

Thurston County
**HEALTHY HOME
COMPANION**

*Easy ways to protect your family
from hazardous household chemicals*





The average family has dozens of hazardous products throughout the home. Follow these easy guidelines to keep your home safe for your family, pets, and the environment.

What's Inside

Pay attention, for children's sake	3
Avoid products that say DANGER or POISON.....	4
In the house, use less-hazardous cleaners	5
Reduce pesticide use	6
Home and car maintenance.....	7
Guide to safer cleaners.....	8
Mercury and lead.....	11
Disposing of hazardous wastes: a guide to HazoHouse.....	12
What will you do?.....	15



Pay attention, for children's sake

The average American family has dozens of hazardous products throughout the home, including car products, oil-based paints and thinners, solvents, cleaners, and pesticides. A product is hazardous if it is toxic, flammable, corrosive, or reactive. Take a quick look at your shelves, closets, and garage. Any product that says DANGER, POISON, WARNING, or CAUTION is hazardous and can harm family members, pets, and the environment.



Children are particularly vulnerable to hazardous household products because they are just beginning to grow and develop. Household chemicals affect their bodies more than adults' bodies and the consequences may last a lifetime.

Most child poisonings happen through eating or drinking, but toxic substances can also get into bodies through the eyes or skin, or when children inhale.

CHILDREN ARE NOT MINI-ADULTS

- Little ones crawl, breathe, and eat on the ground where dust and chemicals settle.
- Kids put hands and objects in their mouths, touch more stuff, and are attracted to the bright colors and labels of many hazardous products.
- Pound for pound, children eat, drink, and breathe more than adults, making them more vulnerable to household chemicals. *(Source: Handbook of Pediatric Environmental Health, American Academy of Pediatrics)*
- Most of the 75,500 chemicals listed for use in the U.S. have not been tested for toxicity to children. *(Source: Center for Child Environmental Health Risks Research, University of Washington)*

TOX TIP: Medications top the poisoning list.

In 2008, the Washington Poison Center received more than 90,000 calls from state residents.

- Around ¼ of exposure calls were about children under 6 years old poisoned by medications.
- Take unwanted medications to Group Health at 700 Lilly Rd NE in Olympia to place in the free "Medicine Return" container.
- Do not throw unwanted drugs down the toilet or in the trash.
- For more information, see www.medicinereturn.com.



Avoid products that say DANGER or POISON

Read labels first. Buy the least hazardous product and only the amount you need for the job. It may be cheaper to buy products in bulk, but the products are not a good deal if you do not use them up or they harm family members.

Get more information. Labels rarely mention how the product may cause long-term health effects. Ingredients not found on the label may also be toxic. Request the Material Safety Data Sheet (MSDS) from the manufacturer or see www.hazard.com/msds. Find information in the National Institutes of Health Household Product Database at <http://householdproducts.nlm.nih.gov>.

Use the signal word system to choose the least toxic product. Choose “caution” or “warning” over “danger” or “poison.” Better yet, find a product that is so safe it does not require a signal word. But be aware that regulations do not govern the use of advertising terms, such as “natural,” “ecologically safe,” or “non-toxic.” These terms do not indicate safety.

Follow directions for safer use. It only takes a moment to read the label; guesswork can be dangerous.

Store products safely. Avoid storing chemicals under the sink or near a wellhead or wellhouse. Also keep chemicals away from children, food, heat, and flames. Always store chemicals sealed and in their original containers. Never put chemicals in food containers.

The law requires signal words on the label of hazardous products



HIGHEST HAZARD
DANGER or **POISON**
Avoid these products.

MODERATE HAZARD
CAUTION or **WARNING**

SAFEST
Does **NOT** have any of the signal words, **CAUTION**, **WARNING**, **DANGER**, or **POISON**.

If you find a product not properly labeled, let the Consumer Product Safety Commission know, call 800-638-2772 (TDD 800-638-8270).



TOX TIP: Labels do not list everything in a product. Laws do not require manufacturers to list many of the chemicals in household products.

Products that list ingredients: Food and drug items.

Products that do not list all ingredients: Cleaning products, pesticides, and personal care items. For instance, labels may not mention fragrance ingredients even though they may be hazardous. For more information, see www.cosmeticsdatabase.com.

In the house, use less-hazardous cleaners

CLEANING PRODUCTS

Never mix household cleaners. Never mix bleach with other cleaners or soaps, especially ammonia products. These mixtures can create deadly fumes.

Avoid products with the antibacterial Triclosan. Germs can be stubborn and adaptable. The use of Triclosan may create resistant germs. Simple soap and water is just as effective. Find more tips from the Washington Toxics Coalition at www.watoxics.org/healthy-homes-gardens-1.

Choose pumps over aerosols. Aerosols can send propellants and solvents into the air. Pump sprayers or wipe-on liquids are a better choice.

Avoid air fresheners, perfumes, and fabric softeners. These products can send particles and perfume chemicals into the air and trigger asthma and skin reactions in sensitive people.



TOX TIP: Household cleaners can look and smell like food. To prevent accidents, keep household chemicals away from food, pets, and children.

MORE TIPS FOR INSIDE YOUR HOME

- Maintain a clean home to keep pests away
- Clean regularly with less-toxic cleaners (see pages 8-10) to keep jobs manageable.
- Damp-mop and wipe to reduce dust that can contain pesticides, lead, and other toxins
- Keep foods sealed and kitchen surfaces clean
- Vacuum once a week (or more if crawling children are in the home)
- Clearing clutter makes it easier to clean

DID YOU KNOW? House dust may contain lead, arsenic, pesticides, and PBDE flame retardants in surprisingly high levels. A combination of removing shoes at the door and frequent cleaning can reduce dust levels by 99%. (Source: American Lung Association of Washington)



Reduce pesticide use

PESTICIDES CAN HARM PEOPLE, TOO... ESPECIALLY CHILDREN

- A study of Seattle-area pre-schoolers found common pesticides in the urine of 109 out of 110 children tested. The only child free of pesticides had parents who did not use them and bought organic produce. (Source: *Environmental Health Perspectives*, March 2001)
- Northwest stream samples turned up 23 common weed and bug killers at levels harmful to salmon and wildlife. (Source: *United States Geological Survey*, 2000)
- "Many of the health problems linked with pesticide use are serious and difficult to treat — so we are advocating reducing exposure to pesticides and prevention of harm as the best approach." (Source: *Ontario College of Family Physicians*, 2004)
- Almost one-half of homes with a child under 5 have pesticides stored within reach of children. (Source: *U.S. Environmental Protection Agency*)

TOX TIP: Lawn and garden pesticides can travel indoors.

Outdoor pesticides can hitch a ride inside a home on shoes, paws, and clothes. Worse yet, they can settle in household dust and carpet for up to a year because they are designed to break down in sunlight, rain, or soil.

To keep pesticides out, use doormats, remove shoes, and wash gardening clothes separately from household laundry. Better yet, don't use pesticides at all.



WEED & PEST CONTROL TIPS

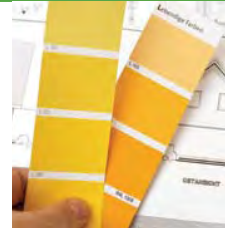
- Prevent problems with healthy plants:
 - use compost to build robust soil
 - provide adequate light, water, and nutrients
 - mulch bare areas to prevent weeds
- Use good bugs: Plant daisies, carrots, parsley, and related plants to encourage beneficial insects that prey on pests.
- Inside: Reduce or remove pest food sources and hiding places, such as cracks in floors and walls. Reduce clutter so surfaces are easier to clean.
- Use traps, screens, and barriers rather than chemical controls.
- As a last resort, use low-hazard chemicals to control pests or weeds. Always read and follow label directions. Call Thurston County Environmental Health for specific advice, 360-867-2674.

DID YOU KNOW? Many lawn fertilizers include pesticides. Avoid using lawn fertilizers with weed or insect control; they spread pesticides over the entire lawn.

Home and car maintenance

PAINT

Not all paint products are alike. Oil-based paints, thinners, stains, and solvents are among the most hazardous products found in homes. Bring all oil-based paints and products to HazoHouse for safe disposal. If using these items, follow all safety precautions, such as: wear rubber gloves, open windows, and use a fan for ventilation.



- Use water-based latex and acrylic paints, stains, and strippers where practical.
- Buy only the paint you need. One gallon of paint will cover around 300 square feet of surface.
- Use water repellents in place of wood preservatives; do not use creosote or pentachlorophenol.
- Get the most out of thinners and turpentine. After you use the products, let the particles settle to the bottom of the container, then pour off and reuse the liquid.
- Donate unopened cans of paint to interested theater groups or schools.

AUTO CARE

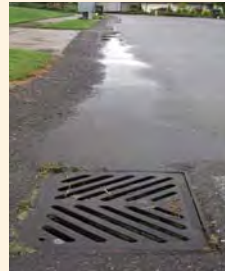
Many auto products are hazardous and have no safe substitutes. Keep your car well maintained and dispose of fluids properly.

- Change oil and air filter regularly.
- Fix your car's oil drips. Put cardboard under a leak when parked until you get it fixed.
- Use a commercial car wash.
- Store all products in original containers away from children, pets, and sources of heat.
- Take used auto products to HazoHouse, see pages 12-14.

TOX TIP: Never pour anything down a storm drain; most lead to streams or soil.

Rain carrying toxics from streets and lawns is a major source of pollution to Puget Sound. When chemicals and oils enter storm drains, the pollutants flow along with the rainwater, ending up in the ground (our source of drinking water), nearby streams, or Puget Sound.

Even small amounts of soaps and pollutants can harm fish and water quality. Consider washing cars over the lawn or gravel to trap soaps, oils, and cleaners. Better yet, use a professional car wash.



RECYCLE YOUR USED MOTOR OIL. There are over 30 FREE oil recycling locations throughout Thurston County. For locations, call 360-867-2578 or 1-800-RECYCLE or visit www.ThurstonSolidWaste.org

Guide to safer cleaners

Hazardous Product Concerns

Safer Substitutes

AIR FRESHENERS

These products send particles and chemicals into the air that can cause allergic reactions and are common asthma triggers. They may contain phthalates (hormone-disrupting chemicals).

Simmer cloves and cinnamon in water to freshen the air, or simply open the windows.

Use baking soda to absorb smells on carpets, in garbage cans, refrigerator, or garbage disposal.

ALL-PURPOSE CLEANERS

Products with chlorine or ammonia may release hazardous gases if mixed together or with other cleaners. Read the label carefully.

Some are harmful or fatal if swallowed, some are flammable, some cause skin or eye burns.

Clean most surfaces with soap to remove germs. Use baking soda, *Bon Ami*, or liquid castile soap. Rinse well.

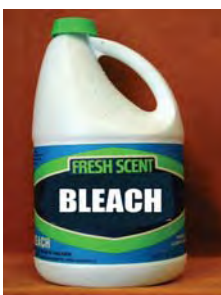
Disinfect only if necessary (such as an illness in the home). Mix 1 teaspoon bleach per gallon of cool water. Do not add soap – it reduces the effectiveness of the bleach. Leave on the surface for 2 minutes to be effective. Air dry.

ANTIBACTERIAL HAND CLEANERS

Avoid using soaps that contain Triclosan (often marked “antibacterial” or “antimicrobial”). Use of these cleaners could create resistant germs.

Wash with solid or liquid soap and warm water for 20 seconds (long enough to sing Happy Birthday twice). Dry well.

After washing hands, an alcohol-based gel or wipe can be used, if desired.



TOX TIP: Bleach can create a deadly gas when mixed with other household chemicals. Never mix chlorine bleach (also called “sodium hypochlorite”) with ammonia or acids, including acid toilet bowl cleaners, drain cleaners, vinegar, and even lemon juice.

Guide to safer cleaners

Hazardous Product Concerns

Safer Substitutes

CHLORINE BLEACH TO WHITEN CLOTHES

Chlorine bleach is highly irritating to eyes and lungs. It also is poisonous if swallowed, and reactive when mixed with ammonia or acids (see Tox Tip, page 8). If it must be used, be sure to wear gloves and eye protection. Avoid breathing fumes; open windows for ventilation.

For laundry, use a non-chlorine “oxygen” bleach (contains hydrogen peroxide, sodium perborate, or sodium percarbonate).

DRAIN CLEANERS

Many drain cleaners are highly toxic, especially those containing lye or marked DANGER or POISON. They are hazardous to inhale, harmful to skin, and may actually damage plumbing and septic systems.

To free minor clogs, pour 1/2 cup baking soda and 1/2 cup vinegar down the drain, followed by boiling water.

Use a plunger or a plumber’s snake.

To prevent future clogs, place drain strainers over all drains.

FABRIC SOFTENER AND DRYER SHEETS

The chemical fragrance in softeners and dryer sheets may irritate lungs and skin. Dryer sheets may also clog up septic systems, if flushed down the toilet.

Add 1/2 to 3/4 cup baking soda to the rinse cycle as a softener.

For more green cleaning recipes, visit www.co.thurston.wa.us/health/ehhm/greencleaning.html.



continued on next page

Guide to safer cleaners... *more*

Hazardous Product Concerns

Safer Substitutes

OVEN CLEANERS

Many oven cleaners are very hazardous to inhale and corrosive to the skin, especially those containing lye or labeled DANGER or POISON.

Use a non-lye product like *Bon Ami*. Use a damp cloth or wet cleaner to soak and soften baked spills.

To prevent build-up, use a tray or foil liner to catch spills. Wipe up spills promptly.

TOILET BOWL CLEANERS

These vary widely in hazard level; read the label carefully. Avoid products labeled DANGER or POISON.

Scrub with baking soda or *Bon Ami*. Rinse surface to remove residue.

WINDOW AND MIRROR CLEANERS

Ammonia-based cleaners are harmful if inhaled. Mixing ammonia with chlorine-based products creates hazardous gases.

Mix 1 cup vinegar with 3 cups water; wipe on or spray. Dry with newspaper or clean cloth.

Use club soda in a spray bottle or on a cloth; spray or wipe on. Dry with a clean cloth.

Outdoor windows or tough jobs: Wash with a sponge and warm water mixed with a few drops of soap. Rinse and squeegee dry.



Place Mr. Yuk stickers on hazardous products to warn children not to touch, smell, or taste. To receive a package of stickers, call the Washington Poison Center at 1-800-222-1222 or visit www.wapc.org.



Mercury and lead

MERCURY

Mercury is a highly toxic element that can harm the brain, kidneys, and lungs. It is used in many common household products and fixtures, such as fluorescent tubes and bulbs, thermometers, and thermostats. Mercury can enter our bodies through our lungs and skin, or more commonly, by eating mercury-contaminated fish.



We add to mercury pollution if we throw a mercury product in the trash or wash it down the drain. Replace mercury thermometers with digital, solar, or alcohol ones and thermostats with digital or programmable types. See HazoHouse, pages 12-14 for safe disposal.

Avoid breaking fluorescent bulbs; if possible, cover the floor with plastic sheeting when changing bulbs. For clean-up instructions see www.ecy.wa.gov/mercury/mercury_bulb_cleanup.html.

LEAD

Lead is a toxic metal that can cause brain and nervous system damage, and behavior and learning problems, especially in developing children.



Since the 1980s, lead has been banned for use in most products; however, it still may be found around the home, notably in chipping paint in houses built before 1978, and in dust and soils. It is also used in small quantities in polyvinyl chloride (PVC) as a stabilizer. Lead keeps turning up

in household products and toys. See www.co.thurston.wa.us/health/ehkids.

Steps to take

- Test your home for lead paint hazards if it was built before 1978. Lead paint in poor condition (peeling or cracking) should be removed by a certified contractor.
- Lead paint in good condition is best left undisturbed.
- Lead is often in dust. Wash children's hands before they eat; wash bottles, pacifiers, and toys often.
- Use cold water for drinking and for food preparation.

Eat fish low in mercury

Pregnant and nursing women, women who may become pregnant, and young children should avoid certain types of fish that could be contaminated by mercury: king mackerel, marlin, shark, swordfish, tilefish, and tuna steak (i.e. cuts from large tuna). For more information, see www.doh.wa.gov/fish.

Good choices:

- Canned light tuna*
- Cod
- Sardines
- Salmon
- Pollock (imitation crab, fish sticks)
- Catfish
- Flounder
- Shrimp
- Shellfish

*To reduce mercury exposure, choose *canned light tuna over canned albacore (white)*.



Disposing of hazardous wastes: a guide to HazoHouse

ABOUT HAZOHOUSE

What should you do with an unwanted hazardous product? Bring it to HazoHouse, Thurston County's collection center for household hazardous waste.

HazoHouse is located at the Thurston County Waste and Recovery Center (formerly known as the Hawks Prairie Landfill). Wastes at HazoHouse are sorted by type and shipped to licensed recycling, treatment, and disposal facilities. HazoHouse is free for residents. Businesses can bring hazardous waste to HazoHouse for a fee (call 360-867-2491 to set up a business account).

Residents can also take household hazardous wastes to WasteMobile events, which are held throughout the county as a convenience to residents.



TOX TIP: Household hazardous chemicals can pollute our drinking water source. Virtually all of our drinking water comes from ground water –



rainfall that trickles through soils. If hazardous wastes are poured down the drain, stored unsafely, thrown in the garbage, or dumped outside, the chemicals can contaminate ground water, kill fish, and injure garbage collectors.

HOW TO GET THERE

From Interstate 5, take exit 111, go north on Marvin Rd. Turn right on Hogum Bay Rd, then right again at the sign for the Waste & Recovery Center. Go through the recycling area; you will see the HazoHouse entrance at the far end.

Thurston Co. Waste & Recovery Center
2418 Hogum Bay Rd. • Lacey

HazoHouse: 360-754-3354

WasteLine: 360-786-5494

www.ThurstonSolidWaste.org

Avoid products that say DANGER or POISON

USE HAZOHOUSE SAFELY

- Keep products in original containers; label if needed.
- Never mix different products together.
- Make sure items are well sealed, lids tight, not leaking.
- Do not stack items above each other or jumble items together in large trash bags or containers – place upright in a leak-proof tub or box to prevent spills.
- Keep products away from children, pets, and vehicle passenger compartments (use the trunk when possible).
- Do not bring containers larger than 5 gallons; workers cannot unload large drums. Call 360-867-2664 for help disposing of larger containers.

Free!
to households

HOURS OF OPERATION

HazoHouse and the Swap Shop are open four days a week: Friday, Saturday, Sunday, and Monday from 8 a.m. to 5 p.m.

HazoHouse and the Swap Shop are closed New Year's Day, Independence Day, Thanksgiving Day, and Christmas Day. Call 360-867-2491 or visit www.ThurstonSolidWaste.org for additional information.

See next page for items accepted at HazoHouse.

THE SWAP SHOP

The Swap Shop is an area at HazoHouse where residents can pick up reusable household



products, such as paints, cleaners, and auto products. The items are free of charge and HazoHouse staff check to make sure they are in good condition.

LATEX PAINT

Take old latex paint made before 1989 to HazoHouse - it may contain lead or mercury. Identify cans with mercury-based mildewcide and bring them to HazoHouse as well.

Place dried out latex paint cans in the trash, with lids off. Dipping of liquid paint is prohibited. To solidify a partially full can, add kitty litter, sand, shredded paper, or a store-bought paint hardener (available at some hardware and paint stores).

Bring unwanted oil-based paints, varnishes, thinners and stains to HazoHouse. Empty oil-based paint product containers can go in the trash.



continued on next page

Disposing of hazardous wastes: a guide to HazoHouse... *cont'd*

YES! ITEMS ACCEPTED AT HAZOHOUSE...

- Cleaning supplies and solvents
- Auto products – used oil filters, antifreeze, car batteries, brake fluid
- Used motor oil (please pour used oil into self-serve recycling tanks outside HazoHouse)
- Pesticides, including banned (Dursban, Chlordane, diazinon)
- Aerosol sprays (no empty cans)
- Glues and adhesives
- Pool and hobby chemicals
- Some batteries, including rechargeable and up to 3 lead-acid car batteries per day. Place batteries in bag or put tape across the terminals
- Oil-based paints, thinners, mineral spirits
- Old latex paint (made before 1989, see page 13)
- Mercury thermometers (in sealed container or double zip-seal bag), thermostats, and switches
- Kerosene and gasoline, including contaminated
- Fluorescent light tubes, high-intensity discharge (HID) lamps, and PCB ballasts. Pack lights carefully in original box, if possible; breakage releases mercury vapor!
- 5-gallon propane (barbecue) tanks – no need to remove valve. Limit 3 per day.
- Business waste: to register for the program, call 360-867-2491



NO! ITEMS NOT ACCEPTED...*

- No latex paint made after 1989
- No empty containers – place in trash
- No alkaline batteries
- No smoke detectors – place in trash
- No fire extinguishers (except those made before 1994) – place in trash
- No empty aerosol cans – place in trash (City of Olympia curbside recycling accepts aerosol cans)
- No medical waste – place in a biomedical waste bag, sharps container, or clear plastic bottle with a lid, then put in the garbage (see page 3 for medicine disposal)
- No flares, ammunition, fireworks, or explosives – call Thurston County Dispatch at 360-704-2740 for disposal options
- No electronics
- No compressed gas cylinders (except 5-gallon propane tanks)

* See www.WhereDoITakeMy.org for information on proper disposal of these items


TOX TIP: Fluorescent lights are both good and bad for the environment. All fluorescent bulbs contain mercury. When bulbs break, mercury vapor escapes. Each year in Washington, broken fluorescent lamps release as much as 1,800 pounds of mercury.

On the other hand, fluorescent lights are good for the environment because they save energy. Coal-fired energy plants release much more mercury into the environment than broken fluorescent bulbs, and contribute to climate change. Reducing energy consumption with fluorescents results in less mercury and carbon dioxide in the environment.

We encourage you to change to compact fluorescents and to recycle used bulbs at HazoHouse.



What will you do?

<p>How safe is your household? Ask yourself the following questions</p>	<p>Actions</p>	
<p>1 Do you use highly hazardous products (signal word “Danger” on label) in or around your home? Such as: chlorine-based cleaners; oil-based paints; spray-on adhesives; auto products; pesticides, such as flea bombs, rat poison, bug and weed killers</p>	<p>Try safer substitutes – see “Guide to safer cleaners,” pages 8-10. For indoor use, consider installing a fan in the room or open two windows and use a fan to pull air outside. Use auto products outdoors. Reduce or stop using indoor pesticides. Avoid fertilizers mixed with weed or bug killers (see page 6).</p>	
<p>2 Do you wear gloves and goggles when using hazardous products?</p>	<p>Learn more about the risks of chemicals you use by getting the Material Safety Data Sheet (see page 4). Use all recommended safety equipment.</p>	
<p>3 Are any flammable products stored near fire or heat?</p>	<p>Move flammable materials (including aerosols) away from sources of flames, heat, or sparks.</p>	
<p>4 Are any hazardous products within reach of children?</p>	<p>Put Mr. Yuk stickers on hazardous products (see page 10) and move to locked cupboards out of reach of children.</p>	
<p>5 Do you have:</p> <ul style="list-style-type: none"> • Damaged, rusting, or unused containers of hazardous products? • Banned or restricted products? • Old mercury products (see page 14)? 	<p>Place containers upright in tub or box that will not leak and bring to HazoHouse (see “Use HazoHouse Safely,” page 13) or WasteMobile event. Never mix products.</p>	

SET AN ACTION PLAN!

Look at the suggested actions and add others of your own. Commit to taking three actions within the next six weeks. Record them here. Choose at least one that can be finished quickly with little expense or effort.

To improve the safety of my home, I will take these three actions in the next six weeks:

1. _____
2. _____
3. _____



This brochure is a joint effort of the Thurston County Public Health and Social Services Department and the Public Works Department, and is funded in part by the Washington Department of Ecology and the LOTT Alliance.



To receive this information in an alternate format, call:
360-867-2674
(TDD line: 360-867-2603)



Printed on recycled paper

Published December 2009

Resources

Household Hazardous Waste Education

360-867-2674 (TDD line: 360-867-2603)
www.co.thurston.wa.us/health/ehhm

Business Hazardous Waste

360-867-2664 (TDD line: 360-867-2603)
www.co.thurston.wa.us/health/ehhw

Thurston County WasteLine

Recorded information on HazoHouse, garbage, recycling
360-786-5494

www.co.ThurstonSolidWaste.org

Common Sense Gardening

360-867-2674 (TDD line: 360-867-2603)
www.co.thurston.wa.us/health/ehcsg

Washington Poison Center

1-800-222-1222 (voice or TDD line)
www.wapc.org

Household Products Database

National Institutes of Health
<http://householdproducts.nlm.nih.gov>

Welcome to Tox Town

National Institutes of Health
<http://toxtown.nlm.nih.gov/>

Printed by Thurston County:

Public Health and Social Services Department
Environmental Health Division
412 Lilly Road N.E., Olympia, WA 98506
360-867-2500 (TDD line: 360-867-2603)
www.co.thurston.wa.us/health/ehadm

Public Works Department
Solid Waste Program
2404 Heritage Court S.W., Olympia, WA 98502
360-867-2491
www.co.thurston.wa.us/wwm

LOTT Alliance
111 Market Street N.E., Ste 250
Olympia, WA 98501
Ph: 360-528-5719
www.lottonline.org