UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8, MONTANA OFFICE
FEDERAL BUILDING, 10 W. 15th STREET, SUITE 3200
HELENA, MONTANA 59626

Ref: SEMD-C

January 29, 2020

Becky Franks, Board Chair,
Gallatin City-County Board of Health
215 W. Mendenhall
Bozeman, MT 59715

Steve Custer, Board Chair
Gallatin Local Water Quality District

Re: Environmental Protection Agency response to public comments regarding the notice of intent for partial deletion of the Idaho Pole Company Superfund Site (EPA-HQ-SFUND-1986-0005

Dear Ms. Franks and Dr. Custer:

A Notice of Intent for Partial Deletion of Operable Unit (OU) 1 of the Idaho Pole Superfund Site was published in the Federal Register on July 19, 2019 (84 FR 34839). The publication of that notice was intended to inform the public that United States Environmental Protection Agency (EPA) planned to delete the surface and unsaturated subsurface soils portion of the Site from the National Priorities List and provide a 30-day public comment period on the proposed deletion. The closing date for comments on the Notice of Intent to Delete was August 19, 2019 and subsequently extended to September 6, 2019. Two written comments and three oral comments were received. All public comments were considered in EPA's final decision to delete a portion of the Site from the NPL.
This Responsiveness Summary was prepared to respond to comments submitted to EPA during the 30-day public comment period on the Notice of Intent for Partial Deletion of OU1 of the Idaho Pole Superfund Site (84 FR 34839). The original written comments are provided below while the oral comments are summarized. All comments in their entirety are available as Attachment S to this responsiveness summary. A copy of this responsiveness summary with the support materials included as attachments will also be placed at the information repositories at the following addresses:

U.S. EPA Montana Office; Federal Building, Suite 3200; 10 West 15th Street; Helena, MT 59626
Bozeman Public Library, 626 E. Main Street, Bozeman, MT 59715.

Below are the comments received with EPA's responses.

Comment #1: Per 40 CFR 300.425(e), [Gallatin City County Board of Health (GCCBOH) and Gallatin Local Water Quality District (GLWQD)] believe that further Superfund responses are needed to protect human health and the environment at the Site for the following reasons:

Inadequate soil testing. Soil testing performed at the Site in advance of the proposed delisting included five point composite samples in only four (4) locations from surface soils at a depth of 0-6 inches (Page 2, paragraph 2 and 3 in the June 2018 Idaho Pole Surface Soil Sampling Report). Sampling results are particularly scant or non-existant in areas of the Site north of Interstate 90 where the record indicates that surface contamination occurred where contaminated groundwater was at least seasonally near or at the surface. Specifically, the Federal Register, Vol. 84 No 139, Page 34842, column 2, paragraph 2, line 8 states, "Contaminated surface soils were identified .... in the Pasture Area." according to the Remedial Investigation and Feasibility Study. Soils from this area were excavated and treated in the land treatment unit (LTU). [It is assumed that] soil sampling in 2018 was conducted to confirm that the cover soil in areas where contaminated soils were excavated do not contain dioxin above the ROD cleanup level. No surface or subsurface soil samples were collected from the Pasture Area for testing during the 2018 soil-sampling event. Board members also noted that well 26-A, located in the north portion of the Pasture Area , sampled on September 26, 2017 had a pentachlorophenol (PCP) level of 3.60 [microgram/Liter (ug/L)] (2017 Groundwater Assessment Report Idaho Pole Company Site, Table 2-3. Groundwater Analytical Data September 2017). This is above the ROD cleanup level (1.0 ug/L), but no soil samples were collected from the Pasture Area . Board and staff believe additional soil testing at more locations including but not limited to the Pasture Area is necessary to evaluate risk to human health and the environment.

Response:

The United States Environmental Protection Agency (EPA) and the Montana Department of Environmental Quality (MDEQ) believe that surface and unsaturated subsurface soils have been well-characterized as part of the remedial investigation and remedial design including extensive testing north of I-90. During the remedial investigation, multiple test pits were completed and soil samples were analyzed to characterize the nature and extent of contamination at the Site. In addition, light non-aqueous phase liquid (LNAPL) borings spaced 20 feet apart were completed on both sides of I-90 including 24 boreholes in the Pasture Area. Numerous test pits were excavated and soil samples collected during the Remedial Design to further define the extent of pentachlorophenol (PCP), polynuclear aromatic hydrocarbons (PAHs) and LNAPL. Sixteen test pits were excavated in the Pasture Area north of I-90 at locations of observed LNAPL-stained surface soils or locations intended to bound the area of LNAPL-affected media. It was determined that the soils requiring remediation north of I-90 were limited to the southeast portion of the Pasture Area adjacent to locations of LNAPL staining of the ground surface. Sections 4 and 5 of the Remedial Investigation Report for Idaho Pole Site, MultiTech Service, March 1992 (Attachment A) as well as sections 3 and 4 of the Additional Studies and Design Basis Report I Remedial Design/Remedial Action Idaho Pole Company, Geraghty & Miller, Inc, Feb 1995 (Attachment B) provide the information to support the statement that the soils have been well-characterized. In addition, all the construction requirements for excavation, treatment and placement of the impacted soils at the Idaho Pole Site have been met as described in the 1998 Preliminary Site Close Out Report (Attachment C); the 2002 Remedial Action Completion Report (Attachment D); and the 2003 Certification of Completion of the Soils Component of the Remedial Action (Attachment E). Four Five Year Reviews have also been completed since 1995 and each review has made the determination that the soil component of the remedy remains protective of human health and the environment.

Soil samples were collected in 2018 for dioxin analysis because EPA and MDEQ (the Agencies) determined that additional analyses of dioxins were needed to compare to recently revised EPA Regional Screening Levels (RSLs) for residential and industrial use. The re-evaluation of dioxin levels in soil was conducted using current dioxin science, including current EPA estimates for the toxicity of dioxin and current EPA risk assessment exposure factors. This evaluation was also conducted using existing soil site data, along with additional soil sampling data collected in 2018 (Attachment F). Additional soil samples were also collected north of I-90, the former roundhouse, the land treatment unit and treat soils area on September 30, 2019 and analyzed for PCP and PAHs (Attachment G). Analytical results were below cleanup levels established in the 1992 ROD and appropriate chemical contaminant RSLs for industrial use. The Agencies have determined that the soils have been well characterized and the soil remedy is protective of human health and the environment. Accordingly, it is appropriate to delete the surface and unsaturated subsurface soils from the National Priorities List (NPL).

With regards to PCP concentrations of 3.6 ug/L (micrograms/liter) in groundwater in Well 26-A, if mixed saturated subsurface soil in this area were brought to the surface because of an excavation, the soil results would contain very low levels of PCP in soil that would be below the ROD cleanup standard of 48 mg/kg (milligrams/kilogram) and the EPA Regional Screening Level of 4.0 mg/kg for industrial use.

Comment #2: It appears from the documentation that the soil treatment process did not positively reduce dioxin to the ROD level. Dioxin is an extremely toxic substance. The fact that the recently tested surface soils in one of the handful of sites outside of the Treatment Unit, is close to the ROD level for dioxin is concerning, as those should have been clean soils. Testing of treated soils for dioxin, as well as more comprehensive testing of both surface and subsurface unsaturated soils in additional areas beyond the locations sampled in 2018, is called for before any of the Site is developed and sampling and remediation becomes economically impractical.

... Were the soil dioxin furan cleanup standards met in the LTU soils used as the fill material... I didn't get a feel on what I read through that the levels of dioxins and furans were below .... EPA standards before they were used as fill material.

Response:
The Remedial Action Completion Report Soil Remediation Phase, December 2002, states "Based on the September 2000 Land Treatment Unit (LTU) soils sampling results, soil treatment was complete having met the ROD-specified performance standards. Soil analyses of the final list indicated that concentrations were below the ROD performance standard for PCP, total B2 (carcinogenic) PAHs and total D (non-carcinogenic) PAHs. Concentrations of dioxins were above the performance standard for dioxin." In recognition of this, EPA's May 21, 1996 Explanation of Significant Differences stated, " If the soil contains other contaminants that exceed the Record of Decision (ROD) levels, the soil will be isolated from groundwater, will be covered at the surface to prevent direct contact and Institutional Controls on future land use will be required." These dioxin-containing soils were purposely contained within the 4.5 acre Treated Soils Area. LTU closure activities were based on soil data meeting the ROD soil treatment goals for PCP and PAHs, but not for dioxins. The bottom elevation of the pits into which the treated soils were placed was surveyed to be at least one foot above the historic high groundwater level at the Site to prevent soil contact with the groundwater in the area. A 12 to 15-inch cover of clean

fill material was placed over the treated soils to prevent direct contact risk, as described in the remedial action objectives. The 4.5 acre Treated Soils Area is not being deleted from the NPL, its' protectiveness is being assessed during Five Year Reviews, and remains eligible for response actions if required, as does the portion of the site to be partially deleted from the NPL.

While the dioxin levels in the treated soils are above the ROD cleanup level, EPA and MDEQ have determined that the dioxins in the treated soils do not pose a risk to human health because the Institutional Controls on future land use discussed below will prevent human exposure.

All the dioxin results from the 2018 soil sampling event of surface soils were below relevant cleanup levels established in the 1992 Record of Decision and recently revised RSLs for industrial use but above recently revised RSLs for residential use which means that the surface soils south of I-90 that are outside of the 4.5 acre Treated Soils Area may not allow for unlimited use and unrestricted exposure (Attachment F). Under Superfund, Institutional Controls are normally placed on the property where conditions do not allow for unlimited use and unrestricted exposure. As part of the Idaho Pole remedy, two enforceable Institutional Controls identified below have been placed on the Idaho Pole property:

1) A Controlled Groundwater Use Area (CGA) was issued by the Montana Division of Natural Resources in 2001. This CGA restricts use of groundwater beneath the site for any purpose, except as provided in the remedial action or as otherwise authorized by EPA and MDEQ (Attachment J).

2) Land use restrictions are recorded on the deed with the Gallatin County Clerk and Recorder and include the following covenants, conditions and restrictions (among others) that run with the land as quoted directly from the Declaration of Institutional Controls (Attachment K):

   a. Restriction on Construction. No construction, other than surface paving, landscaping, curbs, light standards, traffic signs, foundations (and related above-ground structures), utilities and greenways, shall take place on the Treated Soil Areas, except as provided in the Remedial Action or as otherwise authorized in writing by EPA and MDEQ.

   b. Residential Development or Use Prohibited. No residential development or residential use of the property is allowed, unless approved by EPA and MDEQ. "Residential" includes, but is not limited to, permanent residential use; temporary residential use; limited residential use; short-term residential use; children's day care; mobile homes used for residential use (as contrasted to temporary on-site construction office or the like that is not used as a dwelling or for residential use) with or without footings; mobile home used for residential use (as contrasted to temporary on-site construction office or the like that is not used as a dwelling or for residential use) with or without a pad; and camping. It is Idaho Pole Company's intent that this limitation be construed as broadly as possible to prohibit any type of residential use whatsoever.

   c. Restriction or Excavation within the Treated Soils Area (TSAs). No excavation deeper than 12 inches shall take place on the TSAs, unless authorized in writing by EPA and MDEQ and conducted in compliance with the March 2011 Agency-approved Soil Management Plan that is in EPA's and MDEQ's site files for the Idaho Pole Superfund Site, or such other soils and groundwater management plan that may be approved by EPA

and MDEQ ("Soil Management Plan"). Owner shall maintain a protective cover of at least 12 inches of clean soil over the TSAs. A 12 inch gravel layer, gravel and asphalt overlay, or other cover that prevents erosion and which maintains the integrity of the remedy can be substituted for clean soil.

d. Restriction on Excavation within Controlled Ground Water Area. In addition to the Restriction on Excavation within the TSAs, above, no excavation shall be allowed on the Property within Controlled Ground Water Area (Decision 41H-114172) where that excavation reaches saturated soil or groundwater, except where the Owner receives prior written approval from MDEQ and EPA and meets the requirements of the Controlled Ground Water Area and the Soil Management Plan or except as otherwise authorized in writing by EPA and MDEQ.

e. Restriction on Use of Ground Water. Ground water within the boundaries described by the Controlled Ground Water Area shall not be pumped, withdrawn, used, or developed for any purpose, except as provided in the Remedial Action or as otherwise authorized in writing by EPA and MDEQ. If the Controlled Ground Water Area is amended to allow for wells on the Property, subject to Owner first obtaining the requisite prior authorizations from EPA and MDEQ, Owner may be allowed to install and use one or more groundwater wells for the irrigation of landscaping features on the Property, to the extent permitted by such authorizations and otherwise in compliance with applicable law, including the Controlled Ground Water Area.

Comment #3: The relatively shallow depth of soil sampling (0 to 6 inches) is also a concern. As we understand the documents, the purpose of the partial deletion as stated in both the article in the Bozeman City Chronicle on May 7, 2019, and the EPA Idaho Pole webpage is to allow redevelopment of the land. Redevelopment as we understand it would require excavation for building foundations, water lines, sewer mains, and other underground utilities on the Site. Experience suggests such excavation would extend 6 to 8 feet below ground surface. The excavated material would be mixed and used to backfill-excavated areas. This excavation and mixing may bring contaminated materials from below the six-inch level. Because of this, contamination in the unsaturated and even the saturated zone in shallow groundwater areas may surface and be inhaled, ingested or otherwise come into contact with children and adults.

Response:

The purpose of the partial deletion is to acknowledge that all appropriate response actions have been implemented for the soils portion of the remedy at the Idaho Pole Site; that no further response action for soils is deemed necessary; and that the soils remedy as implemented poses no significant threat to public health or the environment. Redevelopment can occur absent of partial deletion as long as the protectiveness of the remedy is maintained.

Given current land use as an undeveloped field, a 0 to 6 inch sampling depth for surface soils is considered appropriate because deeper disturbances are not anticipated. Should a deeper disturbance of the subsoils be required for redevelopment, two enforceable Institutional Controls are in place to ensure protection of human health and the environment. Those Institutional Controls are identified in the

response to comment #2 (Attachments J and K).

*Comment #4: **Unknown fate of over 300,000 gallons of petroleum hydrocarbons spilled on the Site.** The 2002 Remedial Investigation Report estimated that 327,000 gallons of petroleum hydrocarbons were spilled on the Site. To date, the EPA has not responded adequately to requests from the Board of Health as to the status of those contaminants. There are no estimates on how much of the fuel may have been recovered through soil excavation or other cleanup efforts.*

According to the US Agency for Toxic Substance and Disease Registry (ATSDR) petroleum hydrocarbons can be harmful to human health if they are ingested, inhaled or touched by people. ATSDR states that exposure can cause serious health impacts, including irritation of the throat and stomach, central nervous system depression, difficulty breathing, and pneumonia from breathing liquid into the lungs. The compounds in some total petroleum hydrocarbons (TPH) fractions can also affect blood, immune system, liver, spleen, kidneys, developing fetus, and lungs. Certain TPH compounds can be irritating to the skin and eyes. The boards believe that no determination regarding public health and safety can be reached absent better understanding of TPH levels on the Site.

Response:
This 327,000 gallon estimate has often been referenced by the Gallatin Local Water Quality District and Gallatin City County Board of Health as a point of concern, but this number was only an estimate made during the remedial investigation to aid in gaining a general sense of the potential magnitude of resulting contamination issues, but is not useful for contaminant removal evaluations. First, the estimate involved a large amount of potential error. Second, as the products were used and introduced to the environment over more a quarter of a century, their composition and distribution changes through time. In other words, the hydrocarbons removed from the environment take a much different form than when they were emplaced.

As soon as petroleum hydrocarbon mixtures are released to the environment, they begin to undergo changes in which natural processes such as volatilization or degradation occur, thereby altering the chemical composition of the original environmental contamination. During this process the lighter hydrocarbon fractions (i.e., smaller molecular weight and less carbon numbers (C_5-C_6, C_7-C_8)) decrease in concentration while relative concentrations of higher molecular weight (and carbon number) hydrocarbon fractions (identified as PAHs in the 1992 ROD) in residual Total Petroleum Hydrocarbons (TPH) increase in proportion to the overall mass of the remaining hydrocarbons in the environment. The remaining higher molecular weight hydrocarbons (PAHs) also have a higher organic carbon-water partitioning coefficient. In other words, the hydrocarbons that were characterized during the remedial investigation and removed from the environment during the remedial action were much different from than when they were originally released and are less soluble in water than the lighter weight hydrocarbon fractions. This is due to many factors, including but not limited to the complexity and heterogeneity of the sediments and soil, groundwater movement, degradation, their use in wood treatment operations and the long time span over which they were initially introduced in a variety of forms. In short, not all of the petroleum hydrocarbons released over time remain in the soil and groundwater in their original chemical form.

Additional investigations were conducted in 1994 to support the Soil Remedy Design. These investigations excavated more than 60 tests pits in the Roundhouse area, the Pressure Plant area, along Cedar Street, the Barkfill area and in the Pasture area north of the I-90. These areas were expected to have the highest amount of contamination. The objective was to further characterize the soils for removal and treatment. Test pits were excavated to below the water table in most areas. It was assumed that the remaining hydrocarbon contaminants in groundwater at this Site would be in the form of LNAPL, or light non-aqueous phase liquids that are not soluble in water and which have a lower density than water. The LNAPL would float on the top surface of the groundwater layer and would not be able to sink below the groundwater layer due to their physical and chemical properties. During the 1994 investigations LNAPL was not observed in measureable quantities on the water table in any test pit, even after the pits had been left open for several hours. LNAPL existed primarily as staining with some sheens observed. The investigators defined unmeasurable LNAPL as more than a sheen but less than 0.01 feet in thickness. Please refer to sections 3 and 4 of the Additional Studies and Design Basis Report I, Geraghty & Miller, Inc, Feb 1995 for additional information (Attachment B). Based on this information, the pretreament of LNAPL saturated soils by steam cleaning in the original remedy design was deemed not necessary, as insufficient LNAPL was found to warrant this step.

These data and the effects that the many complex factors have on the original composition of the petroleum hydrocarbons historically released indicate the original estimate in the RI report of 327,000 gallons of LNAPL was substantially overestimated. Areas where LNAPL was observed were excavated between 1995 and 1998 as part of the soil remedy and a LNAPL plume no longer exists at the Site.

Comment #5 Specific components of diesel fuel have not been sampled for recently in the soils and in the unsaturated zone. This is a concern for human health and the environment.

Response:

Site investigations conducted between 2014 and 2017 have focused on a range of potential petroleum hydrocarbon contamination in soils, subsurface soils, and groundwater. While these studies have not attempted to isolate the specific presence of diesel fuel components, diesel fuel would be only one component of petroleum hydrocarbon contamination in the subsurface soils and groundwater. In any case, the analysis of risks posed to human health and the environment by the presence of hydrocarbon contamination at the Idaho Pole Site encompasses any individual risk that might be posed by diesel fuel and its breakdown elements.

Total petroleum hydrocarbons (TPH) refer to a variety of complex technical mixture products or wastes. TPHs are generally grouped into three ranges (fractions) according to the number of carbon atoms in the chemical compound: $TPH_{gasoline}$ (C5 – C12) TPH_{diesel} (C10 – C28) and $TPH_{lubricating\ oil}$ (C14 - > C29). In some analyses, TPH fractions may be reported in small incremental hydrocarbon ranges, such as C_5-C_6, C_7-C_8, etc., but generally, TPH is most often grouped into the three fractions mentioned above, plus total hydrocarbons. Transformer oil was used in the wood treating applications by the Idaho Pole Company which has a fraction between C9 - > C29, the analysis of diesel range organics (C10 – C28) was considered an appropriate analysis to evaluate the presence of carrier fuel in the source area.

The presence of petroleum hydrocarbon compounds was investigated between 2014 – 2019 using various total and fractionated petroleum hydrocarbon analyses as well as PAH analyses. Because cleanup levels for fractionated petroleum hydrocarbons were not included in the ROD, the results were

compared to Montana MDEQ risk-based screening levels (RBSLs). MDEQ developed RBSLs for petroleum hydrocarbons based on generic site conditions and likely possible human exposure scenarios. They are intended to evaluate whether additional investigation is needed at a Site, not as site-specific cleanup levels. While they are not Site cleanup levels, they are useful in evaluating the extent of petroleum hydrocarbons at the Site and whether additional investigation into their presence may be warranted.

Although comment #5 pertains to soils, there is an overall concern with petroleum hydrocarbons expressed over the past few years and the following summarizes recent TPH investigation results for surface soil, subsurface soil, and groundwater.

Several phases of investigation into petroleum hydrocarbon concentrations in Site soil and groundwater have been conducted at the Site since 2014. Summaries of the investigation results are provided below.

1. 2014 Subsurface Soil Investigation in Barkfill Area (Attachment M)
    a. Ten soil samples collected from four borings for TPH analysis from depths of 5 to 23 feet. Samples from three of those borings (five samples) contained TPH fraction concentrations > MDEQ RBSLs for leaching and direct contact (construction/commercial). All samples that had TPH Fraction concentrations > MDEQ RBSLs were in saturated soils.
    b. The borings are all located within the barkfill area south of I-90 where treated soil were placed and Institutional ControlsInstitutional Controls prevent direct contact.
2. 2019 Surface Soil Sampling North of I-90 (Attachment G)
    a. Two surface soil samples were collected from the ditch on the south side of Bohart Lane between monitoring wells GM-4 and GM-5 in response to a citizen report of a sheen in this area.
    b. The samples contained petroleum hydrocarbon screen concentrations of 133 and 98 mg/kg. These results are below the level at which MDEQ has established for additional analysis, indicating no health risks from the petroleum hydrocarbons in this area.
3. Groundwater Monitoring – Several groundwater monitoring events for petroleum hydrocarbons have been conducted.
    a. 2016 Phase II Pilot Study (Attachment N) – Groundwater samples collected from 14 monitoring wells at various times during the study were analyzed for diesel range organics. Seven of the wells were located south of I-90 in the treatment study area. Seven of the wells were located north of I-90, immediately down-gradient of the Barkfill Area, which is where saturated soil samples collected in 2014 contained TPH fractions above the MDEQ RBSLs.
        i. Samples collected from two of the seven wells located within the Phase II Pilot Study contained petroleum hydrocarbon concentrations above the concentation at which MDEQ has established for additional fractionation. Additional fractionation was not completed as part of this pilot study because the objective of the sampling was to determine the presence of TPHs so that biosurfactants and bioamendments could be introduced in that area.
        ii. The analytical results from samples collected north of I-90 were below the concentration at which MDEQ has established for additional fractionation, with the exception of one of the four samples collected from well 9-A, which was slightly above the fractionation level. That sample was collected immediately

following injections of a biosurfactant and bioamendments into the subsurface and subsequent samples collected from well 9-A did not contain detectable concentrations of diesel range fractions.

iii. The results indicate that natural attenuation processes are effective at preventing down-gradient migration of petroleum hydrocarbon concentrations in groundwater.

iv. Samples were collected from monitoring wells 5-A, P-4, GM-4, 9-A, 9-B, 11-A, 10-A, 24-A1, 24-B, 25-A, 25-B, 26-A, 26-B, RES-3, RES-4, RES-7, 27-A and 27-B in October 2019 and analyzed for petroleum hydrocarbon fractions. The results will be presented in the 2019 Groundwater Assessment Report and evaluated as part of the fifth Five-Year Review which is scheduled to be completed by September 2020.

Together, the data provided to date document the presence of petroleum hydrocarbons located in the saturated soils in the barkfill area south of I-90 and groundwater in the barkfill area and north of I-90 still pose a risk to human health and the environment. However, land and groundwater use restrictions prevent exposure to human health and ecological receptors. Saturated soils and groundwater at the site are not part of the partial deletion.

Comment #6: Smear Zone. The Federal Register states that "The majority of soils in the Barkfill and Pasture Areas were contaminated by non-aqueous phase liquid (NAPL) smearing in the saturated subsurface soil." It continues on to describe that the clean overburden was stripped off and the exposed contaminated soil layer was excavated and treated. Concern remains that NAPL smearing has occurred at other locations on the Site as well, particularly directly downgradient in the northern portion, where a shallow groundwater table is present. The 2014 Temporary Monitoring Well Installation Data Summary Report prepared for NorthWestern Energy measured water table depths at 1.26 feet to 8.26 feet below the ground surface at eleven temporary monitoring locations. One member of the public at the August 7 public meeting reported observing a sheen on surface water near the road ditches north of I-90 during spring time high-groundwater conditions. If contamination smearing is still occurring in this area, this would mean that soil and unsaturated -zone contamination is still present at least in the smear zone up-gradient of this surfacing groundwater. Other areas on the site may also have smeared contamination. If NAPL smearing is in fact present at the surface and in shallow subsurface unsaturated soils upgradient of and within these wetland areas, this is not protective of human health and the environment because shallow contaminated soils will be disturbed and exposed to the land surface during underground utility construction, and soil vapor instrusion could negatively affect human health if structures are placed in these areas.

Response:

EPA considers the smear zone to be the approximate 6.7 acres of potentially contaminated saturated soils discussed in Section 5.3.3 of the *Remedial Investigation Report for Idaho Pole Site*, MultiTech Service, March 1992. While these saturated soils are not being considered for deletion, the potential for LNAPL smearing and the seasonal fluctuations in groundwater containing wood treating constituents that could potentially impact surface and unsaturated subsurface soils has been evaluated by the Agencies and it is not considered a threat for the following reasons.

- Extensive investigations conducted in 1994 during soil remedial design and during soil investigations identified only a limited area of LNAPL on the groundwater surface north of I-90 adjacent to Bohart Lane. Sixteen test pits were excavated in the Pasture Area north of I-90 at locations of observed LNAPL-stained surface soils or locations intended to bound the area of LNAPL-affected media. It was determined that the soils requiring remediation north of I-90 were limited to the southeast portion of the Pasture Area adjacent to locations of LNAPL staining of the ground surface. Please refer to sections 3 and 4 of the Additional Studies and Design Basis Report I, Geraghty & Miller, Inc, Feb 1995 for additional information (Attachment B). A recovery trench was also installed in this area during the 1995 soil removal to prevent migration of LNAPL to down-gradient areas that had been remediated through excavation. Absorbent pads were used to collect the LNAPL and the quantity of LNAPL accumulating in the trench declined until it was no longer observed in 2014. In addition, groundwater monitoring has been conducted at least semi-annually since the soil removal action and LNAPL has not been observed in any of the monitoring wells located north of I-90. These data indicate that a LNAPL plume is not present in this area, precluding the possibility of LNAPL smearing and impacting surface and unsaturated subsurface soils.

- Groundwater monitoring conducted since the remedial investigation has identified a dissolved phase PCP plume north of I-90 that is shrinking in extent and magnitude over time (Attachment O). The highest PCP concentrations north of I-90 have been measured in the deeper B zone aquifer, which does not have the potential to impact surface soil. PCP concentrations measured in the shallow aquifer north of I-90 over the last ten years have not exceeded 200 µg/L. The highest concentrations have also been measured adjacent to Bohart Lane at GM-4 and concentrations decline rapidly in a down-gradient (northeasterly) direction. The dissolved phase PCP concentrations north of Bohart Lane are several orders of magnitude less than the PCP soil cleanup level of 48 mg/kg identified in the 1992 ROD and do not have the potential to cause impacts to surface and unsaturated subsurface soils above that cleanup level.

The observed sheen on the surface water within the center line of L Street and near the road ditches along Bohart Lane north of I-90 has been discussed with this community member who will contact EPA should this sheen be observed in the future. Furthermore, anyone can call their local or state officials or they can call EPA at 303- 293-1788 to report a release. The EPA number is a 24 hour hotline manned by EPA for the public to report a release.

In preparation for the Five-Year Review and to determine if the sheen observed is impacting surface and unsaturated subsurface soils, two five-point composite samples were collected in the ditch between Bohart Lane and I-90 and analyzed for PCP and fractionated petroleum hydrocarbon. An additional sample was also collected in the Pasture Area and analyzed for PCP and PAHs. All results came back below ROD cleanup levels for PCP and PAHs, EPA RSLs for industrial use and below the State of Montana RBSLs for fractionated petroleum hydrocarbons.

Comment #7: The other issue is the roundhouse. Everybody knows what's going on...at the Livingston rail yard...I didn't get a good feel in the reports or the information I've read on how extensive that contamination may have been. It was typically, diesel contamination and sometimes chlorinated solvents were used in those operations...

Response:
The roundhouse operated from the late 1800s through the 1930s before chlorinated solvents were widely used commercially; and, perhaps because of this, chlorinated solvents were not detected during the remedial investigation. Roundhouse soil samples collected during the remedial investigation and the remedial design identified PAHs as the primary contaminant of concern which is consistent with a diesel contaminant that has undergone degradation over time. Test pits completed during the remedial investigation and remedial design indicated that impacted soils in the former roundhouse were limited to a depth less than 4 feet, which is above the groundwater table in this area. This is consistent with small surficial releases that may have occurred during minor engine maintenance at the roundhouse. Major engine maintenance was conducted at the Livingston, Montana rail yard. For more information, please refer to the Remedial Investigation Report for Idaho Pole Site, MultiTech Service, March 1992(Attachment A); the Additional Studies and Design Basis Report I, Geraghty & Miller, Inc, Feb 1995 (Attachment B) and pages 14 – 23 of the Cultural Resource Inventory of the Idaho Pole Site, GCM services, June 1990 (Attachment P).

Comment #8: … the ROD was issued in 1992 and I'm wondering if the standards set out in the ROD have been updated with new research….. I want to make sure that all of the standards that are being met in this remedial effort aren't old standards that are now not considered accurate anymore.

Response:
EPA conducts Five-Year Reviews to determine if the remedy continues to be protective of human health and the environment and considers new information about contaminant standards. The last Five-Year Review for the Idaho Pole Company Site, conducted in 2015, included a technical assessment to support the determination that the remedy is functioning as designed and is expected to remain protective of human health and the environment. This assessment included evaluating whether the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives (RAOs) used at the time of remedy selection are still valid. The evaluation conducted in the 2015 Five-Year Review concluded that, for the soil remedy as well as for the remedy as a whole, the remedy approach remains valid when those changes are considered. This evaluation will be conducted again for the next Five-Year Review, scheduled to be completed in 2020.

In addition, EPA issued new screening levels for dioxins in 2014 that are more stringent than the site-specific cleanup dioxin values identified in the 1992 ROD. Confirmatory sampling was conducted in 2018 in areas where historic wood treating operations and response actions occurred to ensure that the dioxin levels in soils did not exceed the new screening levels for industrial use (Attachment F). A re-evaluation of dioxin levels in soil was conducted using current dioxin science, including current EPA estimates for the toxicity of dioxin and current EPA risk assessment exposure factors. That evaluation was based on existing soil site data, along with additional soil sampling data collected in 2018. In addition, soil samples analyzed for PCP and PAHs in September 2019 were compared against EPA RSLs for industrial use since the risk assessment exposures assumptions of PCP and PAHs have been modified since the 1992 ROD (Attachment G). EPA RSLs are based on generic site conditions and exposure scenarios and are meant to be conservative since they are intended to be used to evaluate whether additional investigation and response may be needed at a Site, not as de facto site-specific cleanup levels. Analytical results for PCP and PAHs were below EPA RSLs for industrial use.

Comment #9: If the Site's soil is partially delisted, development will occur and excavation for underground utilities will be necessary. There is concern that excavation and gravel backfill around utility lines will introduce preferential pathways for the contaminated groundwater, potentially transporting contamination to off-site down gradient locations. In addition to this concern, shallow subsurface contamination smearing, whether in saturated or unsaturated soils, is likely to be encountered during excavation and could bring contamination to the land surface, reintroducing a human health contact risk. The Boards, including representatives of the City of Bozeman and Gallatin County, would like EPA's guidance and further clarification on these issues and their recommended resolution prior to delisting the majority of the Site's surface and unsaturated subsuirface soils, which will likely result in developemtn proposals that must be evaluated by the respective entities.

And, so water lines are typically buried between six and eight feet deep that's into the ground water table in much of this area. Sewer lines I'm not sure where but it flows downhill so I'm not sure where a sewer line or how deep it would need to be so again those are conduits that if they are in or near the contaminant plume, that plume could then be drawn along that that gravel filled ditch ... that can then become a conduit to carry contamination away from the site...

I am concerned that allowing development of the Idaho Pole site and/or within the controlled groundwater site and the underground infrastructure that will entail, will provide a perfect conduit for contaminated water to be transported elsewhere....

We believe that development of the Site- both to build structures and install utilities – undoubtedly would require excavation that may exacerbate the health concerns related to the connections between groundwater and soils. We and members of the public express concern that utility trenching could provide conduits through which contaminants in the soil and water would migrate. Additionally, we are concerned that the position of the boundary between saturated and unsaturated soils in the delisting statement changes both seasonally and from year to year as groundwater fluctuates. This fluctuation and attendant uncertain position would not protect public health during construction and excavation and potentially during the life of a building. We also note the inexact knowledge of groundwater depth throughout the Site, a limitation that underscores the important connection between the land and the groundwater. We believe the Site poses a risk to public health based on this connection.

... I remember talking to a developer one time who has a history of developing areas of high groundwater and I asked him how he went about doing that and his response was once we lace in the sewer and water lines the gravel bed acts like a huge French drain and it drops the water table so, you can expect that this smear zone will in essence be drained into the over digs for your sewer system and since those are all set to grade that's an actual perfect conduit to move any of this tainted water ....

Response:

The potential for encountering impacted saturated soils and groundwater is an important consideration for building construction and utility installation. However, it is less of a concern if buildings and utilities are constructed properly, and where construction takes any remaining contamination into account. This is based on experience at other Superfund sites that have implemented widely used construction methods. To ensure protection of human health and to minimize contaminant migration during any future construction activities, Paragraph 10(d) of the Restated and Amended Declaration of Institutional Controls requires development of a soils management plan and prior written approval from EPA and

MDEQ prior to construction of utilities that may encounter impacted saturated soils and groundwater (Attachment K).

Comment #10: It is possible that soil vapor intrusion into future structures on Site could present a human health hazard. Naphthalene, a semi-volatile compound, or other components of diesel fuel remaining in residual subsurface contamination in the smear zone, or in shallow groundwater could volatilize and present an indoor air hazard in overlying structure. No Institutional Controls or mechanisms requiring the use of soil vapor mitigation systems are required for future structures at this time. Additionally, to our knowledge, a soil-vapor-intrusion assessment has not been conducted.

I think we talked about VOCs well will light PAH's or other potential VOCs from past hydrocarbon impacts within the groundwater cause vapor intrusion into the new utility lines or living areas. We touched on that naphthalene being one of them that's in diesel again a diesel plume map would be nice to see here not just not just PAHs or PCPs.

Response:
Since many factors affect vapor migration, the State of Montana's 2011 Vapor Intrusion guidance specifies the pathway should initially be considered a potential threat for all current or potential future structures located within 100 feet laterally from soil, soil vapor, or groundwater contaminated with petroleum hydrocarbons. It is not anticipated that any additional structures that will be continuously occupied will be proposed for construction or constructed in the approximately 6.7 acre area where wood treating constituents containing petroleum hydrocarbons were historically identified. Should new or exisiting structures be continuously occupied in the area where petroleum hydrocarbons have historically been detected, the Agencies will work with the property owner to investigate the indoor air pathway following the 2011 Montana Vapor Intrusion Guide and EPA's 2015 Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air (Attachment Q).

Comment #11: ... real estate development is very complex and ... we try ... to kill these things off as fast as we can. ... We're still here. We have not found any reason to stop doing what we're doing here right now as far as bringing these sites .. into redevelopment...

Response:
Comment noted. However, any development on Idaho Pole property must comply with the Institutional Controls that have been placed on the property and receive appropriate local government approval.

*Comment #12: **Inadequate collaboration and consultation with local governments that will be responsible for assuring public health and safety of future potential development at the Site.** The EPA decision notice of intent to delist portions of the Site was reached without any meaningful consultation, collaboration, or notification of the local government entities that would be burdened with the responsibility for making decisions on future use of the land. According to testimony by EPA staff Roger Hoogerheide at the boards' August 7, 2019, meeting, the MDEQ agreed to support delisting absent any opportunities for public comment from the affected community or any outreach to government officials who would shoulder responsibility for governing future use of the Site. Board members are concerned that local governments and taxpayers will be burdened with decisions about land use and the liability that comes with future potential health impacts. Further, Mr. Hoogerheide stated at the August 7*

meeting that EPA would remain involved in the Site but also stated that there is no clear mechanism for EPA to work with local officials to determine safe uses for the Site. Board members feel that local zoning rules are insufficient to ensure appropriate use of the Site as those rules are malleable and subject to exceptions. One board member noted that current zoning in Bozeman allows childcare facilities in all parts of the city. The board feels strongly that safe use of the Site demands specific and comprehensive understanding about regulatory mechanisms that would be protective of public health. Absent such mechanisms, the boards feel it would be irresponsible to move ahead with delisting.

Now it's been brought up that, yeah, it's going to be storage units and so forth but quite honestly it could take a while and it could be somebody else coming in and doing something totally different so I think we have to make sure that we safeguard with the idea that at this juncture, essentially anything can happen here.

Response:

The following activities have been done as part of communicating to the public and local government partners that the soil and unsaturated soil components of the remedy no longer poses a public health risk and to ensure that local governments and taxpayers will not be burdened with decisions about land use and liability that might result from future potential health impacts.

1) The construction requirements for treatment of the soils at this site have been met as described in the 1998 Preliminary Site Close Out Report and the 2002 Remedial Action Completion Report (Attachments C & D). These reports are available on EPA's webpage at https://www.epa.gov/superfund/idaho-pole.
2) Even if a site or a portion of a site is deleted from the NPL, additional response actions can be taken if conditions warrant. EPA has placed Burlington Northern Santa Fe Railroad Company and the Idaho Pole Company (Respondents) under an Administrative Order for cleanup at the Site (EPA Docket No. CERCLA VIII-93-26). While work is still being done to address the groundwater and saturated subsurface soils components of the remedy, Paragraph XII provides EPA with the authority to require the Respondents to conduct additional work that may be necessary to protect human health and the environment (Attachment R).
3) Institutional Controls on groundwater use have been implemented through the establishment of a Controlled Groundwater Area (Attachment J). Enforceable deed restrictions have also been placed on the property which cannot be restated or amended without EPA and MDEQ approval. Both of these measures will prevent human exposure to any remaining contamination and minimize risks to human health. Specifically, Paragraph 10(b) of the Restated and Amended Declaration of Institutional Controls prohibits residential development or use of the property within city limits (Attachment K).

> "**Residential Development or Use Prohibited.** No residential development or residential use of the property is allowed, unless approved by EPA and MDEQ. "Residential" includes, but is not limited to, permanent residential use; temporary residential use; limited residential use; short-term residential use; children's day care; mobile homes used for residential use (as contrasted to temporary on-site construction office or the like that is not used as a dwelling or for residential use) with or without footings; mobile home used for residential use (as contrasted to temporary on-site construction office or the like that is not used as a dwelling or for residential use) with or without a pad; and camping. It

is Idaho Pole Company's intent that this limitation be construed as broadly as possible to prohibit any type of residential use whatsoever."

4) The Agencies notified the public as early as May 2010 during a public meeting that the soils component of the remedy was completed (https://www.bozemandailychronicle.com/news/idaho-pole-superfund-site-deemed-clean/article_adc01f94-598f-11df-95e8-001cc4c002e0.html) but could not proceed with the partial deletion until the new RSLs for dioxin were finalized.
5) Four Five Year Reviews have been completed since 1995. Each review has made the determination that the soil component of the remedy remains protective of human health and the environment. Notices have been placed in the Bozeman Chronicle announcing the start and completion of each Five Year Review and the most recent Five Year Review Report is available on EPA's webpage at https://www.epa.gov/superfund/idaho-pole.
6) The Agencies identified that the partial deletion was being evaluated during presentations to the public in December 2017 and to the boards in March 2018, as well as in the November 2017 fact sheet that was sent to local residences, local government offices and elected officials.
7) At NPL Sites, §300.425(e)) describes the State's, i.e. MDEQ's, role with the deletion process: EPA should consult with the State and request concurrence on the EPA's intent to delete the site. A site or portion of a site cannot be deleted from the NPL without state concurrence. A state has no public participation requirements for concurrence determination of deletion of a NPL site or partial deletion per the NCP. Although a formal concurrence memo from the State is required for publication, it is suggested that the Region obtain verbal or informal concurrence on the intent to delete before the deletion docket is prepared and the NOID is drafted. A formal concurrence letter must be obtained before Headquarters concurs on the deletion.
There is no requirement that MDEQ independently solicit public comment. The EPA published notification of the proposed partial deletion in the Federal Register, including a request for public comments. In addition, a press release was issued on July 19, 2019 and a notice was published in the local paper on July 21, the Bozeman Chronicle, which provided multiple methods to submit comments, specified where additional information about the site could be found, and provided contact information in case community members had questions concerning the proposed deletion.
8) EPA was available for a public meeting with the Gallatin City County Board of Health and Gallatin Local Water Quality District on August 7, 2019 to answer questions and address concerns about the partial deletion. EPA also re-opened the public comment period at the request of local government until September 6, 2019 to provide additional opportunities for the public to submit comments concerning the proposed partial deletion.
9) The Bozeman Chronicle published two articles about the partial deletion during the public comment period. (https://www.bozemandailychronicle.com/news/city/epa-wants-to-kick-part-of-idaho-pole-site-off/article_ee667f2f-ec7e-5ef8-ba7a-27480a890ac3.html) (https://www.bozemandailychronicle.com/news/health/health-officials-question-epa-plan-to-delist-bozeman-superfund-site/article_c50b772a-3928-5aea-975b-b6f3c47d594d.html)
10) EPA and MDEQ met with local officials on October 15, 2019 to understand local official questions and concerns regarding partial deletion and redevelopment of the Idaho Pole site. EPA also held a public meeting on October 15, 2019 to provide information and answer questions regarding the partial deletion proposal. The Bozeman Chronicle published an article about this

meeting (https://www.bozemandailychronicle.com/news/epa-seeks-to-ease-concerns-about-bozeman-superfund-site/article_b104ae21-b1e9-51a5-8fee-bf7ebc316437.html)

11) Greg Sopkin, EPA Region VIII Regional Administrator, submitted a letter to the editor stating that EPA's decision to delete the soils from the NPL will be based on sound science which was published in the Bozeman Chronicle on November 1, 2019. https://www.bozemandailychronicle.com/opinions/guest_columnists/idaho-pole-decision-will-be-based-on-science/article_1cb44651-7eec-5a07-863f-817ef5137017.html

12) EPA recognizes the role of local government in land use decisions and attempts to partner with state and local government to implement appropriate land use restrictions as Institutional Controls.

Comment #13: The soils and unsaturated subsurface soils proposed for delisting were cleaned up to industrial and commercial standards. A portion of the area proposed for delisting is in the Gallatin County-Bozeman Area zoning district currently designated as sub district Agriculture Suburban, which allows for many different types of development. Future human health could be at risk if residential development were to occur on this parcel. Any new development would also likely require utility trenching due to restrictions of the Controlled Groundwater Area encompassing the Site which do not allow any new wells to be drilled.

Response:

During the remedial investigation, only groundwater contamination was detected on the properties that are currently designated as sub district Agriculture Suburban in the Gallatin County-Bozeman Area zoning district (Attachment A). . Soils and unsaturated soils on these properties do not pose a human health risk and are eligible to be deleted from the NPL. This is also why the Declaration of Institutional Controls was restated and amended on August 21, 2017 to lift the residential use restrictions on these properties (Attachment K). However, to ensure continued protection of human health and the environment should these properties be redeveloped, Institutional Controls have been placed on the properties and restrictions on use are included in the property deed designated as sub district Agriculture Suburban. These include prohibitions on groundwater use and development of a soils management plan and EPA and MDEQ approval before excavating into saturated soils (Attachments J & K).

Comment #14: EPA staff have described that EPA and MDEQ would assist with providing input into future land use for the Site. However, it is unclear to the boards the mechanism by which these agencies would interact with the City of Bozeman and the County of Gallatin to determine future site use that is safe for human health. We are concerned that the City of Bozeman and Gallatin County would have little or no legal ground to stand on in prohibiting certain uses of the Site, after partial delisting of the surface.

At minimum, a Memorandum of Understanding (MOU) between the City of Bozeman, the County of Gallatin, U.S. EPA and Montana DEQ should be composed and finalized to outline roles of each party when determining appropriate future use of the property to ensure human health and environmental protection. Partial delisting should not occur until and MOU is finalized and signed.

... as far as a Memorandum of Understanding between the different parties here and stakeholders what type of enforcement would be possible with that, I mean is it just a feel-good document or is there something that actually could prevent a use that would be a public health issue.

Response:
The Agencies are committed to assist the City of Bozeman and Gallatin County in the redevelopment of the Idaho Pole Site and can provide input on future land use for the Site at the request of the local governments. However, a formal mechanism such as an MOU is not needed prior to the Agencies' determination to delete the surface and unsaturated subsurface soils outside of the 4.5 acre Treated Soils Area from the NPL. The Agencies have determined that the Notice of Institutional Controls as restated and amended contains the land use restrictions to ensure that future redevelopment is done in a manner that protects human health and the environment (Attachment K). These restrictions also cannot be restated or amended without the Agencies' review and approval. Groundwater use restrictions also cannnot be amended without an official rule-making from the Montana Department of Natural Resources and Conservation. Therefore, the City of Bozeman and Gallatin County Institutional Controlscan invoke these Institutional Controls and deed restrictions to assist in restricting future land uses. .

Comment #15: Per 40 CFR 300.4259(e), GCCBOH and GLWQD believe that responsible parties or other persons have not implemented all appropriate response actions required for the following reasons:

Absence of clear, comprehensive statement of scientific rationale for finding that the delisting would not pose a threat to human health. *We do not believe that EPA, MDEQ and Idaho Pole Company have provided the public and government partners with an adequate assessment and rationale for the apparent position that the Site does not pose a public health risk. The Site has been on the National Priorities List for 33 years, in large part in order to protect human health and environment. Despite this history, there is inadequate communication or documentation explaining to local officials and residents why the EPA and MDEQ consider all but 4.5 acres of the surface and unsaturated subsurface to no longer be a substantial risk to human health. We believe a clear statement of this rationale is needed.*

I am also concerned that this delisting is driven more by a rush to develop instead of sound science and a concern for public health. I am equally concerned knowing that the delisting is being pushed by the current adminsitration ....

I'm concerned that the driving force on this is from the administration's viewpoint of trying to get this off the list instead of a true analysis that yes the problem has been solved. I understand the development pressure of anything especially Creekside has all kinds of desirability in this day and age so I can see a significant amount of economic pressure coming to opening this up for development and I am very concerned if this came down from the top and this administration being an incredibly anti-science administration that we're releasing this for the right reasons.

Response:
The desire for property development is not a factor considered by EPA when determining whether a site or a portion of a site should be deleted from the NPL.

Please refer to the response to comment #12 on communications and documentation explaining to local officials and residents why the EPA and MDEQ consider all but 4.5 acres of the surface and unsaturated subsurface to no longer be a substantial risk to human health.

Under part 40 Code of Federal Regulations, section 300.425(e)(1), a release may be deleted from the NPL where no further response is necessary. In making this determination, EPA must consult with the State and consider whether any of the following criteria have been met:

> (i) responsible parties or other persons have implemented all appropriate response actions required; (ii) all appropriate Fund-financed response under CERCLA has been implemented, and no further response action by responsible parties is appropriate; or (iii) the remedial investigation has shown that the release poses no significant threat to public health or the environment and, therefore, taking of remedial measures is not appropriate.

The LTU was closed in 2002, treated soils placed on-site, and Institutional Controls placed on the property, thus completing the remedy for the soils portion of the Site. Since that time, no further information has come to light that would indicate the need for additional soils removals. Also, additional soil samples were collected in 2018 and 2019 to confirm that Institutional Controls are placed appropriately to protect human health and the environment. After consultation with MDEQ and considering response actions taken to date, EPA has determined that no further response is necessary to address any risk to human health and the environment posed by any contaminants that may remain in the surface and unsaturated subsurface soils outside of the 4.5 acre Treated Soils Area. As a result, those portions of the site are being deleted from the NPL. EPA believes the response for these portions of the Site is complete and protective of human health and the environment as documented in the deletion docket and as required by statute and regulation. The decision to delete portions of the Site is based on sound science and a concern for public health, especially since remaining components of the remedy specified in the 1992 ROD such as groundwater and saturated subsurface soils may still pose a risk to human health and environment and EPA will continue to administer an appropriate response at these portions of the Site.

Comment #16: Per 40 CFR 300.425(e), GCCBOH and GLWQD believe that all appropriate Fund-financed response under CERCLA has not been implemented, and additional response action by responsible parties is appropriate for the following reasons:

The proposed partial delisting of the unsaturated soils inadequately considered the connections of the soil to groundwater and saturated soils. *Some members of both boards expressed concern that it is impractical and inappropriate to delete sections of the Site from the National Priorities List without additional consideration of connections between the land, groundwater, and saturated soils. One board member noted that the Site was placed on the National Priorities List in a manner that sought cleanup of the entire Site – soil, saturated soil and groundwater – but is now being broken into pieces in order to accommodate development and the EPA's current emphasis on deleting sites from the national Priorities List. The board member noted the absence of a scientific rationale for this fragmentation of the Site.*

The Idaho Pole Site contains one Operable Unit (OU1), including soils and groundwater contamination. The proposed soils delisting at the Site removes a large area that serves as a buffer around the treated soils area. In the view of some Board members, delisting a subset of the soil portion of the Site is not aligned with the original intent of the Superfund listing as a single Operable Unit. Because of the interconnectedness between soil and the very shallow groundwater table at the Site (less than 10 feet at the northern portion of the Site), human health and environmental concerns remain.

I do not think this site can be realistically separated into the surface cap and subsurface smear zone.

Response:
The National Priorities List (NPL) is the priority list of hazardous waste sites in the United States eligible for long-term remedial investigation and remedial action (cleanup) financed under the federal Superfund. The NPL is intended primarily to guide EPA in determining which sites are so contaminated as to warrant further investigation and significant cleanup.

NPL sites require that a ROD be issued. The ROD is the public document that explains the remediation plan for the cleanup at a Superfund site. While the 1992 Idaho Pole ROD identified one operable unit at the Idaho Pole Site, a separate remedy for the soil and groundwater components was issued. The soil component of the remedy was implemented between 1995 and 2002 while the groundwater component is ongoing. Designation of OUs at a site is an administrative function at EPA's discretion.

The Agencies carefully evaluated the partial deletion of the soil component of the remedy at the Idaho Pole Site, and part of this evaluation considered the Treated Soils Area as well as the groundwater and smear zones. The LTU was closed in 2002, treated soils placed on-site, and Institutional Controls placed on the property, thus completing the remedy for the soils portion of the Site. Since that time, no further information has come to light that would indicate the need for additional soils removals. Also, additional soil samples were collected to confirm that Institutional Controls are placed appropriately to protect human health and the environment. Part of the Institutional Controls includes a Soils Management Plan that addresses management of soils that may be excavated onsite, particularly in the treated soils area. The groundwater component of the remedy, which includes the saturated soil smear zone, remains on the NPL.

Accordingly, it is appropriate to delete the surface and unsaturated subsoils from the National Priorities List (NPL). The Partial Deletion Rule, which allows the EPA to delete portions of NPL sites, provided that deletion criteria are met, was published in the Federal Register on November 1, 1995 as the "Notice of Policy Change: Partial Deletion of Sites Listed on the National Priorities List (60 FR 55466). EPA may pursue partial deletions of sites by area or media once deletion criteria for that portion of the site is met. However, deletion of a portion of a site from the NPL does not itself create, alter, or revoke any individual's rights or obligations. Deletion of a portion of a site from the NPL also does not in any way alter the EPA's right to take enforcement actions, as appropriate. The NPL is designed primarily for informational purposes and to assist EPA management. Under part 40 Code of Federal Regulations, section 300.425(e)(3) states that the deletion of a site from the NPL does not preclude eligibility for future response actions, should future conditions warrant such actions.

Comment #17: I'm not sure whether the developer has plans and where those plans are, but I don't have a feel for where the ground water restriction zone is. We know where the soil or surface soil zone is

which restrictions are but not where the groundwater restriction areas ... and how that's going to affect development of the area. And, ... does the developer have a map showing where his land will be developed?

Response:
The groundwater remedy component is not being considered for deletion at this time. Groundwater use restrictions have been placed on all Idaho Pole property through a deed restriction. The final order establishing the Controlled Groundwater Area and a site map of the groundwater restriction zone are available at Montana Department of Natural Resources and Conservation website using the following link: http://dnrc.mt.gov/divisions/water/water-rights/controlled-ground-water-areas/idaho-pole-company-site

No plans have been provided to the Agencies regarding redevelopment of the property. Potential purchasers of the property are obligated to make all appropriate inquiries about the condition of the property and develop the property in a manner that does not exacerbate any remaining contamination or interfere with cleanup response actions including those land use and groundwater restrictions specified in the Institutional Controls.

Comment #18 Other maps of plumes that I'd like to be able to review would be all free phase and dissolved phase chemicals of concern that at are at below or above the MCL for the EPA or the Montana WQB7 for both ... carcinogenic compounds and non-carcinogenic compounds. I just don't have a feel for how big the plume is and what chemicals of concern are there.

Average depth to groundwater throughout the study area apparently is between five and fifteen feet but I'd like to see a map that shows those seasonally over several years and this comes back to Mrs. Sweeney's information or request for information for utilities that may be placed that have to support businesses in the area typically water lines, city water lines and since I'm a taxpayer I don't want to see a bond issue come forward in the future to say now we need to pay for this legal issue that's going on, like at the landfill

Response:
Groundwater monitoring has been conducted at least semi-annually since the early 1990s and free phase LNAPL has not been observed in any of the monitoring wells since the soil and groundwater remedies were implemented in 1995. The groundwater remedy component is not being considered for deletion at this time. Contaminant plume and groundwater elevation figures are presented in the annual Groundwater Assessment Reports. The entire documents are available for public review at the U.S. EPA Montana Office, Federal Building, Suite 3200, 10 West 15th Street, Helena, MT 59626, (406) 457-5046, Hours: Mon-Fri 8 am to 5 pm or can be provided upon request.

In addition, several wells located downgradient of the source area will be analyzed for polycyclic aromatic hydrocarbons and total extractable hydrocarbons in October 2019. These data will be presented in the 2019 Groundwater Assessment Report, and dissolved phase plume maps will be generated if contaminants of concern are detected above cleanup levels established in the ROD. The results will also be evaluated as part of the fifth Five Year Review which is scheduled to be completed in September 2020.

Comment #19 The smear zone map of the diesel and PAH's as compared to the de-listing areas I think that would be an interesting map to see of the smear zone.

Response:
The smear zone is considered saturated soils and is not being considered for deletion at this time. Please refer to Section 5.3.3 of the Remedial Investigation Report for Idaho Pole Site, MultiTech Service, March 1992 for additional information concerning the smear zone prior to remediation (Attachment A).

Sincerely,

Roger Hoogerheide
EPA Remedial Project Manager

cc: File
J. Vranka, EPA (electronic copy without attachments)
A. Urdiales, EPA (electronic copy without attachments)
L. DeWitt, MDEQ (electronic copy with attachments)
T. Stoops, MDEQ (electronic copy without attachments)
C. Balliew, MDEQ (electronic copy without attachments)

Attachment A: Remedial Investigation Report for Idaho Pole Site
Attachment B: Additional Studies and Design Basis Report I Remedial Design/Remedial Action Idaho Pole Company
Attachment C: 1998 Preliminary Site Close Out Report
Attachment D: 2002 Remedial Action Completion Report
Attachment E: 2003 Certification of Completion of the Soils Component of the Remedial Action
Attachment F: Idaho Pole Company Site Bozeman, MT Report of Surface Soil Sampling June 2018
Attachment G: Idaho Pole Company Site Bozeman, MT Report of Surface Soil Sampling October 2019
Attachment H: Idaho Pole Company Site Bozeman, MT Treated Soil Area Dioxin Evaluation Report
Attachment I: 1996 Explanation of Significant Differences for the Idaho Pole Company Site
Attachment J: 2001 Final Order Controlled Groundwater Area
Attachment K: Notice of Institutional Controls including the Restated and Amended Notice of Institutional Controls
Attachment L: Montana Risk-Based Corrective Action Guidance for Petroleum Releases
Attachment M: 2014 Subsurface Soil Investigation in Barkfill Area Analytical Summary Report
Attachment N: 2016 Phase II Pilot Study Report Idaho Pole Company Bozeman, MT
Attachment O: 2014 – 2018 Potentiometric Maps, PCP Isocontours in "A" Wells and PCP Isocontours in "B" Wells
Attachment P: Cultural Resource Inventory of the Idaho Pole Site
Attachment Q: Montana and EPA Vapor Intrusion Guidance

Attachment R: Administrative Order for Remedial Design/Remedial Action
Attachment S: Partial Deletion Public Comments