Programmatic State Environmental Policy Act (SEPA) Checklist
Tacoma Smelter Plume Interim Action Plan

Determination: Mitigated Determination of Non Significance (MDNS)

WAC 197-11-960 Environmental Checklist

Purpose of checklist

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. The purpose of this checklist is to provide information to the agency to identify impacts from the proposal, and to reduce or avoid impacts from the proposal, if it can be done.

Contents

A. Background

1. Name of proposed project: Tacoma Smelter Plume Interim Action Plan

2. Name of applicant: Washington State Department of Ecology

3. Address and phone number of applicant and contact person:

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4. Date checklist prepared: October 1, 2011

5. Agency requesting checklist: Washington State Department of Ecology

6. Proposed timing or schedule (including phasing, if applicable): This checklist will go out for public review at the same time as the draft Interim Action Plan.

7. Plans for future additions, expansion, or further activity related to or connected with this proposal:

By around 2015, Ecology will write a Phase Two Supplemental Interim Action Plan. This plan will explore taking actions through the development permitting process, and through real estate transactions. The extent of this future work depends on availability of funding and the Phase Two plan would go through a separate SEPA process. All soil sampling and cleanup actions, however, will be conducted under the current proposal.

8. Environmental information that has been prepared, or will be prepared, directly related to this proposal:

Ecology has done a series of studies that examine the area-wide nature of the Tacoma Smelter Plume contamination. These studies look at undisturbed areas, child use (play) areas, and an "extended footprint" of contamination across the region. The following studies can be found at http://www.ecy.wa.gov/programs/tcp/sites/dirt_alert/studies_and_maps/footprint_studies.html:

- Vashon-Maury Island – Undisturbed Area Study (2000)
- Survey of Typical Soil Arsenic Concentrations in Residential Areas of the City of University Place (2001)
- Vashon-Maury Island Child-use Area Study (2001)
- Dockton Park Resample Study (2002)
- Mainland King County Preliminary Study (2002)
- Pierce County Footprint Study (2002)
- Mainland King County Child-use Area Study (2003)
- Pierce County Child-use Area Study (2003)
- Vashon-Maury Island School District Child-use Area Resample (2003)
- Extended Footprint Study (2005)

The Credible Evidence Report and Tracer Report used to name Asarco Inc. as the potentially

liable person are available at http://www.ecy.wa.gov/programs/tcp/sites/dirt_alert/studies_and_maps/sources.html.

9. Applications that are pending for governmental approvals or other proposals directly affecting the property covered by your proposal:

Property owners within the Tacoma Smelter Plume area have the option of conducting soil sampling and cleanup under Ecology's Voluntary Cleanup Program. For a fee, applicants can receive technical assistance and an opinion letter. Currently, there are several properties under development that have entered the Voluntary Cleanup Program. These properties would not be included under Ecology's proposed sampling and cleanup program, as described in the Interim Action Plan.

Ecology is also currently conducting soil sampling and cleanup at schools, childcares, parks, camps, and public multifamily housing, under the Soil Safety Program. All cleanup work goes through SEPA review and will continue to do so. To maintain a consistent approach, Ecology proposes continuing the work of the Soil Safety Program in the Interim Action Plan.

Ecology is not aware of any other applications pending approval.

10. List of government approvals or permits that will be needed for the proposal:

Large sites with soil cleanup actions will require a construction stormwater permit. Excavation and removal actions will require waste disposal authorizations for disposing of contaminated soils, depending on the local jurisdiction. Certain jurisdictions will require grading permits.

11. Brief, complete description of the proposal, including the proposed uses and the size of the project and site:

The Interim Action Plan outlines a phased approach to addressing Tacoma Smelter Plume contamination. Phase One prioritizes sampling and cleaning up properties where people are at greatest risk of exposure to contaminated soils, including childcares, schools, parks, camps, and residential properties. Property sizes and future uses vary throughout the plume. Ecology's work focuses on residential properties and child play areas.

Phase One also continues existing education and outreach, efforts to work with other government agencies, and encouraging cleanup during land development. The phased approach allows Ecology to do permanent cleanups and prioritize funding in the highest risk areas. However, it also allows Ecology to address lower risk areas without using costly, traditional cleanup methods at every property. **This environmental review focuses mainly on the impacts of property sampling and cleanup for certain land uses in the areas of highest potential contamination.**

<u>Phase one actions</u>

1. <u>Property Sampling and Cleanup</u> – Ecology will design and manage a program that provides soil sampling and cleanup. The program will target the most contaminated

areas of the Tacoma Smelter Plume, where arsenic levels are expected to be over 100 parts per million (ppm). Within the targeted area, residential properties, schools and childcares, and existing parks and camps containing arsenic above state standards will be cleaned up. In most cases, contaminated soils will be dug up and trucked to a landfill. Clean soils will then be brought in to backfill the excavated areas. Ecology estimates that roughly 125 properties could be cleaned up each year, as settlement funds allow. It is expected that most of these properties will be standard residential lots. The program will likely begin in North Tacoma neighborhoods and on Vashon-Maury Island, where the highest contamination is found. Detailed project phasing will be based on the most recent spatial information about contamination, at the time the program is designed.

2. Child Play Areas – Ecology will continue the work of the Soil Safety Program under the Interim Action Plan. The agency will sample and clean up play areas at childcares and schools, as well as existing parks, camps, and multi-family public housing.

3. Encouraging Cleanup During Development – Ecology will encourage local planning offices to require property sampling and cleanup when permitting new developments or major redevelopment. The agency will provide guidance to both the planning offices and developers or property owners doing sampling and cleanup. Property development plans often already include actions that clean up contaminated soil. For example, removing surfaces soils, landscaping, and covering soils with buildings or pavement can limit or prevent future exposure to arsenic. Certain jurisdictions may have additional requirements for property owners conducting independent cleanups.

   Ecology will also work with other government agencies to address soil safety on properties that they manage or regulate

4. Outreach and Education – Broad-based outreach and education by local health departments will continue. Current outreach includes television advertising, billboards, targeted mailings, and community presentations. Additional outreach and education is needed to support the three actions listed above.

Further detail about each of these actions can be found in the text of the Interim Action Plan.

12. Location of the proposal: Portions of King, Pierce, and Thurston counties. For further detail, see the Tacoma Smelter Plume interactive map:
http://apps.ecy.wa.gov/website/facsite/viewer.htm?sp_area=Tacoma%20Smelter%20Plume

B. Environmental Elements

1. Earth

a. General description of the site:

Properties within the areas estimated to have over 100 parts per million soil arsenic have varying land types. Land types are mainly flat and rolling, or sloped along the shores of the Puget Sound. Sampling and cleanup work would likely start in Ruston and north Tacoma or on Vashon-Maury Island. North Tacoma neighborhoods in the vicinity of the Asarco Superfund site tend to be on flat or rolling terrain. Some areas slope steeply down towards the shoreline. Vashon-Maury Island has a combination of rolling terrain and steep slopes or bluffs meeting the shoreline. Ecology is unable to provide specific information about other potential cleanup areas at this time.

b. What is the steepest slope on the site (approximate percent slope)?

Within the areas Ecology expects to do soil sampling and cleanup, the steepest slopes are likely in the bluff areas surrounding Puget Sound. Parts of some of these properties may have nearly vertical slopes.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? Specify the classification of agricultural soils and note any prime farmland.

Properties within the areas estimated to have over 100 parts per million soil arsenic have varying soil types. Most local soils in the Puget Sound region are glacial—glacial till, glacial outwash (sand and gravel), or lacustrine (lakebed). The areas where Ecology expects to do soil sampling and cleanup are either residential or child play areas.

d. Are there surface indications or history of unstable soils in the immediate vicinity?

Unstable soils may be found on properties near Puget Sound with steep slopes or bluffs. These are common landslide areas. Ecology will generally avoid cleanup work on steep slopes.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

The general purpose of filling and grading would be to replace contaminated soils removed during the cleanup process. Fill type and volume would vary depending on the characteristics of individual properties and the area and depth of contamination. Backfill will typically be to the original grade, unless grade changes are requested by the property owner and agreed to by Ecology. Given that the majority of properties cleaned up will be residential, fill will mainly be soil that can support landscaping. Fill sources will be from local vendors and must meet state Model Toxics Control Act standards for at least arsenic and lead.

f. Could erosion occur as a result of clearing, construction, or use?

Erosion may occur during soil cleanup, particularly during excavation, removal, and bringing in clean fill. Ecology plans to use best management practices to minimize soil runoff in stormwater. Landscaping, such as sod, will be used to stabilize soils. In some cases, Ecology may cap contaminated soils with a geotextile cover and gravel, woodchips, or other landscaping material.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Soil cleanup will not include any building construction. However, hard caps such as concrete or asphalt are considered a cleanup option. Property owners' preferences will be taken into consideration in planning the cleanup. Based on Ecology's experience with a cleanup program for child play areas, including family home childcares, residential property owners have a strong preference for permeable surfaces such as sod, gravel, and woodchips.

h. Proposed measures to reduce or control erosion, or other impacts to the earth:

Erosion and soil stability issues will be addressed in two ways. First, contamination in steeply-sloped areas and bluffs will typically not be addressed using physical soil cleanup methods (excavation and removal, capping, or mixing). These methods could cause damage to the sensitive ecosystems, outweighing the benefits of reducing arsenic concentrations. These are also areas where human exposure is less likely. In most cases, human health can be protected using institutional controls, such as signage or educating residents about how to reduce exposure to soil contaminants.

Second, best management practices will be used during each cleanup, to minimize erosion and runoff. Any stockpiled soils will be covered during wet weather and surrounded by berms. Fill and remaining soils will be graded to minimize erosion and covered with stabilizing materials such as sod, plantings, permeable surfaces, or paving.

These measures are also recommended for local land use planners and developers doing sampling and cleanup during property development or major redevelopment.

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? Generally describe and give approximate quantities, if known.

This proposal has two major, potential impacts to air quality—dust and vehicle exhaust. During drier months, soil cleanup activities produce dust. Stripping vegetation from soils, excavation, removal, and importing fill all produce dust.

The volume of soil to clean up will require vehicles for excavation, soil removal, and

bringing in fill. Past residential soil cleanups have required an excavator (usually a mini-excavator), large trucks to take contaminated soils to the landfill and deliver clean fill, and vehicles to transport workers. These vehicles have a local impact from their exhaust, as well as a climate change impact from emission of greenhouse gases.

b. Are there any off-site sources of emissions or odor that may affect your proposal?

There are no known off-site sources of emissions that may impact this proposal.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Fugitive dust will be controlled by watering down soils during the cleanup process. Ecology has found this method to be effective during past soil cleanup projects in the Tacoma Smelter Plume. Vehicle exhaust and greenhouse gas impacts can be reduced by minimizing truck trips. For example, the same truck that brings in clean fill can be used to take contaminated soils to the landfill. Routes can be planned to minimize the miles that need to be driven. Excavators and other soil moving vehicles will not be idled unnecessarily.

Air emission control measures will also be included in Ecology's guidance to property owners conducting cleanup during property development or redevelopment. Property redevelopment may sometimes involve removal of existing structures, which may release asbestos or other hazardous materials. Ecology will encourage property owners and developers to follow all applicable regulations and refer inquiries to Puget Sound Clean Air Agency.

3. Water

Given the size of the Tacoma Smelter Plume, there has not been a study of the hydrogeology for the entire area. Most arsenic from the smelter emissions is still in the top foot of the soil column. Arsenic binds strongly to soil and does not readily migrate. The Model Toxics Control Act Science Advisory Board has determined that there is limited risk of ground water contamination from Tacoma Smelter Plume contamination. Possible exceptions include areas with: (1) soils high in natural organic content (peat, wetlands); (2) biodegradable organic compounds (petroleum); (3) very high pH from waste material like cement kiln dust; or (4) phosphate additives and deeper contamination than typical from smelter emissions.

a. Surface:

i. Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

Some water bodies fall within areas estimated to have over 100 parts per million soil arsenic. North Tacoma areas within the proposal have several streams entering the Puget Sound, as well a few small lakes or ponds. Vashon-Maury Island areas also have streams and small lakes or ponds. These areas are all

relatively near Puget Sound.

ii. Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

Soil sampling will indicate which properties require cleanup. Ecology will evaluate areas within 200 feet of a waterway to determine if human health risk warrants physical soil cleanup. If so, Ecology will take special measures to protect the waterway. As with steeply sloped areas, human health can be protected using institutional controls, such as signage or educating residents about how to reduce exposure to soil contaminants.

iii. Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

Not applicable.

iv. Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

Not applicable.

v. Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

A very small portion of the areas estimated to have over 100 parts per million soil arsenic fall within a 100-year floodplain. None of the north Tacoma properties are in a floodplain. A few Vashon-Maury island properties may be within a floodplain because they are located within 200 feet of a stream.

vi. Does the proposal involve discharges of waste materials to surface waters?

Not applicable.

b. Ground:

i. Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities, if known.

Not applicable.

ii. Describe waste material that will be discharged into the ground from septic tanks or other sources.

Not applicable.

c. Water runoff (including stormwater):

i. Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Most cleanup work will take place between the driest months of May and October. Runoff may occur during soil cleanup in wetter months, particularly during excavation, removal, and bringing in clean fill. Runoff will be controlled using best management practices outlined in section 3d below.

ii. Could waste materials enter ground or surface waters? If so, generally describe.

Materials of concern include arsenic soil contamination. Surface waters will be protected through controlling runoff from each property cleanup. Contaminated soils will be properly disposed of in a landfill. Arsenic is relatively immobile in soil and will not enter groundwater.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts:

Best management practices will include covering soil stockpiles and building berms around stockpiles and significantly sloped areas to prevent runoff. Physical soil cleanup will not be done in steeply sloped areas. Interceptor dikes and swales will be used to control stormwater that does occur, and storm drains will be protected with filters or impounding areas. Mulching, matting, seeding, and preservation of natural vegetation will be used to prevent erosion. Vehicles and equipment will be washed before leaving the site.

4. Plants

a. Types of vegetation found on the site:

The area covered by the proposal includes many different types of vegetation. Soil cleanup will mainly be done in residential areas, with a mix of native and ornamental vegetation, mainly in gardens. Natural areas with native vegetation will not be part of this sampling and cleanup effort, although some of these areas may fall under Ecology's guidance if they are part of a development project.

b. What kind and amount of vegetation will be removed or altered?

Landscaping vegetation on mainly residential properties may be removed or altered during soil cleanup. The amount depends on the size of the area of contamination on each property. Typically, large trees and bushes will not be removed. Restoration may include lawns, landscape plants, or other vegetation, as requested by the property owner.

c. List threatened or endangered species known to be on or near the site.

According to the Center for Biological Diversity, Puget Sound has several hundred

imperiled species. This proposal is focused mainly on residential properties already developed. Ecology plans to avoid soil cleanup of natural areas, particularly near bodies of water or in steeply sloped areas.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Ecology will work with property owners to replace the original or similar landscaping, including native plants, after soil cleanup is complete.

5. Animals

a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

The area covered by the proposal is likely used by a number of animal species. Soil cleanup will mainly be done in developed, residential areas. Natural habitats will be avoided.

b. List any threatened or endangered species known to be on or near the site.

Generally, Puget Sound has a number of imperiled animal species. This proposal is focused mainly on developed, residential areas. Natural habitats, particularly riparian areas, will be avoided.

c. Is the site part of a migration route? If so, explain.

In general, Puget Sound in on the Pacific Flyway, a major migration route for many types of birds. However, the properties that are likely to be cleaned up are too few and scattered to have an impact on this migration route.

d. Proposed measures to preserve or enhance wildlife, if any:

Natural habitats, particularly riparian areas, will be avoided.

6. Energy and natural resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

None anticipated.

b. Would your project affect the potential use of solar energy by adjacent properties?

It is not anticipated.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

Not applicable.

7. Environmental health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal?

Different portions of the Tacoma Smelter Plume have varying probabilities of elevated soil arsenic levels. Actual levels vary widely, and depend on the history of individual properties. Property-specific sampling is needed to determine the amount of arsenic on a given property. Typical levels found within the plume that exceed state cleanup standards may pose a chronic health risk, but not an acute risk or health emergency.

i. Describe special emergency services that might be required.

Not applicable. Soil arsenic and does not pose a fire, explosion, or hazardous waste risk.

ii. Proposed measures to reduce or control environmental health hazards:

The purpose of this Interim Action Plan is to manage environmental health risks from arsenic from the Tacoma Smelter Plume. However, the proposed soil sampling and cleanup work has the potential to put workers, property owners, residents, and neighbors at a short term risk of exposure to arsenic. Ecology will require the following measures to limit human exposure and prevent the spread of contamination:

- Watering down soils to limit dust.
- Washing truck wheels before leaving a contaminated property.
- Covering soils being removed from a contaminated property.

Department of Labor and Industries regulates workplace safety and should be consulted about worker safety requirements.

b. Noise

i. What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

None.

ii. What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (traffic, construction, operation,

other)? Indicate what hours noise would come from the site.

Soil cleanup activities will generate typical construction noises during normal business hours. Depending on the type of cleanup required, noises come from equipment used to remove and replace soils (excavators), and trucks used to remove soils or bring in fill or capping materials.

iii. Proposed measures to reduce or control noise impacts, if any:

Work will be done only during normal business hours. An Ecology project manager will be available to assist with community concerns and needs throughout the cleanup process.

8. **Land and shoreline use**

a. What is the current use of the site and adjacent properties?

Ecology's sampling and cleanup efforts will be focused on residential properties and childcares. Work would likely start in Ruston and north Tacoma or on Vashon-Maury Island. North Tacoma areas estimated to have over 100 parts per million soil arsenic are primarily residential. Vashon-Maury Island residential properties are mainly zoned rural and are surrounded by other residences and farms.

b. Has the site been used for agriculture? If so, describe.

Ecology will not sample or clean up agricultural properties. Some properties on Vashon Island in areas estimated to have over 100 parts per million soil arsenic may have once been used for agriculture.

c. Describe any structures on the site.

Most properties that fall under this sampling and cleanup program will have residential structures, schools, or childcare facilities on site.

d. Will any structures be demolished?

No structures will be demolished during the sampling and cleanup process.

e. What is the current zoning classification of the site?

There are two general areas Ecology expects to begin sampling and cleanup: Ruston/North Tacoma and Vashon-Maury Island. North Tacoma areas estimated to have over 100 parts per million soil arsenic are primarily residential, but may include commercial and other zoning. Vashon-Maury Island residential properties are mainly zoned rural. The larger Tacoma Smelter Plume area encompasses a wide range of zoning classifications.

f. What is the current comprehensive plan designation of the site?

The Tacoma Smelter Plume area includes a wide range of comprehensive plan designations. Vashon-Maury Island's entire designation is Rural.

g. What is the current shoreline master program designation of the site?

On Vashon-Maury Island, properties may fall within a variety of shoreline master plan program designations, including rural, natural, and conservancy. A very small portion of the north Tacoma properties may be on a shoreline, and will be evaluated on a case-by-case basis.

h. Has any part of the site been classified as an "environmentally sensitive" area?

Some parts of the Tacoma Smelter Plume, and specifically properties targeted for soil sampling and cleanup, fall within environmentally sensitive areas. Some of these properties may be situated on bluffs or steep terrain. However, as noted in section 3a, Ecology will do less soil cleanup in areas that fall within flood hazard zones, near streams, or in wetlands or habitat areas. Ecology will take special measures to ensure sensitive areas are protected.

i. Approximately how many people would reside or work in the completed project?

The Tacoma Smelter Plume covers approximately 1,000 square miles, including heavily populated parts of Thurston, Pierce, and King Counties (see attached map). However, the area covered by Ecology's proposed soil sampling and cleanup program is much smaller. Ecology cannot estimate the number of people potentially impacted by soil sampling and cleanup due to uncertainty about the number of properties that can be sampled and the percentage that will require cleanup. Over 17,000 residential properties may qualify for sampling, but Ecology estimates only 1,000-2,000 will need cleanup.

j. Approximately how many people would the completed project displace?

This project would not displace any people. The purpose of the proposal is to reduce exposure to arsenic where people live and where children play.

k. Proposed measures to avoid or reduce displacement impacts, if any:

Not applicable.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The overall proposal seeks to work with existing and planned land uses, while reducing the potential for exposure to arsenic. The soil sampling and cleanup component will reduce risks on residential, school, and childcare properties. This will allow families to continue living in their homes and daycares to continue operating, within some of the most highly contaminated zones.

9. Housing

a. Approximately how many units would be provided, if any?

Not applicable.

b. Approximately how many units, if any, would be eliminated?
Not applicable.

c. Proposed measures to reduce or control housing impacts, if any:

Ecology does not anticipate that this proposal will have any impact on housing supply.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

No structures will be built under this proposal.

b. What views in the immediate vicinity would be altered or obstructed?

Ecology does not believe that this proposal will impact views. Any soil cleanup will work around large landscaping or trees, although property owners could opt to alter their landscaping at that time, using their own funds. Limited soil cleanup will be done in forested areas, wetlands or natural areas, or steep slopes.

c. Proposed measures to reduce or control aesthetic impacts, if any:

Ecology will work with individual property owners to ensure they are satisfied with the restoration of their landscaping once soil cleanup is complete. No major aesthetic impacts are expected.

11. Light and glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

This proposal does not include any actions that would create light and glare. Any soil cleanup work would be done during daylight hours.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

Not applicable.

c. What existing off-site sources of light or glare may affect your proposal?

Ecology does not anticipate any significant sources of light and glare that would affect soil

cleanup or other portions of the proposal.

d. Proposed measures to reduce or control light and glare impacts, if any:

No measures are needed.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

The Tacoma Smelter Plume area includes many different parks, beaches, wildlife areas, and other recreational opportunities.

b. Would the proposed project displace any existing recreational uses? If so, describe.

Ecology does not anticipate that the proposal will displace any recreational uses.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

For the most part, this proposal addresses just play areas of parks and camps. Part of the proposal also involves working with other agencies to institutionalize soil safety. This might include working with county and local park districts to educate visitors about reducing their potential exposure to arsenic in park soils. These areas may undergo physical soil cleanup that would temporarily limit recreational use.

13. Historic and cultural preservation

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

There are many known cultural and historic resources throughout the Tacoma Smelter Plume area. Ecology will work with Department of Archeology and Historic Preservation and tribes to identify areas of cultural or historic significance within or near soil sampling and cleanup areas.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

Ruston and north Tacoma have known cultural resources, including Native American village sites and a large burial area. Vashon Island has known village sites and other areas with potential cultural resources. Shorelines and riverbanks or stream banks throughout the plume area are more likely to have cultural artifacts. Ruston, north Tacoma and Vashon-Maury Island have several historic residences and businesses, and a historic bridge.

c. Proposed measures to reduce or control impacts, if any:

Ecology will evaluate historic properties or properties where soil cleanup might impact a cultural resources or a historic landmark, on a case-by-case basis. All soil sampling and cleanup in potentially sensitive areas will be coordinated with the Department of Archeology and Historic Preservation and tribes. Other proposals under the Interim Action Plan—education and outreach, coordinating with other agencies, and encouraging sampling and cleanup during development—are not expected to have any impacts on historic and cultural preservation.

14. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

The Tacoma Smelter Plume area covers a large network of public streets and highways. The areas Ecology expects to begin soil sampling and cleanup are mostly residential (Ruston and north Tacoma) or rural (Vashon-Maury Island), with arterial routes throughout. Access points to North Tacoma include Highway 16 to Pearl Street (Highway 163) and Interstate 705 to Schuster Parkway, to Ruston Way. Access points to Vashon Island are the Tahlequah Ferry, Southworth Ferry, and Fauntleroy Ferry. The main route on the island is Vashon Highway.

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

The area is served by several public transit authorities, including Pierce Transit, King County Metro Transit, and Sound Transit (bus and rail). Other public transportation is provided by Washington State Ferries.

c. How many parking spaces would the completed project have? How many would the project eliminate?

No parking spaces would be directly created or eliminated under this proposal. However, land owners could opt to pave a portion of their property as part of an Ecology-managed or independent soil cleanup.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

This proposal will not require new roads or streets. Existing roadways should accommodate traffic related to soil cleanup activities, such as soil removal by truck.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

While the Tacoma Smelter Plume area generally includes water, rail, and air transportation networks, Ecology does not expect that soil sampling and cleanup will be done in their

immediate vicinity.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

The completed project is not expected to generate any additional traffic. Soil cleanup activities will generate additional vehicular trips through worker commutes and the transport of equipment, soil, and other materials. Ecology estimates soil cleanups will generate approximately 19 trips per day. Narrow residential streets would require the use of 10-20 cubic yard capacity trucks. This is a reasonable estimate for the proposed soil cleanup program.

g. Proposed measures to reduce or control transportation impacts, if any:

Traffic impacts during soil cleanup will be mitigated by carefully planning truck routes to minimize miles driven, and informing neighbors when work is occurring and what roads may be impacted. Load out areas may be used to transfer soils from smaller trucks to truck-trailer combinations for long-haul transport to disposal facilities. An Ecology project manager will be available to assist with community concerns and needs throughout the cleanup process.

15. Public services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

Encouraging soil sampling and cleanup during development and major redevelopment may increase the workload of local planning departments. Staff will need training and may need to spend time working with permit applicants and Ecology staff. Some cleanup measures will require environmental covenants to ensure the remedy is protective for the long term—filing the covenants will take staff time.

Local solid waste divisions may also see an increase in processing Waste Disposal Authorizations for contaminated soils. For jurisdictions already requesting soil sampling, this program may eventually reduce their workload by streamlining soil sampling and cleanup guidance.

b. Proposed measures to reduce or control direct impacts on public services, if any.

The current proposal *encourages* local jurisdictions to require soil sampling. Ecology will work closely with planning and permitting departments to develop guidance and provide technical assistance. Ecology will also work closely with other government agencies to ensure they have the educational materials and technical support to institutionalize soil safety within their day to day operations.

16. Utilities

a. Utilities currently available at the site:

There are a number of utilities currently available within the Tacoma Smelter Plume area, including electricity, natural gas, water, refuse service, telephone, sanitary sewers, and septic systems.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

No utilities are proposed. Where necessary, Ecology will work around existing utilities during soil cleanup.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Cynthia Walker

Date Submitted: 10/20/2011