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# Tacoma Smelter Plume Child-Use Area Study – King County

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## Introduction

As a part of the Tacoma Smelter Plume project, the Washington State Department of Ecology (Ecology) is preparing to sample child-use areas (such as schools, parks, childcare centers) in south King County. Ecology and Public Health Seattle & King County sponsored three public meetings to receive community input on the child-use area study design. Following careful review of the information we received, we have completed prioritization of the child-use areas. This fact sheet summarizes the selected child-use areas, and outlines the next steps to our study.

## Prioritized Child-use Areas

The main focus for the child-use area study is to identify locations where arsenic and lead contamination (likely the result of air emissions from the former Asarco smelter in Tacoma), potentially poses the greatest risks to young children. The results will be used to focus health education programs and determine if some kind of action (e.g., cover with clean soil) is necessary right away. While Ecology would like to sample all child-use areas, we are unable to do so because of funding limitations. Current funding allows for about 250 play areas at 100 locations to be sampled in King County. Hence, we have prioritized the child-use areas. This prioritization takes two forms. First, a Study Zone was defined where the highest levels of contamination are expected (over 100 parts per million). Second, the child-use areas within the study zone were prioritized.

With Public Health's assistance, Ecology identified nearly 600 child-use areas within the King County study zone. Using a simple formula for prioritizing the child-use areas, we believe we have targeted the worst areas first, with the highest potential for exposure to young children. We considered such factors as: 1) number of children present at the property; 2) potential highest level of contamination at the property (based on past studies); 3) how recently the property was developed or redeveloped (contaminants are often less in sites where development has occurred); and 4) how much contact a child is likely to have with the soils on the property.

Ecology and Public Health also sponsored three public meetings:

- ❖ Federal Way – October 30
- ❖ Highline Community College – November 6
- ❖ Tukwila – November 20

We received useful information from local government representatives and school districts. Carefully considering this information, we have finalized our list of prioritized child-use areas. We will seek access for sampling at:

## November 2002

### SEND WRITTEN COMMENTS TO:

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(360)407-7115

### INFORMATION REPOSITORIES

#### Documents can be reviewed at SW King County libraries:

Burien Library  
14700 Sixth SW  
Burien, WA 98166  
(206) 243-3490

Des Moines Library  
21620 11th Ave S.  
Des Moines, WA 98198  
(206) 824-6066

Federal Way Regional Library  
34200 1st Way S.  
Federal Way, WA 98003  
(253)838-3668

Vashon Library  
17210 Vashon Hwy SW  
Vashon Island, WA 98070

Department of Ecology  
300 Desmond Dr.  
PO Box 47775  
Olympia, WA 98504-7775

Ecology's web site:  
[http://www.ecy.wa.gov/program\\_s/tcp/sites/Tacoma\\_smelter/ts\\_hp.htm](http://www.ecy.wa.gov/program_s/tcp/sites/Tacoma_smelter/ts_hp.htm)

For special accommodation needs or language translation assistance, call Molly Gibbs, Ecology's Public Involvement Specialist at (360) 407-6179 or (TTY) at 711 or 1-800-833-6388.

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## ELEMENTARY SCHOOLS

<b>Federal Way School District</b> Adelaide Green Gables Lake Grove Mark Twain Nautilus Star Lake Sunnycrest Twin Lakes Valhalla Wildwood Woodmont	<b>Highline School District</b> Gregory Heights Seahurst Midway Parkside Des Moines McMicken Heights Mount View White Center Heights Shorewood Sunnydale Marvista North Hill Bow Lake	<b>Seattle School District</b> Highland Park  <b>Tukwila School District</b> Cascade View  <b>Private Schools</b> Christian Faith (SeaTac) Normandy Park City Hall
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## PARKS

Dash Point State Park Saltwater State Park Des Moines Creek Park - County Lakeview (Burien) City Park (Des Moines) Des Moines Beach (Des Moines) Des Moines Creek Trail (Des Moines) Des Moines Memorial (Des Moines) Redondo Pier and Boardwalk (Des Moines) Scenic Hill (Kent) Foster (Kent) Lake Meridian (Kent) Grandview (Kent) Pea Patch Garden (Kent)	Adelaide (Federal Way) Dash Point Highland (Federal Way) Dumas Bay (Federal Way) Lake Grove (Federal Way) Lakota (Federal Way) Palisades (Federal Way) Poverty Bay (Federal Way) Marine View (Normandy Park) Marvista Park (Normandy Park) Nature Trails (Normandy Park) White Center (Seattle) Roxhill (Seattle) Crystal Springs (Tukwila) Community Center (Tukwila)
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## CHILDCARE CENTERS

Burien (3) Des Moines (15) Federal Way (11) Kent (4)	SeaTac (2) Seattle (7) Tukwila (1) Vashon (1)	(#) = number of childcare centers
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### Sampling Child-use Areas

The individual areas where children play at a child-use property will be sampled. For example, a private childcare will likely have one play area, perhaps the backyard; whereas a school will likely have several play areas – playground, ball fields, garden. We anticipate sampling approximately 250 play areas. Soil samples will be collected from the top six inches from eight borings or holes. Sampling will be conducted by Ecology’s contractor, SAIC, and will begin this December, with a final study to be completed in June 2003. We anticipate two or three releases of results as the study progresses.

If you have any questions about the sampling design, please contact Guy Barrett, Site Manager, at 360-407-7115, or [gbar461@ecy.wa.gov](mailto:gbar461@ecy.wa.gov).

### Child-Use Area Studies

Elevated concentrations of arsenic and lead have been found in the soils of King and Pierce counties. Air emissions from the former Asarco smelter in Ruston were the likely source. The Washington State Departments of Ecology and Health, Public Health – Seattle and King County, and the Tacoma-Pierce County Health Department are concerned about potential exposure to people, especially young children. High levels of arsenic can cause cancer, and lead can cause developmental disabilities in people. Children under six are the population most at risk for arsenic and lead exposure because they play directly in dirt where they can ingest contaminated soil through their mouths and inhale dust through their noses. Ecology and the health agencies are preparing to sample soil from child-use areas – areas where children play regularly - in King and Pierce counties to determine the potential exposures. We are considering these common types of child-use areas for sampling:

- Elementary schools
- Preschools
- Childcare centers
- Parks and playfields
- Camps

We are also interested in other informal play or activity centers, such as community gardens, nature education centers, vacant lots, or play areas associated with apartment complexes, public housing, houses of worship, mobile home parks, or youth clubs.

*If you have special accommodation needs, please call (360) 407-6300 or (TTY) at 711 or 1-800-833-6388.*