United States Department of Agriculture | Forest Service | Kootenai National Forest | Forest Supervisor's Office
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APPROVAL MEMORANDUM: United States Department of Agriculture Forest Service

FOR THE REGIONAL FORESTER

THROUGH: Leanne M. Marten, Regional Forester, United States Forest Service, Northern Region Date: February 6, 2024

FROM: Chad Benson, Forest Supervisor, United States Forest Service, Kootenai National Forest, Supervisor's Office Date: February 6, 2024

SUBJECT: Request to conduct an EE/CA for the proposed NTCRA at the Mitchell Jackson Project Area, Lincoln County, Montana

FILE CODE: 2160

Purpose

The purpose of this approval memorandum is to request and document approval to conduct an Engineering Evaluation/Cost Analysis (EE/CA) for a non-time-critical removal action (NTCRA) proposed for the Mitchell Jackson Project Area surrounding the current U.S. Environmental Protection Agency's (EPA) boundary for Operable Unit 3 (OU3) of the Libby Asbestos Superfund Site in Lincoln County, Montana.

The proposed NTCRA is being performed pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). Within the Mitchell Jackson Project Area, the U.S. Department of Agriculture Forest Service (USFS) is the CERCLA lead agency with delegated authority to respond to the release or threatened release of hazardous substances on USFS-managed lands. Sections 104(a) and (b) of CERCLA response authority (including the authority to perform a NTCRA) has been delegated to the Department of Agriculture pursuant to Executive Order 12580.[1]

This memorandum documents that the situation meets the criteria in 40 Code of Federal Regulations (CFR) §300.415 for initiating a removal action under the NCP, and that the required removal action is a NTCRA. Finally, this memorandum provides a finding of an actual or threatened release from the site that may present an imminent and substantial endangerment.

Project Background

The Mitchell Jackson Project Area surrounds OU3 of the Libby Asbestos Superfund Site, located in Lincoln County, Montana, east–northeast of Libby, Montana, and along Montana Highway 37. The Mitchell Jackson Project Area is bounded on the exterior by Montana Highway 37 in the south, National Forest System Road 228 in the east, land managed by the U.S. Army Corps of Engineers (USACE) along Koocanusa Reservoir up to Jackson Creek in the northeast, and a series of ridgelines reflecting topographic changes in the north and west. The Mitchell Jackson Project Area is bounded on the interior by EPA's current OU3 boundary (EPA 2017). The Mitchell Jackson Project Area comprises 26,464 acres and lands in all or parts of Townships 30,

[1] 52 Federal Register 2923 (January 29, 1987)

31, and 32 North and Ranges 29, 30, and 31 of the West Principal Meridian of Montana in Lincoln County, Montana. An interdisciplinary USFS team developed the exterior boundaries of the Mitchell Jackson Project Area based on topography and geographical features (water bodies, roads), fire modeling efforts, and assessment of fuels conditions influencing the potential for fire start and movement into OU3.

OU3 includes USFS-managed lands, streams including the Rainy Creek watershed and the Kootenai River, and the private property in and around the former Libby Vermiculite Mine owned by W.R. Grace and Co. (Grace) or Grace-owned subsidiaries (excluding OU2, the former Screening Plant). Operations at the mine included blast and drag-line mining and milling of the vermiculite ore. After milling, concentrated ore was transported down Rainy Creek Road by truck to a screening facility (known today as the former Screening Plant) adjacent to Montana Highway 37, at the confluence of Rainy Creek and the Kootenai River. At the screening facility, the ore was size-sorted and transported by rail or truck to processing facilities in Libby and nationwide. At the processing plants, the ore was expanded or "exfoliated" by rapid heating then exported to market via truck or rail. Vermiculite ore was dry milled through 1985, and wet milling was done from 1985 until closure in 1990.

As a result of these historical activities, Libby amphibole asbestos (LA), a toxic and highly friable form of asbestos also called tremolite-actinolite series asbestos, was liberated to the forested areas within and surrounding OU3. The Human Health Risk Assessment (HHRA) evaluations indicate that LA-contaminated soil, duff, and ash within OU3 pose unacceptable risks to forest workers (EPA 2015, 2018).

Much of the Mitchell Jackson Project Area was part of the original OU3 study area that was evaluated in the 2016 OU3 Remedial Investigation (RI), 2015 HHRA, and 2018 HHRA Addendum to determine the extent of LA contamination and risks to human health around the former mine area (MWH 2016; EPA 2015, 2018). When the current OU3 boundary was revised in 2017, parts of the OU3 Study Area, now part of the Mitchell Jackson Project Area, were excluded because LA contamination was not detected in site media at elevated concentrations posing unacceptable human health risks to receptors when disturbed (i.e., unacceptable hazard quotient [HQ] levels), based on available EPA activity-based sampling data. However, the presence of LA complicates routine USFS operations, and few forest management activities have been performed within the Mitchell Jackson Project Area since 2000. These limited forest management activities include 60 acres of harvest in 2019/2020, additional limited harvests in 2004 and 2008, and only 155 acres of pre-commercial thinning since 2000. Because of the continuing buildup of forest-related fuels within the Mitchell Jackson Project Area and the human-induced changes resulting from years of fire suppression activities, as well as potential impacts from climate change, the potential for high severity wildland fires that could spread into the adjacent OU3 have increased.

Threat to Public Health, Welfare, or the Environment

Asbestos is a "hazardous substance" as defined by Section 101(14) of CERCLA[2] and is explicitly identified in 40 CFR 302.4. EPA found that OU3 contains elevated concentrations of a

[2] 42 U.S. Code (USC) § 9601(14)

hazardous substance (i.e., asbestos) (EPA 2015). Based on the area-weighted HQs presented in the OU3 Risk Management Strategy, wildland firefighters have unacceptable risks from exposure to LA within OU3 during understory burn dry mop up (Integral Consulting Inc. 2022).

LA also has been detected within forest-related media (e.g., soil and duff) at the Mitchell Jackson Project Area, albeit at concentrations that corresponded with lower HQ levels relative to OU3, based on available EPA activity-based sampling data. Additionally, wildland fuels conditions, topography, and climate indicate that fires starting in the Mitchell Jackson Project Area could become severe and spread into LA-contaminated forested areas within OU3. Spread of wildland fires into OU3 could result in an exposure scenario that has been determined to have unacceptable risks (i.e., wildland firefighters conducting dry mop up during understory burn).

If no action is taken to address the human-induced changes resulting from years of fire suppression activities and the continuing buildup of fuels, natural processes would continue, and the accumulation of forest debris would increase fuel loadings, which would contribute to higher severity and intensity wildfires. Many of the forested stands in the Mitchell Jackson Project Area would remain overstocked and ladder fuels would continue to fill in and crowd the understory. The drier forest stands would continue to lose vigor because of competition from a dense understory of shade-tolerant species. This understory would serve as ladder fuels that would permit a surface fire to expand into the canopy of overstory trees. This could result in the mortality of many of the existing overstory trees that would have otherwise survived a surface fire of lower intensity. Fire modeling indicates there is a risk of crown fire under existing conditions. Climate change is expected to result in longer fire seasons, which will allow for more ignitions, greater likelihood of fire spread, and a longer burning duration.

Fire spread into OU3 could subsequently expose wildland firefighters to LA-contaminated soil, duff, and/or ash within OU3 and increase migration of LA-contaminated soil, duff, and/or ash in OU3 to nearby surface water.

USFS has wildfire response authorities and responsibilities on lands in and around OU3. USFS is required to properly prepare and equip wildland firefighters to initially attack wildfire starts in OU3 if response to a fire is warranted.

Statutory Basis for Removal Action

Previous investigations and risk assessments indicate that hazardous substances are present at OU3, which may pose a threat to public health or welfare or the environment. These investigations identified elevated concentrations of a hazardous substance (i.e., asbestos) in OU3-related forest media.

Pursuant to Sections 104(a)(l) and (b)(l) of CERCLA, 42 USC § 9604(a)(1) and (b)(1), whenever there is a release or substantial threat of a release of a hazardous substance into the environment, the president is authorized to act, consistent with the NCP, to remove or arrange for the removal of such hazardous substance or take any other response action, including appropriate investigations, deemed necessary to protect public health or welfare or the environment. Section 104(a) and (b) of CERCLA response authority (including the authority to perform a NTCRA) has been delegated to the Department of Agriculture pursuant to Executive Order 12580.[3] The

[3] 52 Federal Register 2923 (Jan. 29, 1987)

Secretary of Agriculture has re-delegated the authorities granted under Executive Order 12580 to the Chief of the Forest Service with respect to land and facilities under Forest Service jurisdiction, custody or control.[4] The Secretary of Agriculture has re- delegated the CERCLA Section 106 order authority to take abatement actions, with respect to National Forest Service lands and resources to the Director, Office of Procurement and Property Management, to be exercised with the Chief of the Forest Service and with the concurrence of the General Counsel.[5] The authority of the Chief of the Forest Service was re-delegated to regional foresters.[6]

Section 300.415(b)(2) of the NCP provides factors for determining the appropriateness of a removal action. The factors applicable to current conditions in OU3 from wildland fires started in the Mitchell Jackson Project Area include, among others:

(i) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants

(ii) Actual or potential contamination of drinking water supplies or sensitive ecosystems

(iv) High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate

(v) Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or to be released

Based upon these considerations, USFS has determined that the use of its delegated CERCLA removal action authority to investigate, abate, prevent, minimize, stabilize, mitigate, and/or eliminate the release or threat of release of hazardous substances within OU3 from conditions in the adjacent Mitchell Jackson Project Area is appropriate. Additionally, USFS has determined that a planning period of at least six months exists before on-site activities must be initiated. USFS is authorized to conduct an EE/CA (or its equivalent) pursuant to and in accordance with § 300.415(b)(4) of the NCP. Therefore, USFS recommends that an EE/CA be performed at the site to identify and evaluate removal action alternatives to address unacceptable fuels conditions that may cause a wildland fire to spread into the LA-contaminated forested areas of OU3.

Enforcement Actions

There are currently no enforcement actions occurring for the Mitchell Jackson Project Area. EPA is conducting enforcement actions for OU3 on a viable potentially responsible party (Grace). At present, USFS does not anticipate pursuing an enforcement action against Grace for the Mitchell Jackson Project Area.

Proposed Project/Oversight and Cost

The proposed project is to conduct a removal action to provide fuels reduction and road modifications to the USFS-managed lands located within the Mitchell Jackson Project Area. An EE/CA will be prepared to define the scope and the approach for the NTCRA in the Mitchell Jackson Project Area. Information developed as part of earlier scoping identified a limited

[4] 7 Code of Federal Regulations (CFR) §§ 2.20(a)(7), 2.60(a)(39)
[5] 7 CFR §§ 2.24(a)(6)(xvii)(H); 2.90(a)(7)(viii)
[6] FSM Manual 2164.04c, 2.1, effective November 10, 1994

number of removal action approaches, and these will be refined and evaluated in the EE/CA. The likely technology and process options that will be subject to detailed analysis include (1) forest management within the Mitchell Jackson Project Area and (2) road modifications within the Mitchell Jackson Project Area. A recommended removal action alternative will be identified in the EE/CA, and a final removal alternative will be selected following public comment on the EE/CA and evaluation of comments.

USFS funds specifically identified for use on this project will pay for the costs for conducting the EE/CA. Estimated EE/CA costs are ± $600,000, which include USFS oversight.

References

EPA. 14 March 2017. Letter from Greenblum, Max (EPA Enforcement Attorney) to Lydia Duff, Associate General Counsel of Grace. Libby OU3 Boundary Figure. 14 March 2017. Ref. 8EPR-SR.

Integral Consulting, Inc. 2022. *Risk Management Strategy for OU3 of the Libby Asbestos Superfund Site. Revision 4*. April 2022.

MWH Americas, Inc. 2016. *Final Remedial Investigation Report, Operable Unit 3 Study Area, Libby Asbestos Superfund Site, Libby, Montana. Revision 1*. November 2016.

U.S. Environmental Protection Agency (EPA). 2018. *Addendum: Site-Wide Human Health Risk Assessment, Libby Asbestos Superfund Site, Libby Montana. Final.* U.S. Environmental Protection Agency, Region 8. April 2018.

———. 2015. *Final Site-Wide Human Health Risk Assessment Libby Asbestos Superfund Site, Libby, Montana*. November 2015.

Approval/Disapproval

Based on the information and analysis presented in this memorandum, please indicate your concurrence or nonconcurrence with the recommendation to perform an EE/CA as part of an NTCRA for the Mitchell Jackson Project Area.

LEANNE M. MARTEN, REGIONAL FORESTER:

Approved: _____ Digitally signed by LEANNE MARTEN Date: 2024.02.20 11:27:14 -07'00'

Disapproved: _____

Date: February 20, 2024