grids 2 and 5, direct loading of the debris is allowed while leaving the ash on the foundation area. The ash should then be containerized for hazardous waste disposal for lead. The ash should be sampled by TCLP for lead content to make a hazardous waste determination. During removal and hauling, appropriate erosion control measures shall be implemented to minimize erosion from exposed soils. The Site will also need to be wetted to prevent visible emissions while manipulating debris and ash from the site.

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. If soils are not below the cleanup goals, removal of 6 inches of soil and retesting will be required.

Compliance for this action was completed for this project under NPS PEPC Project 104262. The following requirements, conditions or stipulations were identified:

Required Mitigations - For the proposed project actions to be within compliance requirements during construction and/or project implementation, the following mitigations must be adhered to:

- The debris pile sampling confirmed the presence of asbestos containing material (ACM). Removal of ACM must be performed in comportment with California's Department of Safety and Health's Asbestos Standard for Construction, Title 8, CCR 1529 and Asbestos Standard for General Industry, Title 8, CCR 5208. Applicable U.S. Occupational Safety and Health Administration for ACM removal also applies, including 29 CFR 1910.1001 and 29 CFR 1926.1101.
- Migratory birds could be in the area for their breeding season. Proposed work could potentially disturb nesting behaviors. Staging of vehicles and equipment should occur in previously developed areas that avoid potential nesting locations, as is possible to safely conduct the work. If a nest is spotted, workers should keep work at least 20 feet away from the nest.

NHPA Recommendations for Conditions or Stipulations: Archeological

monitoring is required.

Compliance for this action was completed on September 16, 2021.

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Materials will be disposed of in an approved, U.S. Environmental Protection Agency (EPA)-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.

5.1.3 Factors Affecting Removal

The Site presents no significant challenges to using hand methods for ACM removal and conventional heavy equipment for the remainder of the removal action.

5.1.4 Risks to Human Health and the Environment Associated with the Work

A slight increase in short-term risk to human health and the environment may be encountered during the excavation and transport phase of this work. This increase includes potential exposure to asbestos during ACM removal. Work will be conducted in accordance with Occupational Safety and Health Administration (OSHA) health and safety protocols for working with asbestos and other hazardous substances. Impacts associated with construction activities are considered short-term and should not significantly impact human health if the appropriate OSHA protocols are followed.

Short-term air quality impacts to the immediate vicinity may occur during the removal of debris and contaminated soils. Control of fugitive dust is required onsite 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 charred building site, 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, offsite activities are subject to all applicable federal, state, and local laws and regulations. All onsite project activities must attain "applicable or relevant and

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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)).

To determine whether a particular ARAR is applicable under the difficulties 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 NPS 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 the 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. §§ 460l-22(c) *et seq.*) and related implementing regulations (codified at 36 CFR Part 6). This project must comply with CERCLA Section 121(d)(3) ("offsite rule"), which requires that hazardous substances, pollutants, and contaminants that must be transferred offsite as a result of CERCLA response activities must be managed at a facility operating in compliance with federal and state laws. The NCP's offsite 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 stormwater 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 historical 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), Archeological Resources Protection Act (43 CFR Part 7), American Indian Religious Freedom Act (42 U.S.C. § 1996), Native American Graves Protection and Repatriation Act (43 CFR Part 10), and Executive Order 13007.
6. Removal of ACM must be performed in comportment with California's Department of Safety and Health's Asbestos Standard for Construction, Title 8, CCR 1529 and Asbestos Standard for General Industry, Title 8, CCR 5208. Applicable U.S. Occupational Safety and Health Administration for ACM removal also applies, including 29 CFR 1910.1001 and 29 CFR 1926.1101.

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Additionally, the following are other factors "to be considered" (TBCs) that provide useful standards or policy direction for this TCRA:

1. 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."*
2. Section 4.8.2.4 of the 2006 NPS Management Policies allows importation of offsite soil or soil amendments to restore damaged sites. It provides that *"offsite 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 offsite 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."*
3. Section 9.1.3.2 of the 2006 NPS Management Policies require 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 the use of fertilizers and other soil amendments.
4. 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 the 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).
5. NPS-28: Cultural Resource Management Guidelines address 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.
6. General Management Plan Abbreviated Final Environmental Impact Statement Death Valley National Park, California/Nevada; Notice of Approved Record of Decision (2003) identifies the best mix of actions, policies, and strategies for the management of Death Valley National Park, given diverse public opinion and varying mandates.

5.4 Project Schedule

The removal action work for this TCRA is scheduled to be conducted between October and November 2021.

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5.5 Estimated Costs

Projected total costs for the TCRA, including planning documents, contracting, oversight, and contingency, are estimated at \$340,000. This estimate includes a contingency for one round of contaminated soil removal. This estimate does not include any cost of oversight by the NPS. The NPS is exercising its lead agency authority to perform or oversee the 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. 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 location of the burned building site, NPS employees and 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 Garage/Longshed/Bunkhouse building in Death Valley Scotty Historic District located in Death Valley National Park, 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 poses a risk to human health and the environment and that a TCRA is necessary and appropriate 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.

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Recommended:

GARY RILEY
Digitally signed by GARY
RILEY
Date: 2021.09.23 12:58:17
-07'00'

Date: _____

Gary J. Riley, PE, BCEE
LCDR, U.S. Public Health Service
Operations/Environmental Programs Branch Chief
National Park Service, Interior Regions 8, 9, 10, and 12

Concurred:

**MICHAEL
REYNOLDS**
Digitally signed by
MICHAEL REYNOLDS
Date: 2021.09.21 17:15:04
-07'00'

Date: _____

Mike Reynolds
Superintendent
Death Valley National Park

Approved:

Cindy Orlando
Acting Regional Director
National Park Service, Interior Regions 8, 9, 10, and 12

Date: _____

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ATTACHMENT 1

SITE MAP

ATTACHMENT 2

CLEANUP GOALS

ATTACHMENT 3

IMPACTED MATERIAL, GRID, AND ALIQUOT SAMPLE LOCATIONS