



Superfund Fact Sheet

June 21, 1993

Ruston/North Tacoma Study Area Tacoma, Washington

EPA Adopts Final Cleanup Plan

On June 16, 1993 the U.S. Environmental Protection Agency (EPA) adopted a final cleanup plan for the Ruston/North Tacoma Study Area. The cleanup plan is described in a Record of Decision or "ROD", signed by the acting administrator for PA Region 10.

The plan, which was subject to public comment last fall, focuses on removing and replacing contaminated residential soil and small particles of slag (such as slag in driveways) in the Study Area. The ROD calls for additional soil sampling including samples from each property that EPA anticipates has arsenic and lead concentrations above the agency's cleanup action levels. Where samples show that soil contamination exceeds EPA cleanup levels the soil will be removed and replaced with clean soil.

You are invited to attend a special session of the Ruston/North Tacoma Community Workgroup to learn more about the cleanup plan and how EPA will work with the community to carry out the cleanup. The meeting is scheduled for:

Wednesday July 14, 1993
6:30 p.m. to 8:30 p.m.
McCormick Regional Branch Library
3722 North 26th
Tacoma, Washington

Background Summary

EPA and other federal, state, and local agencies have studied soil contamination in the residential area surrounding the Asarco Tacoma Smelter. The studies conclude that operations at the smelter resulted in emissions of contaminants, primarily heavy metals including arsenic and lead, that have settled in the soil surrounding the smelter. Arsenic is of concern because it is known to cause cancer. Lead is also of concern because exposure to lead is associated with developmental problems in children. In addition, some residential areas contain slag (a black, rock-like material containing arsenic and other metals) that was a waste product of the smelting process at Asarco. Slag has been used in residential areas for driveways and as rockeries and garden ornaments and remains in various locations within the Study Area today.

EPA completed a Remedial Investigation, Feasibility Study and Risk Assessment in February 1992. These studies served to characterize the extent of the residential soil contamination, assess potential risks to public health, and evaluate cleanup alternatives. Based on the results of these studies, EPA concluded that there is community exposure to the contaminated soil and that the potential human health risks posed by the contamination warranted cleanup. The primary risks from exposure to the contamination include increased risk of skin cancer from arsenic exposure and potential neurological effect from lead. In order to be protective of public health, EPA also used the studies to set action levels of 230 parts per million (ppm) for arsenic and 500 ppm for lead.

EPA held a public comment period on these studies in the Spring of 1992 and based on the comments received, selected a preferred cleanup remedy. EPA then held a second public comment period on its Proposed Plan for cleanup in the summer and fall of 1992.

EPA has evaluated all of the comments received during the two public comment periods, and has responded to them in a document called a Responsiveness Summary, which is an attachment to the ROD. The following section outlines EPA's final cleanup plan for the Study Area, which is discussed in detail in the ROD.

Major Elements of the Cleanup Plan

- 1) Sampling to determine which properties or areas exceed EPA's action levels and therefore require cleanup. The sampling activities will include:
 - (a) Surface and depth samples at all properties that EPA has estimated are most likely to exceed action levels. (See the shaded area on the enclosed map).
 - (b) Samples in areas outside the shaded area where arsenic and lead have been detected above the action levels. Where contamination above action levels is found, adjoining properties will be sampled.
 - (c) Sampling within the Study Area at the request of the property owner.
- 2) Continuation of a small quantity soil disposal program for owners of properties requiring cleanup that generate soil for disposal before the final cleanup of their property can be scheduled.
- 3) Excavation of soil and sod from properties or areas where arsenic and/or lead exceeds action levels. The depth of excavation at individual properties will be determined by sampling results, but will not in general exceed a maximum depth of 18 inches. The excavated areas will be replaced with clean soil and sod. If contamination (above action levels) remains on a property below 18 inches, the replacement soil will serve as a cap or barrier to the remaining contaminated soil.

Cleanup activities will be coordinated with homeowners to define the extent of work to be performed on individual properties. Vegetation removal and replacement plans will be determined on a property-by-property basis to accommodate property owners to the extent that is reasonably possible.

The following activities will take place prior to any soil removal activities on an individual property:

- o Obtain permission from property owners for sampling and conducting the remedy and to schedule the work with the homeowner.
- o Conduct site survey, photograph or videotape properties, and prepare detailed plan for each property.

All possible precautions will be taken during cleanup to avoid damage to property such as underground utilities, sprinkler systems, fences, foundations, yard lighting, roads, sidewalks, etc. Efforts will be made to anticipate and minimize these possible problems by working with the homeowners, municipalities, and utilities to prepare sketches of each property to identify all known underground items.

- 4) Excavation of slag driveways and other areas with small slag particles within the Study Area and replacement with gravel. Large pieces of ornamental slag, such as slag used in retaining walls or as a landscaping feature, is not considered a health risk and will not be removed.

Because many streets throughout the Study Area cannot be easily accessed by larger trucks needed to transport soils and slag for disposal, it may be necessary to establish a temporary staging area or transfer facility within or near the Study Area, possibly on the Asarco smelter site. Such a staging area would not be meant to serve as a long term storage facility.

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- 5) Capping of dirt alleys and parking areas where soil exceeds action levels. The caps will either be made of asphalt, or the soil above action levels will be removed and replaced with clean gravel.
 - 6) Fencing of contaminated areas that are too steeply sloped to be excavated. These areas will also be planted with low lying shrubs.
 - 7) A Community Protection Measures (CPMs) program for the Study Area to address: 1) areas where complete removal of soils above the action levels is not practicable (areas where contamination extends beyond 18 inches) and 2) educational efforts for areas that do not exceed the action levels and therefore do not require cleanup, but do have arsenic concentrations above normal of "background" concentrations.

A full time person from the Tacoma Pierce County Health Department (TPCHD) will be funded to serve as the Program coordinator. The program will include the following elements:

- o *Measures to control soil disturbances.*
- o *Soil testing, collection, and disposal program.*
- o *Measures to maintain the integrity of soil caps.*
- o *Development of a property specific data base.*
- o *Notification to future property owners of property conditions.*
- o *Evaluations of the effectiveness of the CPMs program.*

Also, if requested by a property owner, a factual description of the sampling results and/or the cleanup that has been completed at that property will be provided. Owners may want to use this information for the purpose of a deed notice to show that the property did not require cleanup actions, or that cleanup actions were completed on the property.

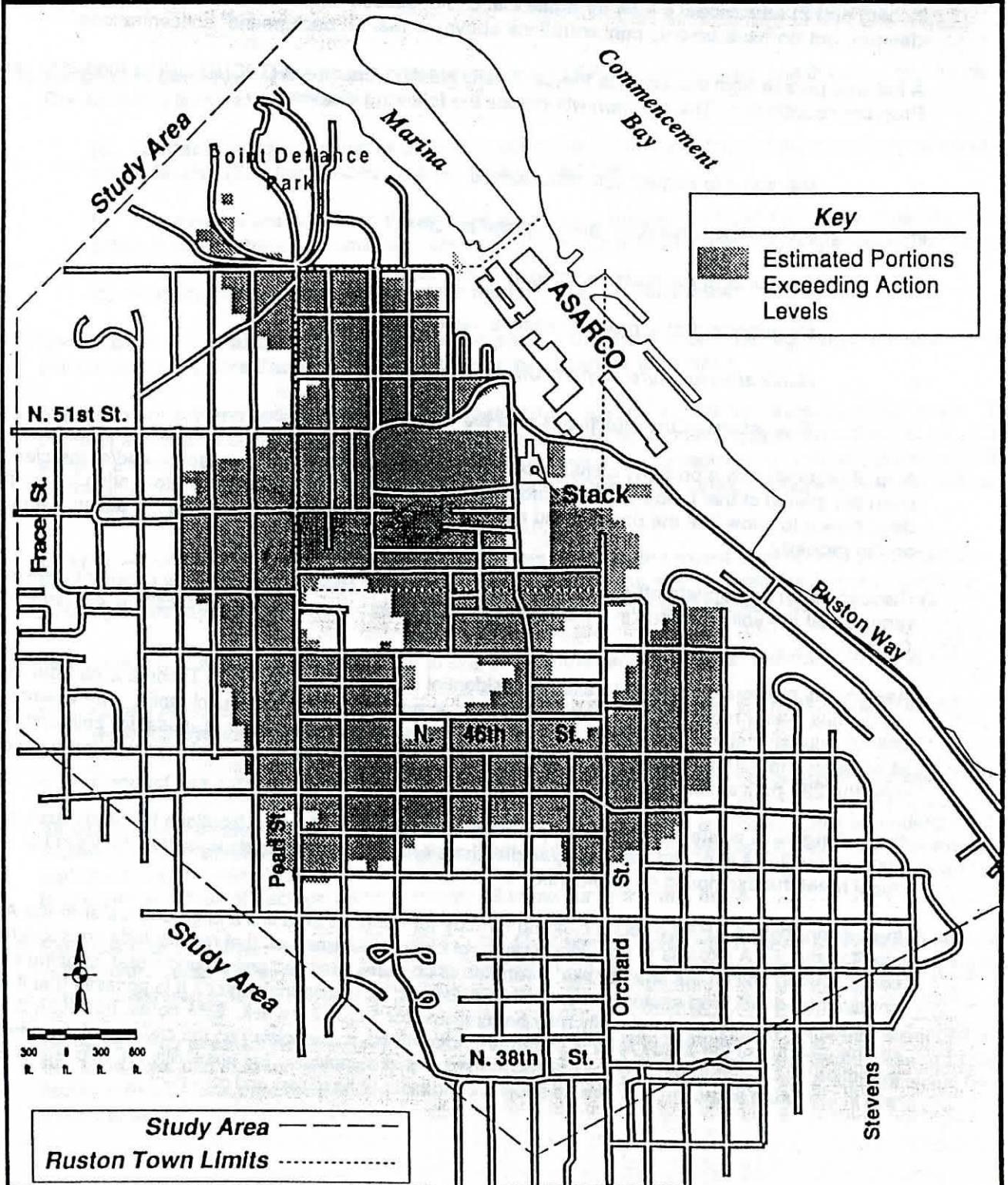
- 8) Disposal at an appropriate off-site facility was chosen in the ROD. Currently state dangerous waste regulations require that the soil be placed in a hazardous waste facility. The nearest such facility is located in Arlington, Oregon.

Asarco has petitioned Ecology to exempt residential soil in the Ruston/North Tacoma area from the state dangerous waste regulations. Ecology proposed to conditionally exempt such soils. The exemption would call for educational measures on how to reduce exposure and appropriate disposal for soils with arsenic levels at or below the 230 ppm action level, and would provide criteria for disposal of soils with arsenic concentrations over the 230 ppm action level.

If the dangerous waste exemption is approved, other possible disposal locations for Study Area soil may become available in the future. For example, there are other non-hazardous waste landfills in the state which might meet the exemption requirements.

In addition, before EPA selects a cleanup remedy for contaminated soil and ground water at the Asarco smelter site, EPA expects to consider a range of cleanup alternatives that may include consolidation of contaminated soil on the smelter site, treatment of contaminated soil and ground water, capping of contaminated soil, and excavation and off-site disposal of contaminated soil. It is possible that if EPA decides to select on-site disposal, capacity may be available for Study Area soil. EPA notes, however, that its decision on the cleanup of the Study Area is separate and apart from its decision on the cleanup of the smelter site. The selection of a cleanup remedy for the Asarco smelter site, including the possibility for disposal of Study Area soil in the future at the smelter, will be subject to further public review and comment.

**Figure 1:
Study Area and Estimated Portions Exceeding Action Levels**



Record of Decision Addresses Expedited Response Action Properties

From 1990 through 1992, under an Administrative Order on Consent with EPA, Asarco conducted cleanup actions at 10 publicly accessible areas (and portions of an 11th area) where soil exceeded 250 ppm arsenic. The top 3 inches of soil was removed and replaced with a 9 to 12 inch soil cap. Access agreements between Asarco and the property owners were established that included provisions for the care, maintenance and monitoring of the soil and vegetation caps. These agreements were designed to be effective until the completion of the Ruston/ North Tacoma Remedial Investigation/Feasibility Study (RI/FS) and the issuance of the Record of Decision. As part of the RI/FS, EPA evaluated the ERA sites to determine whether the cleanups were effective permanent remedies.

The final cleanup plan is similar to the ERA activities in that they both involve the removal and replacement of contaminated soil, and provisions for the care, maintenance and monitoring of soil caps. Under the ROD, the ERA properties will be sampled to a depth of approximately 18 inches from the surface of the cap. If contaminated soil is found, the ERA property will be included in the community protection measures program summarized above. Given that this effort provides for the continued care, maintenance and monitoring of ERA site soil caps, further remediation of ERA sites is not necessary.

The portions of Site 8 of the ERA properties that have not yet been remediated will be cleaned up in accordance with the final cleanup plan.

Keeping the Community Involved During Cleanup

A community relations program, including a full time coordinator, will be established to provide coordination and communication between cleanup personnel, residents, and property owners. The community relations program coordinator will work together with the coordinator of the community protection measures program to address the needs of the community including residents, businesses and schools. EPA intends to keep the community informed and involved by conducting the following activities:

- (a) Establishment of a local information center within the community where information regarding cleanup activities and schedules could be obtained.
- (b) Coordination and communication of cleanup schedules with property owners, including discussions with property owners and day care operators regarding the appearance of the community during cleanup activities, and any recommended safeguards or precautions.
- (c) Notification to residences, businesses, and schools prior to the start of cleanup efforts.
- (d) Preparation and distribution of regular project updates to businesses, residents, and schools and the identification of additional ways of keeping people informed about cleanup activities and progress.
- (e) Regularly scheduled community meetings to discuss cleanup schedules and processes, and to address questions and concerns regarding cleanup activities.

Timing and Costs

The Record of Decision calls for dividing the Study Area into manageable zones. Properties will be cleaned up one zone at a time, beginning with the most highly contaminated areas. To the extent possible, within an area or zone, priority may be given to schools, parks, playgrounds, daycare centers, homes with children, or other areas where children tend to gather. EPA believes that this is not only the most efficient method for cleaning up properties, but that this strategy will be the least disruptive to the community overall.

In response to public comments, attempts will be made to shorten the estimated seven year cleanup timeframe as much as possible by using the maximum amount of trucks, crews, etc., that are available and that the community is willing to tolerate. Community input will continue to be sought as the cleanup progresses and zones are established and individual lots scheduled for cleanup actions.

EPA estimates that the cleanup will cost between \$60 to \$80 million. The lower cost reflects the possibility of disposing of contaminated soil at a non-hazardous waste disposal facility and the higher cost indicates disposal at an out-of-state hazardous waste facility.

Next Steps

EPA will work with Asarco to implement the cleanup called for in the Record of Decision. In the short term EPA will begin to request access from property owners for the additional sampling called for in the ROD. EPA will continue to keep you informed of progress on implementing the cleanup through fact sheets such as this.

For More Information

The Record of Decision and other reports on the Ruston/North Tacoma Study Area can be reviewed at the following location

In Tacoma:

Tacoma Public Library Main Branch
1102 Tacoma Avenue South, Northwest Room

McCormick Regional Branch Library
3722 North 26th

City of Tacoma
747 Market Street, Suite 420

Tacoma Pierce County Health Department
3633 Pacific Avenue

Citizens for a Healthy Bay
771 Broadway

Pacific Lutheran University Library
121st and South Park Avenue

In Ruston

Ruston Town Hall
5117 Winnifred

In Olympia

Washington Department of Ecology
4415 Woodview Drive SE

In Seattle

Environmental Protection Agency
1200 Sixth Avenue

Questions?

If you have questions, or would like more information, please feel free to contact one of the following EPA representatives toll free in Seattle at 1-800-424-4EPA, or as indicated:

Mary Kay Voytilla, Project Manager (206) 553-2712

Michelle Pirzadeh, Community Relations Coordinator (206) 553-1272



United States
Environmental Protection
Agency

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