



# Area-Wide Soil Contamination

## Task Force Recommendations Developed and Report Submitted

Learn about the [Area-Wide Soil Contamination Project](#) and Task Force recommendations

### Introduction.

The final report of the Area-Wide Soil Contamination Task Force was submitted to the Departments of Ecology, Agriculture, Health, and Community, Trade and Economic Development (collectively referred to as "the Agencies") on June 30, 2003. The report represents the culmination of seventeen months of work and contains a series of findings and recommendations regarding a statewide strategy for responding to large areas of low-to-moderate level arsenic and lead soil contamination in Washington State. This packet provides a summary of the project and the Task Force recommendations.

Area-Wide Soil Contamination is low-to-moderate level contamination that is dispersed over a large geographic area. It is distinct from more typical cleanup problems, because it covers large areas (several hundred acres to many square miles) and generally has lower contaminant levels than found on former smelter sites or in areas where lead arsenate pesticides were mixed or formulated. In many areas of Washington State, soil has low-to-moderate levels of arsenic and lead caused by historical activities and sources. Development activities have created pressures for cleanup and raised a variety of health, environmental, and marketplace concerns.

### Background.

In 1995, the Model Toxics Control Act Policy Advisory Committee (PAC) recommended that the Department of Ecology take steps to more effectively address the problem of area-wide soil contamination. The PAC recommendation was based in large part on the recognition that traditional soil cleanup approaches may not be the best way to respond to area-wide soil contamination problems in general and historic practices in particular. In 2001, Ecology worked with the departments of Agriculture, Health, and Community, Trade and Economic Development a Task Force with funding adequate to carrying out the project.

### Overview of Task Force Recommendations.

The Task Force evaluated concerns about area-wide soil contamination and developed findings and recommendations on steps that can be taken to better address area-wide soil contamination problems. Their findings and recommendations (1) describe where arsenic and lead area-wide soil contamination is most likely to be located, (2) provide guidance on assessments and sampling of individual properties, (3) outline a broad-based approach to education and awareness building about arsenic and lead soil contamination, (4) describe steps that should be taken in child-use, residential, and commercial areas and on open land to limit exposure to arsenic and lead in soil, and (5) address real estate disclosure issues and application of the Model Toxics Control Act in areas affected by area-wide arsenic and lead soil contamination.

Please read the following descriptions of the Task Force findings and recommendations and what next steps will be taken by the Agencies to address area-wide soil contamination concerns.

### WHAT'S INSIDE:

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## WHY SHOULD I BE CONCERNED ABOUT ARSENIC AND LEAD SOIL CONTAMINATION?

Extensive scientific information demonstrates that exposure to high levels of arsenic and lead can cause health problems. Arsenic can cause nervous system damage, increased blood pressure, heart problems and cancer. Lead can cause increased blood pressure, kidney damage, and brain damage. Lead is of particular concern for young children. Arsenic and lead bind strongly to soil and usually remain in the environment for many decades. However, the health risks associated with exposure to low-to-moderate levels of arsenic and lead soil contamination are less well understood and disagreements exist between scientists on the interpretation of available information. In recent years, the majority of scientific review committees formed to evaluate available scientific information on arsenic and lead have concluded that there is a sufficient scientific basis for efforts to reduce exposure to these contaminants.

# Background on Area-Wide Soil Contamination

Learn about the concerns and nature and extent of area-wide soil contamination

### Overview.

Soil in many areas of Washington State is contaminated with low-to-moderate levels of arsenic and lead. This contamination often extends over several hundred acres to many square miles. It was caused by a number of historical activities and sources, including past air emissions from metal smelting operations and the use of lead-arsenate-based pesticides in the early 1900s. (The use of leaded gasoline has caused similar contamination along roadways, although its nature and extent has not yet been characterized.) As Washington's population has grown, many areas potentially contaminated by these historical sources have been developed into residential neighborhoods, schools and parks; these changes in land use have raised a variety of health, environmental, and marketplace concerns and created pressures for cleanup.

### What Is Area-Wide Soil Contamination?

The term "area-wide soil contamination" is used to describe low-to-moderate level soil contamination that is dispersed over a large geographic area. It is distinct from more typical cleanup problems, because it covers large areas (several hundred acres to many square miles) and generally has lower contaminant levels than found on former smelter sites or areas where lead arsenate pesticides were mixed or formulated. These areas of contamination are typically found in areas surrounding former smelter operation sites and where lead arsenate pesticides were applied to crops, especially fruit orchards.

For schools, childcare centers, and residential land uses in general, the Department of Ecology considers arsenic concentrations of up to 100 milligrams per kilogram (mg/kg) and lead concentrations of up to 500–700 mg/kg to be within the low-to-moderate range. For properties where exposure of children is less likely or less frequent, such as commercial properties, parks, and camps, the Department considers arsenic concentrations of up to 200 mg/kg and lead concentrations of up to 700–1,000 mg/kg to be within the low-to-moderate range. By way of comparison, the cleanup levels under MTCA for arsenic and lead in soil are 20 mg/kg and 250 mg/kg, respectively. Arsenic occurs naturally in Washington State soils at approximately 5–9 mg/kg; lead occurs at 11–24 mg/kg. (Milligrams per kilogram (mg/kg) is numerically equivalent to parts per million.)

### Why Is It a Problem?

Widespread low-to-moderate levels of arsenic and lead soil contamination present special challenges with respect to human health protection, land use conversion, financial impacts, and residents' awareness. Cleaning up this contamination requires a different approach from most cleanup problems because it covers large areas and generally has lower contaminant levels. While present-day regulations are designed to control these sources of contamination in the here and now, arsenic and lead deposited by past activities remain in the soil – and the question of how best to address this historic contamination that was the focus of the Area-Wide Soil Contamination project.

### How Much Land is Affected?

Preliminary estimates of area-wide soil contamination are provided in the table below.

#### PRELIMINARY ESTIMATES OF AREA-WIDE SOIL CONTAMINATION IN WASHINGTON

Area-Wide Contamination Source	Estimated Land Area Affected
Smelters (Tacoma, Everett, Harbor Island, Northport and Trail, B.C.)	489,000 acres
Orchard Land	188,000 acres
Roadsides	Unknown at present
Total Area-Wide Sources	677,000 acres

Notes: Extent of affected area has not been fully characterized. The total area of land in Washington is about 42.6 million acres.

# Area-Wide Soil Contamination Task Force

Learn about the role of Task Force and how they developed their recommendations

## Overview.

The Area-Wide Soil Contamination Task Force was established in January 2002. Consisting of seventeen individuals selected on the basis of areas of expertise, ability to represent potentially affected stakeholder groups, and a desire to ensure geographic representation across the state, Task Force members represented diverse interests, including business, environment, agriculture, local government, and schools. They served as volunteers and all but two of the original Task Force members served for the entire project. In addition, representatives of the four chartering agencies served as ex officio members of the Task Force. They provided background information and support for Task Force deliberations and offered agency perspectives during the Task Force's development of findings and recommendations. They did not participate in final decision-making with respect to the Task Force report.

## Task Force Charter.

The Agencies asked the Task Force to provide findings and recommendations on the following four sets of questions:

- (1) What is currently known about the nature and extent of arsenic and lead soil contamination in Washington State? What steps should be taken to improve our understanding of the location and magnitude of arsenic and lead soil contamination?
- (2) What are technically feasible measures for addressing widespread low-to-moderate soil contamination problems? What is the full range of actions that might be considered to address widespread low-to-moderate levels of soil contamination?
- (3) What changes are needed to eliminate barriers in addressing area-wide soil contamination problems? How can agencies facilitate cleanup of area-wide soil contamination problems under the current legal system?
- (4) What agencies need to play a role in addressing area-wide soil contamination problems and what are possible funding sources?

The Agencies also identified three areas as beyond the scope of the Task Force process, including: (1) MTCA cleanup standards for arsenic and lead and the policies and technical methods upon which the cleanup standards are based; (2) ongoing site-specific cleanup actions; and (3) current agricultural practices.

## Task Force Approach.

The Task Force focused on area-wide arsenic and lead soil contamination from two primary sources: (a) historical emissions from metal smelters located in Everett, Northport, and Tacoma and on Harbor Island, and (b) past use of lead arsenate-based pesticides.

The Task Force met 12 times from February 2002 to June 2003. All meetings were advertised and opportunities for public comment provided. Task Force deliberations focused primarily on (1) understanding the nature and extent of area-wide soil contamination; (2) making recommendations about effective, practical, and affordable steps individuals and organizations can take to reduce their potential for exposure to area-wide soil contamination; and (3) creating an alternative, more streamlined approach under MTCA for addressing properties affected by area-wide soil contamination. The Task Force was supported by a contractor project team retained by the Department of Ecology and two workgroups made up of technical experts and advisors.

Task Force deliberations took place at their 12 meetings and through conference calls and email discussions. Preliminary Task Force recommendations were widely publicized and made available for public review and comment, which the Task Force considered in finalizing its recommendations.

## TASK FORCE GUIDING PRINCIPLES.

In making recommendations, the Task Force was guided by six principles, which it believes should also guide the Agencies. These principles are:

- A balanced approach is needed, centered on effective, practical, and affordable solutions.
- Risks from area-wide soil contamination appear to be relatively low when compared to risks at sites with higher concentrations of contaminants.
- It is prudent to take effective, practical and affordable steps to minimize the potential for exposure to area-wide soil contamination.
- Efforts should focus on children.
- Responses to area-wide soil contamination should be commensurate with the level of risk associated with potential exposures and should increase as potential exposure increases.
- Decisions about area-wide soil contamination should be made locally.

From these principles, the Task Force's deliberations produced agreement on and support for numerous recommendations to the chartering Agencies.

## WHAT COUNTIES HAVE BEEN POTENTIALLY MOST AFFECTED BY HISTORIC USE OF LEAD ARSENATE PESTICIDES ON APPLE AND PEAR ORCHARDS?

The following list indicates the County acreage in orchard production during the early 1900s based on review of historic maps. Lead arsenate pesticide may have been used on this orchard acreage and resulted in residual low-to-moderate levels of contamination (Counties with less than 2,000 potentially affected acres are not listed):

Yakima County	58,050 acres
Chelan County	30,463 acres
Spokane County	19,455 acres
Okanogan County	10,608 acres
Benton County	7,738 acres
Douglas County	7,467 acres
Whitman County	6,819 acres
Grant County	4,928 acres
Klickitat County	4,632 acres
Stevens County	3,542 acres
Walla Walla County	3,092 acres
King County	2,700 acres
Clark County	2,676 acres
Skamania County	2,376 acres
Pierce County	2,139 acres
King County	2,700 acres
Clark County	2,676 acres
Skamania County	2,376 acres
Pierce County	2,139 acres

THE EDUCATION AND AWARENESS BUILDING TOOLBOX FOR ARSENIC AND LEAD AREA-WIDE SOIL CONTAMINATION SHOULD INCLUDE:

- Maps and materials describing where area-wide soil contamination is most likely to be found.
- Flow charts and checklists describing how to evaluate the potential for elevated levels of arsenic and lead at individual properties and the potential for exposure
- Guidance on how to collect and analyze soil samples.
- Information on the health risks associated with exposure to low-to-moderate levels of arsenic and lead soil contamination.
- Materials that encourage good personal hygiene practices and individual protection measures to reduce exposure.
- Materials that describe individual protection measures for safe gardening.
- Information that describe individual protection measures for utility and other workers who come into contact with contaminated soil.
- Materials describing the range of protective measures that might be taken to respond to area-wide soil contamination, such as actions that can be taken to maintain good soil cover such as placing woodchips or other materials in areas where children routinely play.

EDUCATIONAL MATERIALS SHOULD BE DEVELOPED FOR THE FOLLOWING AUDIENCES:

- Parents of young children
- Childcare providers and preschool operators
- School officials and operations, maintenance and grounds keeping staff
- Park officials and operations, maintenance and grounds keeping staff
- Gardeners
- Real estate professionals
- Construction, utility and other workers who have routine contact with soil
- Healthcare providers
- Homebuilders associations
- Local planning and zoning officials
- Agricultural workers and landlords with farm unit rentals and picker camps

## Broad-based Education and Awareness Building Recommendations:

### Education and awareness building provides the foundation

The Task Force believes that broad-based education and awareness building activities provide a foundation for responding to area-wide soil contamination. They support and underlay all other recommendations, including those related to specific land-uses. The goal of broad-based education and awareness building should be to provide individuals, organizations and communities with the information and materials they need to make responsible choices to respond to area-wide soil contamination. The educational awareness building materials and activities should be balanced to provide accurate information about area-wide soil contamination issues, but avoid creating undue concern or other unintended consequences. The educational activities should be focused on both children and adults who have frequent contact with soil. The most important audiences are people and organizations that care for or work with children, including parents, educators, healthcare providers, and childcare providers, and gardeners and other adults who frequently work in soil.

To assist individuals and communities respond to area-wide soil contamination issues, the Task Force recommends that the Agencies should work with and through local governments, particularly local health jurisdictions, to increase knowledge of area-wide soil contamination. The following recommendations are intended to further this process.

- To support broad-based education and awareness building, the Agencies should develop a “toolbox” of information and materials to help individuals and organizations answer questions about the potential for arsenic and lead contamination at specific properties, as well as identify actions and individual protection measures they can take to reduce exposure to arsenic and lead.
- To use resources effectively, the Agencies should take a step-wise approach to providing information about area-wide soil contamination. Steps should include: (1) making available educational materials about area-wide soil contamination to all residents; (2) in areas where area-wide soil contamination is likely, providing routine briefings, workshops and training sessions for local health jurisdictions and other appropriate organizations to facilitate informed distribution of educational materials and ensure a solid understanding of health risks and exposure reduction measures; and (3) in areas where area-wide soil contamination is known to exist because of soil testing, providing additional outreach, education and other resources addressing each specific land-use scenario.
- The Agencies should monitor and evaluate the effectiveness of education and awareness building efforts to increase the implementation of good personal hygiene practices and other individual protection measures to reduce the potential for exposure to arsenic and lead in soil. Information gathered during this monitoring and evaluation should be used to improve and update education and awareness building efforts.

The Task Force recognizes that maps are a useful communication device, and are an effective way to show where area-wide soil contamination is more or less probable. They recommend that maps should be developed and always by accompanied by information that 1) describes what the maps show and the limitations of data that were used to develop the maps, and 2) provides context for the maps and describe the variability of the nature and extent of area-wide soil contamination.

In addition, the Task Force is recommending that the Agencies take specific actions to build upon and complement broad-based education and awareness building by addressing different land-use scenarios which are described on the following pages.

# Child-Use Areas Recommendations

## Focused recommendations to minimize exposure to children

The Task Force is particularly concerned about exposure of young children to arsenic and lead in soil and, as a result, believes that the Agencies should give special attention to child-use areas located in areas where elevated levels of arsenic and lead are likely. Building upon the broad-based education and awareness recommendations discussed above, activities in child-use areas should be focused on (1) identifying situations where children are at risk of exposure to arsenic and lead soil contamination, and (2) taking steps to prevent or limit such exposure. The Task Force believes that the same responses are appropriate at both public and private child-use areas and that over time potential exposure should be addressed at all child-use areas where area-wide soil contamination is likely. However, the Task Force also recognizes that it may not be practical to address all child-use areas immediately. Accordingly, the Task Force recommends that publicly maintained child-use areas should be prioritized and responses in these areas should set the standard for protection of children.

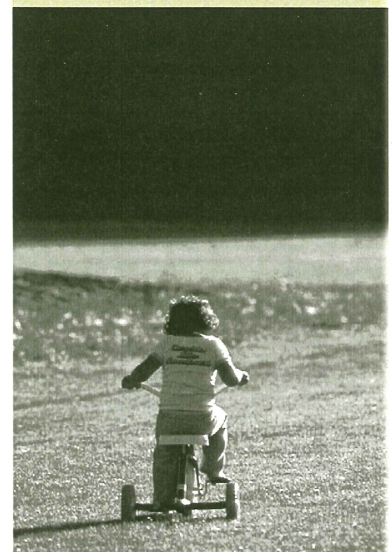
The Task Force recommends that the Agencies work with local health jurisdictions to support, encourage, and assist school districts, parks and recreation departments, childcare operators, and other owners or managers of child-use areas with implementation of individual protection measures. This may include providing training, briefings, or other assistance or materials to local health jurisdictions.

In addition to the education and awareness building previously discussed, the Task Force recommends the following additional responses for child-use areas where area-wide soil contamination is likely:

- **Individual protection measures and maintenance of good soil cover** should be implemented in areas where children play to reduce the potential for children to be exposed to contaminated soil, unless (a) qualitative property evaluations indicate that elevated soil levels of arsenic and lead are not likely or it is unlikely that children could be exposed to soil or (b) quantitative soil testing shows that elevated levels of arsenic and lead in soil are not present.
- **Qualitative evaluations** should be conducted to increase understanding of where exposure could occur and to focus implementation of soil testing and additional protection measures.
- **Soil testing** should be conducted where qualitative evaluations indicate the potential for exposure to contaminated soil and additional protection measures should be implemented if contamination is found.
- **Mandatory soil testing** should be conducted at new public child-use area construction sites and additional protection measures should be implemented if contamination is found.
- **Special approaches**, including targeted outreach and a voluntary certification program, for family home childcare facilities and childcare centers should be implemented.

## TASK FORCE RECOMMENDATION REGARDING VOLUNTARY CHILDCARE CERTIFICATION PROGRAM.

Agencies should collaborate with the Department of Social and Health Services (DSHS) to establish a voluntary certification process that childcare providers can use to communicate that they have taken precautions to reduce the potential for children to be exposed to area-wide soil contamination or have verified through sampling that elevated soil levels of arsenic and lead are not present. The Task Force recommends that targeted outreach be integrated into and build upon existing processes that provide for the health and safety of childcare facilities. The goals of the voluntary childcare certification program should be to (1) create a mechanism to raise awareness of area-wide soil contamination issues among childcare providers, (2) provide parents and other caretakers with information about how individual businesses have chosen to address area-wide soil contamination issues, and (3) assist parents to make informed choices about where to place their children. The Task Force recommends a three-step education and certification process that (1) informs childcare operators, (2) requires qualitative assessments to be conducted, and (3) results in childcare operator certification that soils have been tested and do not contain elevated levels of arsenic and lead or that recommended protection measures have been implemented.



EXAMPLES OF INDIVIDUAL PROTECTIVE MEASURES TO MINIMIZE POTENTIAL EXPOSURE TO ARSENIC AND LEAD IN SOIL:

Inside Your Home:

- Take off shoes before entering your home.
- Wash hands and face thoroughly after working or playing in the soil. Use water and soap to wash - avoid "waterless" soaps.
- Wash hands after handling your pet, and bathe pets frequently.
- Wash toddler toys and pacifiers often.
- Wash clothes dirtied by contaminated soil separately.
- Clean surfaces by wet mopping, spraying with water, or vacuuming with a HEPA filter. Don't sweep or blow the surface.
- Change air filters regularly and properly maintain your heating, ventilation, and air conditioning system.
- Maintain painted surfaces in homes.
- Minimize children's exposure to hobbies that use lead.
- Eat a balanced diet, with adequate iron and calcium

Outside Your Home:

- Keep children from playing in contaminated dirt.
- Do not eat or drink in contaminated areas.
- Keep pets off of exposed dirt so they don't track it into the house.

Special Considerations for Construction, Yard Work, and Gardening:

- Avoid all unnecessary exposure to soil or dust.
- Dampen dusty soils before gardening or working in soil.
- Wear gardening gloves and protective clothing.
- Keep vegetable gardens away from old painted structures, treated wood, and roof overhangs.
- Scrub vegetables and fruits with soap and water before eating.
- Use caution while eating, drinking, or smoking while in the work area to avoid ingesting dirt.

# Residential Areas Recommendations

## Responses at residential areas should be similar to those at child-use areas

The Task Force is concerned about the number of properties potentially affected by area-wide soil contamination and the practicality and cost of implementing protection measures at residential properties. At the same time, the Task Force recognizes that most residential properties are, essentially, child-use areas and that both children and adults are likely to come into regular contact with soil at home, through play, gardening, and other activities.

However, the Task Force also recognizes that residents can choose whether and how to implement protection measures at their properties to address low-to-moderate levels of soil contamination. Therefore, the Task Force emphasizes that the Agencies should focus on helping residents to understand the potential for elevated levels of arsenic and lead in soil at individual properties and take appropriate response actions. With these considerations in mind, the Task Force decided that responses to area-wide soil contamination at residential properties should be similar to, and no more stringent than, the approaches described previously for child-use areas and that particular attention should be paid to three populations: children, gardeners, and other adults who frequently work in soil.

In addition to broad-based education and awareness building to increase residents' knowledge about area-wide soil contamination, the Task Force recommends that the Agencies:

- Offer both technical and financial assistance to support and encourage residents potentially affected by area-wide soil contamination to:
  - Implement individual protection measures and maintain good soil cover in areas where children play to reduce the potential for exposure to contaminated soil. Where area-wide soil contamination is likely, the Task Force recommends that all residents follow individual protection measures and maintain good soil cover unless (1) qualitative property evaluations indicate that elevated soil levels of lead and arsenic are not likely or exposure to soil is not likely, or (2) quantitative soil testing shows that elevated soil levels of arsenic and lead are not present.
  - Conduct qualitative evaluations to increase understanding of where exposure could occur and to focus implementation of soil testing and additional protection measures. Qualitative evaluations should use easily identifiable features to determine if elevated soil levels of arsenic and lead are likely and easily observable features (such as the presence or absence of bare dirt) to determine if exposure to contaminated soil is likely. A qualitative evaluation checklist is included in the Task Force report.
  - Conduct soil testing where qualitative evaluations indicate there is potential for exposure to contaminated soil and implement additional protection measures if contamination is found. Soil sampling will provide a basis for residents' decisions about what steps, if any, beyond implementation of individual protection measures and maintenance of good soil cover should be taken to reduce potential exposures. It may also help confirm the absence of elevated levels of arsenic and lead. Guidance on how to carry out soil sampling is included in the "toolbox" of information in the Task Force report.
- Provide information on where and how to dispose of contaminated soil that individuals choose to remove from their properties, and help residents locate sources of soil that meet the MTCA cleanup standards for arsenic and lead.

The Task Force emphasizes that these are not recommendations for creating new regulatory requirements for residential properties or residents. The Agencies should focus on providing incentives for residents to implement Task Force recommendations and supporting residents who choose to implement recommended activities through education, outreach, and financial assistance. In addition, the Task Force recommends that the Agencies consider confidentiality and reporting of sampling results to protect the privacy of residents who choose to take advantage of soil sampling opportunities.

# Open Land Recommendations

Different recommendations are provided for open lands proposed for development

The Task Force considered open land to include undeveloped properties, agricultural land that is no longer in production, and other developed properties that are currently vacant or abandoned. Agricultural land intended to be returned to active production was not considered open land. In addition to broad-based education and awareness building, the Task Force recommends that the Agencies support and encourage the following activities for open land in areas where area-wide soil contamination is likely:

- Amending the State Environmental Policy Act (SEPA) checklist to include a question designed to prompt consideration of the potential for area-wide soil contamination during new development.
- For open land being developed, qualitative evaluations to increase understanding of whether area-wide soil contamination is likely, soil testing before construction where area-wide soil contamination is likely, and implementing additional protection measures if contamination is found.
- Use of plat or other notices to record information on property status.
- For open land being developed, implementation of existing requirements and policies governing worker protection and safety, and control of dust, erosion, and surface water runoff during construction.
- For open land not being developed that is in or near residential areas, use of practical, cost-effective measures to limit trespassing, the potential for exposure to contaminated soil, and wind-blown dust.

# Model Toxics Control Act (MTCA) Recommendations

Recommendations relating to MTCA for properties affected by area-wide soil contamination

The Task Force was chartered, in part, to recommend how agencies can facilitate cleanup of area-wide soil contamination problems under the current legal system. The Task Force discussed MTCA (the state site cleanup regulations and associated cleanup standards) and its application to area-wide soil contamination. From these discussions, a number of objectives related to use of MTCA were identified, as were a number of elements of MTCA that the Department of Ecology might consider in meeting these objectives. Accordingly, the Task Force developed the following recommendations related to MTCA:

- As much as possible, use regulations instead of policies to implement Task Force recommendations on MTCA.
- Avoid listing individual properties affected by area-wide soil contamination and instead identify and describe area-wide soil contamination zones.
- Establish in regulation a new enforcement forbearance policy to be made available where property owners choose to implement Task Force recommendations at residential and commercial properties within area-wide soil contamination zones. To complement the policy, establish a standard checklist that can be used to document property status and announce the new policy and checklist when area-wide soil contamination zones are first described.
- Where property owners choose not to implement Task Force recommendations, they should remain under the current MTCA system, which includes a policy under which the Department of Ecology, in general, forbears from taking enforcement actions at residential properties.
- Where properties are sampled and concentrations of arsenic and lead are found to be below cleanup levels, provide a streamlined process to reflect that properties are clean.
- Maintain the traditional MTCA approach for property owners who want to use it to address area-wide soil contamination and for the Department of Ecology where a property is affected by contamination other than area-wide soil contamination.

## COMMERCIAL-USE AREAS RECOMMENDATIONS:

The Task Force recognized that commercial-use areas are not frequently used for play by children and tend to be covered with buildings, parking lots, or maintained cover. For commercial areas affected by area-wide soil contamination, the Task Force recommends:

- Where commercial areas are covered with buildings, parking lots, or other effective soil cover, no further response actions are necessary.
- For mixed-use areas, such as a childcare facility located in a shopping center, the non-commercial use should be considered. For example, child-use area recommendations should be considered for a childcare facility located in a commercial area.

## REAL ESTATE DISCLOSURE RECOMMENDATIONS:

The Task Force supports the use of real estate disclosure practices to raise awareness of potential lead and arsenic contamination on properties. The Task Force recommends that the Agencies:

- Encourage the Washington Association of Realtors (WAR) to work with legislators to enact legislation requiring a real property transfer disclosure statement for open land (in addition to the existing requirements for residential properties) and encourage voluntary use of the existing seller's property condition report until such legislation is adopted.
- Work with and through the WAR to strongly encourage real estate agents to use the lead-based paint disclosure form and EPA lead pamphlet for all transactions or use similar disclosure documentation where area-wide soil contamination is likely.
- Support the WAR to create an education course about area-wide soil contamination or to incorporate relevant Task Force findings and recommendations into realtors' existing course materials.
- Encourage the WAR to draft an article highlighting the Task Force's findings and recommendations for the *Washington Realtor*.

IF YOU HAVE  
QUESTIONS OR WOULD  
LIKE MORE  
INFORMATION:

- Visit the project web page at [www.ecy.wa.gov/programs/tcp/area\\_wide/area\\_wide\\_hp.html](http://www.ecy.wa.gov/programs/tcp/area_wide/area_wide_hp.html)
- Or contact Dawn Hooper  
Email: [dhoo461@ecy.wa.gov](mailto:dhoo461@ecy.wa.gov),  
Phone: (360) 407-7182  
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## Recommendations for Additional Information Needed

### Learn about the Task Force recommendations relating to information needs

In the process of developing recommendations for responding to area-wide soil contamination, the Task Force identified several areas where there is limited information and data available. With respect to additional information gathering, the Task Force recommends that the Agencies:

- Gather additional, scientifically valid information on the health of Washington residents, particularly children, who may be exposed to arsenic and lead.
- Conduct further research to characterize the location and extent of elevated levels of lead in soil from past use of leaded gasoline in Washington. Possibly focus on areas adjacent to older, more heavily used roads.
- Study the effects of area-wide soil contamination on ecological receptors, including plants and animals.

## Recommendations Associated with Funding

### Learn about the Task Force recommendations relating to funding needs and options

The Task Force was asked to recommend possible funding sources for agency activities to address area-wide soil contamination. Central themes in their discussions included that (1) State government should provide financial assistance for local government efforts, and (2) individual residents, childcare providers, and others should not bear the full burden of the costs to implement protection measures. The Task Force recognized the limits of State agency budgets and resources and the need to target available resources and seek additional funding. With respect to funding needs and options, the Task Force recommends that the Agencies:

- Provide financial assistance for local government efforts to address area-wide soil contamination, particularly the activities of local health jurisdictions.
- Seek funding from a broad array of Federal, State, and private sources, including the State and Local Toxics Accounts, private foundations, Federal grant programs, the Federal government and the State legislature, and any identified potentially liable parties.

## What's Next

### Learn about the next steps the Agencies will take to address the Task Force recommendations

The Agencies will develop a plan and schedule for implementing the Task Force recommendations, which will include opportunities for public comment.

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