

Federal regulations, however, require that grants must be competitively awarded. The EPA attempts to identify grant opportunities to local organizations through the OLS Community Advisory Group, and fully supports award of grant funds to qualified groups.

*The OLS Community Advisory Group submitted comments regarding the EPA Proposed Plan. In these comments, the OLS Community Advisory Group recommended that the EPA preferred alternative include and fund a comprehensive approach to achieve remedial action objectives. The comprehensive approach would include, but not be limited to, the following components:*

*A not-for-profit entity to oversee the coordination and collaboration of all programs and agencies involved at the OLS*

*Culturally and linguistically appropriate public awareness and outreach programs*

*Culturally and linguistically appropriate public education and training programs*

*Blood screening and monitoring program*

*In-home assessments in residences with children with blood-lead levels at or above 10 µg/dl.*

*A "Comprehensive Plan for the Elimination of Lead Hazards in Omaha, Nebraska" was submitted by the OLS Community Advisory Group recommending that a comprehensive lead risk reduction program be conducted including the following components:*

*Outreach and awareness activities in the Omaha Lead Superfund Site area*

*Education for parents, property owners, health care professionals, and staff at community-based organizations*

*Training for remodelers and home repair workers in lead-safe practices*

*Training for contractors involved in remediation activities – soil and housing*

*Screening of children for elevated blood-lead levels*

*Case management for monitoring children with elevated blood-lead levels*

*Source identification – soil/lead-based paint/air/water/other*

*Source remediation – soil/lead-based paint/lead dust*

*Surveillance – data collection for blood leads and housing*

*Collaboration of service providers in providing coordinated services*

*Plans to expand and improve services*

*Evaluation of effectiveness of collaboration and coordination efforts.*

*The Comprehensive Plan provides considerable detail regarding each of the identified elements proposed for a comprehensive lead risk reduction program. The Comprehensive Plan describes the creation of an Omaha Lead Superfund Site Alliance to direct implementation of a comprehensive lead risk reduction program.*

The selected remedy includes EPA participation in a comprehensive remedy that addresses all potential lead-exposure sources at the Site, and includes the elements described in the comment. The EPA will work with the OLS Community Advisory Group, and other organizations and

community members, to develop a strategy that addresses these potential sources. The EPA's authority under CERCLA extends to many of these activities, and the remedy includes those components of a comprehensive remedy that are allowable under the statute. The EPA will work with other interested parties and agencies to identify and engage other organizations, agencies, and funding sources to address potential lead exposure sources that are outside the scope of CERCLA authority.

*The OLS Community Advisory Group submitted comments and questions concerning the EPA Feasibility Study, OLS, including the following:*

*What will EPA do to ensure that paint chips and dust removed via power washing do not contaminate neighborhood yards? How will EPA contain the wastewater that is generated so that it does not contaminate other properties?*

The EPA anticipates that flaking and deteriorating exterior lead-based paint will be removed by wet scraping. The EPA will require the remediation contractor to develop and implement procedures that will minimize the potential for lead-based paint chips and dust (and associated wastewater) from contaminating neighborhood yards. In addition, removal of exterior lead-based paint will be performed before the removal and replacement of yard soil.

*How does EPA plan to protect its remedy at properties where the owner does not agree to have paint removed? How does EPA plan to protect its remedy at homes where neighboring properties that do not qualify for removals have flaking and deteriorating paint?*

The EPA expects that its health education and community involvement programs will generally be successful in convincing homeowners of the need to stabilize flaking exterior lead-based paint. Further, EPA anticipates that public pressure from owners of nearby remediated properties will positively influence reluctant owners. Deteriorating lead-based paint from neighboring properties that threatens the continued effectiveness of the remedy can be stabilized as part of the selected remedy.

*How will risks associated with excavation and transportation of lead impacted soils to workers and residents be addressed? What will be the impacts to local neighborhoods and residents of increased truck traffic from implementation of EPA's proposed remedy?*

Risks to workers and residents resulting from excavation and transportation of lead-impacted soil (and of importing new backfill) will be controlled by requiring pertinent health and safety procedures be developed, documented, and implemented in the remediation contractor's project specific health and safety plan. Impacts to local neighborhoods and residents include increased noise, dust, and accident potential in remediation areas. These risks will be minimized by appropriate traffic control and other procedures specified in the health and safety plan.

*If an onsite soil repository were to be created, where will it be located? Will the public have any input into the decisions made regarding siting such a repository? If the soil is used as beneficial fill, what are the implications regarding risk to receptors living and working near the fill area? Will the public have any input into the decisions made regarding the use of the soil as fill material.*

The need for a soil repository and its potential location have not been confirmed, but if a decision is made to consider a soil repository for final management of contaminated soils, the public will be provided with opportunities to participate in the decision-making. Typically this involves, at a minimum, public participation opportunities associated with land development, such as planning and zoning commission meetings. Generally, local or state permitting requirements may apply to any proposed facility, which would provide additional opportunities for public involvement. Excavated materials will only be considered for beneficial use if the proposed placement is protective of human health and does not pose a threat to nearby residents. Worker safety during placement of excavated soils as beneficial fill would be addressed in a site-specific health and safety plan developed for the project.

*What considerations have been given to the logistics and costs of additional testing and the potential for rejection of excavated soils by the landfill?*

Excavated materials have been transported to local landfills for use as cover or fill since 1999. The landfill requires periodic testing of soils prior to transport. Currently the landfill is requiring a Toxicity Characteristics Leachate Procedure (TCLP) and total metals analysis for every thousand cubic yards of disposed material. This routine analysis does not present logistical difficulties, and the cost of the analysis is insignificant to disposal costs. If EPA encounters a release of hazardous substances unrelated to the lead contamination during the course of the response action, any resulting contaminated soils would be addressed in a manner similar to any release addressed under EPA emergency response authority. The EPA does not anticipate that any lead-contaminated soils will be determined to be unsuitable for land disposal.

*What will the initial watering requirements be for sod and hydro-seed and what will the cost be to homeowners? What types of upkeep and maintenance will be required, and what will the costs be to homeowners?*

Initial watering requirements will be similar to those associated with starting any other new lawn using sod or hydro-seeding, and vary by season and weather conditions. The EPA will provide for watering until the grass lawn is established at no cost to homeowners. Once established, additional watering and maintenance costs should be no different than those associated with an existing lawn and will be the responsibility of the homeowner.

*At each individual property, how does EPA intend to determine whether contamination is from "industrial operations" or from "other sources"?*

The EPA has determined through the Apportionment Study that a significant amount of the lead contamination detected in yards in the OLS originates from industrial operations. No additional characterization will be required to initiate response, if at least one mid-yard sample exceeds the appropriate action criteria.

*How will EPA determine if interior lead contamination in dust is due to exterior soil and not lead-based paint?*

Additional apportionment studies will be performed to evaluate the relative contribution of contaminated soil and other sources to contaminated interior dust. In the absence of other data, tracking of exterior soils is assumed to significantly contribute to interior dust lead concentrations.

*What potential impacts in property value are expected at properties requiring institutional controls? What are the expected costs to the state and local governments for implementation of institutional controls?*

The selected remedy does not include institutional controls on individual residential properties that are remediated. The need for institutional controls will be further evaluated during the final remedy selection process.

*With known high instances of lead-based paint in residences in the OLS, there is a high potential for the incidence of elevated blood-lead levels to remain the same after soil removal. As such, why do none of the alternatives presented in the Feasibility Study (FS) include elements to address this known source of lead exposure.*

CERCLA Section 104(a)(3)(B) generally limits the EPA's authority to respond to interior sources of lead, such as interior lead-based paint, as follows:

"Limitations on Response. The President (EPA) shall not provide for removal or remedial action under this section in response to a release or threat of release...from products which are part of the structure of, and result in exposure within, residential buildings or business or community structures..."

The EPA believes that the actions provided in the selected remedy, including removal of contaminated soil and contaminated interior dust, will significantly reduce the level of lead exposure at remediated properties.

*The OLS Community Advisory Group submitted the following comments and questions regarding the NHHSS Baseline Human Health Risk Assessment, OLS, and the EPA RI, Residential Yard Soil, OLS.*

*The NHHSS Baseline Human Health Risk Assessment*

*The EPA has developed adult blood lead models – why are these models not being considered at the OLS? Also, why are women of childbearing age, nursing mothers, and pregnant women not included in the risk assessment for the OLS?*

The EPA policy, as presented in the EPA Superfund Lead-Contaminated Residential Sites Handbook, establishes a remedial action objective for remedial response at residential lead sites. The remedial action objective for the OLS is to reduce the risk of exposure of young children to lead such that an individual child, or group of similarly exposed children, have no greater than a 5 percent chance of having a blood-lead concentration exceeding 10 ug/dl. Young children are the group most at risk from lead contamination. By addressing the risks to young children, it will provide the necessary protection to other receptor groups.

*How are the arsenic risks going to be addressed?*

Sampling results indicate that arsenic is not related to lead contamination resulting from historic industrial emissions that defines the properties that are considered a part of the OLS. Accordingly, EPA does not plan to remediate soil contaminated with elevated arsenic concentrations except where it is co-located with lead contamination. Arsenic contamination that exists in lead-contaminated yard soils would be removed and disposed of together with the lead-contaminated soil.

*What value is the Integrated Exposure Uptake Biokinetic (IEUBK) Model if the results do not accurately predict actual Site conditions?*

The EPA followed the *Guidance Manual for the Integrated Exposure Uptake Biokinetic Model for Lead in Children*. Where appropriate, EPA used site-specific input parameters to adjust the IEUBK Model to Site conditions and improve the accuracy of the model output. Default values were used where appropriate and within the guidelines of the IEUBK Model. The EPA is issuing an interim ROD that will allow additional data to be collected to better refine the input parameters to the IEUBK Model. The EPA believes the IEUBK Model results for the OLS are accurate and should be used for decision-making including risk analysis and final remedy selection.

*Much discussion has occurred regarding sources of lead other than industrial sources (e.g.) paint, hobbies, tap water, etc.). How can remedy decisions be made without knowing the contribution of these sources to the overall risk of Omaha residents?*

Regardless of other potential sources of lead exposure, lead-contaminated soils at the OLS pose an unacceptable risk and must be remediated to control this significant exposure pathway. As a

component of the comprehensive lead risk reduction strategy, EPA does plan to collect and analyze samples from interior dust, interior lead-based paint, and tap water during the interim remedy in order to better characterize risks from these other potential sources of lead.

*Has EPA done any statistical analysis to determine if an adequate amount of data have been collected to accurately predict Site risks?*

The EPA believes that sufficient analytical data have been collected to set preliminary cleanup goals for the interim remedy. The EPA will collect additional data during implementation of the interim remedy to refine the characterization of risk at properties contaminated at low to moderate levels.

*Has the EPA compared the results of bioavailability at OLS to the bioavailability of paint and paint in soil?*

A comparison of the bioavailability of lead at the Site to the bioavailability of lead in paint is inconsequential. Speciation studies performed by EPA confirm that a significant amount of lead in Site soils is related to historic industrial emissions.

The EPA conducted bioavailability measurements of lead in the OLS residential soils using both in vivo (live young swine) and in vitro (laboratory) methods. While only two in vivo samples were analyzed, 47 additional samples were analyzed by the in vitro method. The range of bioavailability measurements from these two methods overlap with an average value about 40 percent. This illustrates the expected consistency between these two measurement techniques. The greater than 40 percent result is relatively high and well above the EPA risk model default value for bioavailability of 30 percent. All the samples used to make the bioavailability measurements were collected throughout the Superfund Site in areas in the yards away from the influence of lead-based paint. Some of the in vivo samples were also used in the Apportionment Study and that study determined that only a small percentage (7 percent) of these samples contained lead-based paint. Therefore, lead-based paint was present in a small number of the samples, but could not have been a significant factor in the samples used in the bioavailability measurements. Although the lead concentrations in the samples used in the bioavailability studies are higher than the average concentrations in the yard soil, such higher concentrations will have no impact on the results of the bioavailability study.

*Why was the downtown area excluded from the OLS boundaries, and how will EPA address risk to these individuals?*

The central business district was excluded from the OLS because there is limited exposure in the central business district. There are a limited number of residential yards and high child impact areas in the central business district that would retain contamination from airborne industrial emissions.

*Has EPA considered evaluating the correlation between dust concentration and other variables, like age of home and presence of lead-based paint?*

These correlations would be inconsequential. Speciation studies performed by EPA confirm that a significant amount of lead in Site soils is related to historic industrial emissions.

*Why were drip zones not included in the risk assessment?*

Risks were assessed in accordance with pertinent EPA guidance. Mid-yard lead concentrations are of interest as they are more likely linked to historic industrial emissions and less likely to be affected by the potential presence of lead-based paint.

*Has there been any consideration for occupational exposure to lead and its impact on either Site contamination or elevated blood-lead levels?*

The demographic survey attempted to collect occupational information. Potential occupational exposure will be further evaluated as a component of a comprehensive lead-risk reduction strategy. The potential exposure source does not alter the need to address contaminated Site soils.

*How does the likelihood that a source other than soil is contributing to children's blood-lead levels within the OLS affect the results of the risk assessment?*

The impacts of other potential sources of lead were included in the IEUBK Model through the use of site-specific or default input parameters. Potential exposure to other sources of lead makes the need to remediate Site soils even greater to reduce overall exposure levels.

*The EPA Remedial Investigation, Residential Yard Soil, Omaha Lead Site*

*How are decisions regarding remedy selection for this Site impacted if all significant sources of lead exposure within the OLS are not identified?*

Soil contamination originating from industrial sources pose an unacceptable risk to human health, and must be remediated to eliminate this important exposure pathway.

*Why were data not collected from each of the media listed in the EPA Superfund Lead-Contaminated Residential Sites Handbook, and why were evaluations not conducted to determine the contribution of each to blood-lead levels.*

The EPA believes the data collected during the Remedial Investigation is sufficient to move forward with the interim remedy selection. Other potential exposure sources will be better characterized through additional data collection and the comprehensive lead-risk reduction strategy.

*If all the appropriate lead sources were not identified, how could a presumptive resampling and investigation be conducted at the Site?*

The EPA believes that the sampling performed during the RI adequately supports the interim remedy selection for the media that can be addressed under CERCLA authority.

*The investigation activities deviated from project plans prepared for the investigation. What impact does this have on the investigation results?*

A Field Sampling Plan (FSP) that described planned sampling activities was prepared prior to initiation of investigatory activities. During the course of the investigation, modifications to the sampling procedures were made based on changed or previously unknown field conditions. Such changes were approved by EPA, but the FSP was not revised. Actual sampling procedures were described in the RI. Therefore, changes that were implemented in the sampling and testing program are already reflected in the RI and do not impact the investigation results.

*Can EPA expand the discussion regarding the quality and validity of data generated in EPA's investigation?*

The EPA believes that the data were collected in general conformance with pertinent RI/FS and lead Site assessment guidance. The EPA believes that data collected during the RI is valid and of sufficient quality for selection of the interim remedy.

*Why has EPA not evaluated correlations between exterior soil contamination, interior lead concentrations, and blood-lead levels in children?*

These correlations would be inconsequential to EPA's decision-making. Contaminated soils pose an unacceptable human health risk to individuals at the Site, and must be remediated to eliminate this significant exposure pathway.

*Why is there not extensive sampling being conducted in Council Bluffs, Iowa?*

Sampling was initially conducted in Council Bluffs, Iowa, that showed significantly less soil lead levels than were found at the Site west of the Missouri River. Also, the child blood-lead data for the Council Bluff area do not indicate that the impacts are the same in that community. Accordingly, sampling efforts in Council Bluffs were discontinued.

*A number of comments and questions were submitted by the President of the Lead-Safe Omaha Coalition (LSOC). Some of the comments were prepared and submitted directly by the LSOC, and others were received by LSOC from community members, compiled, and submitted to EPA.*