# Public Comment Notice

DEPARTMENT OF ECOLOGY
State of Washington

**Hazardous Waste and Toxics Reduction Program** **April 2012**

# Draft Dangerous Waste Permit Burlington Environmental, LLC

*(Referred to as PSC in this fact sheet. See "Facility History" for information on name and ownership.)*

The Washington State Department of Ecology (Ecology) is announcing its **draft permit** for commercial dangerous waste treatment and storage at the Burlington Environmental facility in Kent. The facility is within the Green River Valley. (See area of facility on attached map, page 18).

Ecology issued the initial permit to this facility August 27, 1998. The facility has operated under that initial permit since that time. They submitted their permit application for renewal in accordance with the regulations. Ecology will make a final decision on re-issuing a final permit after we consider public comments on the draft permit.

The draft permit has detailed requirements for accepting, storing, and treating dangerous waste in containers and tanks.

This fact sheet summarizes:

- ✓ How the public can comment on the draft permit.
- ✓ Activities at the dangerous waste management facility including waste storage and treatment.
- ✓ Facility operating requirements in the draft permit including waste analysis, storage, and treatment.
- ✓ Requirements for facility inspections, personnel training, and emergency planning and response.
- ✓ Requirements for closing the facility and corrective action.
- ✓ Ecology's process for making final decisions.

## Comment Period

**April 5, 2012 through May 21, 2012**

**Comments must be received or postmarked no later than May 21, 2012. Submit comments to:**

Pallavi Mukerjee
WA Department of Ecology
Hazardous Waste and Toxics Reduction Program
P.O. Box 47600
Olympia, WA 98504-7600
Phone: 360-407-7018
E-mail: pmuk461@ecy.wa.gov

**You may hand deliver your comments to the Ecology address listed below until 5 p.m., May 21, 2012.**

**Review the information** Ecology used to make their tentative decisions to issue the permit, between 9 a.m. and 4:00 p.m. at:

Department of Ecology
Hazardous Waste and Toxics Reduction Program
300 Desmond Drive
Lacey, WA 98503
Contact: Pallavi Mukerjee
Phone: (360) 407-7018

Or contact:
Kent Regional Library
Attention: Judy Renzema, Branch Manager
212 2nd Avenue N
Kent, WA 98032
Phone: (253) 859-3330

For more information or a copy of Ecology's draft permit and fact sheet contact Pallavi Mukerjee above or visit Ecology's Web site: www.ecy.wa.gov/programs/hwtr/foia/index.html.

## A. Facility Background

The facility is located at 20245 77th Avenue South in King County, Washington. It is two miles north of downtown Kent, four miles south of the city of Renton, and 1.3 miles east of the Green River. The facility consists of approximately 6.25 acres, of which dangerous waste operations occur on the developed three acres. The remaining acreage to the west of the facility is used as a 10-day transfer facility for inbound and outbound shipments of containerized dangerous waste. This dangerous waste permit is being re-issued for operations at that facility.

Burlington Environmental, LLC operates two dangerous waste management facilities in Washington. The company (formerly known as Chemical Processors, Inc., and later Burlington Environmental, Inc.) was founded in Seattle in 1970 to provide an outlet for proper treatment, recycling, and storage of dangerous wastes. Burlington Environmental, LLC is owned by PSC Environmental Services, LLC and uses "PSC" as a recognized name in the waste management industry. PSC offers fuel blending and treatment services for bulk and containerized liquid, and solid wastes to industries throughout but not limited to the Pacific Northwest.

Prior to the 1980's, the area used for facility operations was used for agriculture. In 1980, Crosby and Overton, Inc. developed the site into a treatment and storage facility for dangerous wastes. In 1989, the facility was purchased by Chemical Processors, Inc. (Chempro). In 1992, Chempro changed its name to Burlington Environmental, Inc. (BEI). In 1994, Philip Environmental purchased BEI. The parent company is known as PSC Environmental Services, LLC. The Kent facility's legal owner, (due to restructuring between 2000 and 2008) is Burlington Environmental, LLC.

Several dangerous waste management units were closed and removed by former owners of the facility. These units included an RSS reactor, PCP treatment tank, two waste pretreatment tanks, a solidification area and the rotator drum filter.

More recently, under BEI ownership, the facility decontaminated and disposed two portable corrosive treatment tanks. Some other dangerous waste management units that have been closed and removed from service include a baler, cuber, and an aerosol depressurization unit. A number of wastewater treatment tanks were removed from dangerous waste management service, and are now being used to treat wastewater that does not designate as dangerous waste. Two stabilization tanks were removed from dangerous waste service in 2011, and are being used for moderate risk waste (MRW).

In the current facility, containerized dangerous wastes (DW's) are managed in the following areas- load/unload only areas, container staging areas, container storage only areas, and container storage/processing areas.

Wastes stored and treated at the facility include:

- Wastewaters
- Aqueous and non-aqueous metal-bearing wastes
- Oily waste
- Sludges
- Polychlorinated biphenyls (PCB's)
- Compressed gases, flammables, dangerous when wet, oxidizers/organic peroxides, poisons/toxics, and corrosives.

PSC is authorized to store a maximum of 218,777 gallons of dangerous waste in containers and 33,100 gallons in tanks at the facility. PSC estimates that they treat a maximum of 57,600 gallons of dangerous waste per day. No waste is burned or disposed at the facility. Wastes treated by the facility are sent offsite and/or managed in one of the following ways:

- Alternate fuel blending (off-site)
- Disposed by incineration (off-site)
- Wastewater treatment (on-site)
- Disposed of in a landfill (off-site)
- Solidification (on-site; non DW)
- Solvent recycling (off-site)

The PSC dangerous waste management facility permit regulates all activities for receiving, storing, and treating dangerous waste at the facility.

PSC also manages MRW at the facility. MRW is a class of solid waste that covers household hazardous waste (HHW) and small quantity generator (SQG) waste. The facility has an MRW permit from Seattle King County for managing the MRW waste. All MRW material sent off-site for disposal or recycling is only sent to facilities that meet the performance standards of Washington Administrative Code (WAC) 173-350-040.

Typical MRW accepted at the facility includes, but is not limited to, paint-related materials (PRM), lab packs, loose pack materials, landfill ready materials, propane cylinders, batteries, oil filters, electronic waste, aerosol cans, latex paint, light tubes, and PCB light ballasts.

## B. Procedures for Reaching Final Decision

The public may review and comment on this draft permit. Ecology will consider all public comments before deciding whether to issue a final permit. WAC 173-303-840(3) through (9) describe the public review process.

### Public Comment Period

April 5, 2012 through May 21, 2012 is the public comment period on Ecology's tentative decision to issue a dangerous waste management facility permit. See page 1 for information on submitting comments and reviewing documents.

### Public Hearing

Ecology will conduct a public hearing on this tentative decision ONLY if a member of the public requests one. To request a hearing, contact Pallavi Mukerjee by phone, letter, or e-mail by May 10, 2012. To find out if a public hearing will be held, contact Pallavi Mukerjee on or after May 14, 2012. If held, the public hearing will begin at 7:00 pm on May 17, 2012, at Ecology's Lacey Building, Room 1S-16 (see page 1 for address and contact info).

### How to Participate

You may request, review, and comment on the draft permit and supporting documents. The information Ecology used to make their decision is also available to you. See page 1 for locations and hours of availability. You must deliver or postmark your comments by May 21, 2012, for Ecology to consider them.

The most effective comments are those that:

- ✓ Provide specific information describing what condition he or she believes is inappropriate.
- ✓ Provide factual and regulatory support for the comment.
- ✓ Suggest changes to fix the problem.
- ✓ Include supporting material, unless Ecology already has the material. (For example, if the comment references a regulation on managing dangerous waste, Ecology already has it. If the comment references a report or letter that is not part of the application or the agency files on PSC, or is not a commonly available reference, then Ecology likely does not have it and the person commenting should provide a copy of the reference.)

WAC 173-303-840(6) provides details on raising issues and providing information during the public comment period.

## Decision-making Process

### Public Comments and Testimony

Ecology will consider and respond to written comments the public submits. Ecology will also consider and respond to public testimony from the public hearing, if one is held.

### Final Decisions

After considering public comments and testimony, Ecology will make a final permit decision or a new tentative decision. If Ecology re-issues a final permit to PSC, it will be valid for ten years from its effective date. However, PSC or Ecology can modify the permit at any time during that period. Permit modifications are subject to public review.

WAC 173-303-830 has procedures for modifying a permit and presents the types of permit changes that are subject to public review and comment.

Ecology will inform the facility and all people who comment during the public comment period of the final permit decision.

### Effective Date of Decisions

Normally, a permit is effective 30 days after Ecology gives notice of their final decision. However, if there are no comments on the draft permit, Ecology may specify an earlier effective date for the final permit.

If Ecology makes a new tentative decision on this permit, there will be a new comment period.

### Appealing the Final Permit Decisions

Ecology will make a final decision after considering and responding to comments from the public and the facility on the draft permit. People can challenge that final decision or any individual permit condition by appealing to the Pollution Control Hearings Board. Appeal procedures are in WAC 173-303-845 and Chapter 43.21B Revised Code of Washington (RCW).

## Ecology's Authorities and Responsibilities

Ecology regulates dangerous waste in Washington. The Washington State Hazardous Waste Management Act, Chapter 70.105 RCW, and the Dangerous Waste Regulations, Chapter 173-303 WAC, regulate the management of dangerous waste. WAC 173-303-800 specifies that facilities that store and treat dangerous waste, such as PSC-Kent, must obtain a permit.

The U.S. Environmental Protection Agency (EPA) also has regulations for facilities that manage hazardous waste. The Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) and the Hazardous and Solid Waste Amendments of 1984 (HSWA), and the regulations in Title 40 of the Code of Federal Regulations (CFR) regulate hazardous waste nationwide. EPA authorizes Ecology to implement these federal regulations in Washington.

The State of Washington's dangerous waste management program received authorization to implement the state dangerous waste regulations in lieu of the federal hazardous waste regulations on January 31, 1986. The State's program also received approval for revisions to the federal program. The last approval became effective on July 28, 2010. Currently, Ecology's program is authorized for all aspects of the federal hazardous waste regulatory program that apply to PSC's dangerous waste management permit.

## C. State Environmental Policy Act

PSC provided a State Environmental Policy Act (SEPA) checklist with their dangerous waste permit application. However, that checklist is not current because it does not include the construction required under this permit renewal. PSC plans to update the SEPA checklist to include the new construction, and to submit the updated SEPA checklist to the City of Kent for their review. Ecology expects that the final dangerous waste permit will not be effective until the City makes its SEPA determination. Because new construction at the facility will require a building permit from the City of Kent, the City will be the lead agency for SEPA.

Ecology will review the SEPA checklist and City of Kent's SEPA determination and provide input, if needed.

## D. Facility Descriptions and Permit Requirements

PSC operates this dangerous waste management facility at 20245 77th Avenue South in Kent, Washington. PSC is a commercial waste management operation who accepts and manages dangerous wastes from off-site generators.
This dangerous waste management facility permit regulates all activities for receiving, storing, and treating dangerous waste at the Kent facility.

The facility receives dangerous wastes in containers and in bulk tanker trucks. As described in more detail below, they conduct check-in procedures in specified container and tanker staging areas. The dangerous wastes must be formally accepted into the facility and moved to processing or long-term storage areas within 24 hours. All waste check-in areas, storage areas, and treatment or processing areas, have sufficient secondary containment volume to hold up to ten percent of the maximum quantity of waste in the area, or the largest tank or container, whichever is greater. In addition, outdoor dangerous waste management areas have a capacity to contain precipitation from a maximum 25-year storm of 24-hour duration. PSC must remove spilled wastes from any secondary containment system as soon as it is discovered, and they must remove precipitation at least once a day if it accumulates in sumps.

### Dangerous Waste Container Management

When PSC receives a waste shipment of containers, their staff unload the waste containers into the south check-in area where they conduct check in, including waste verification.

After PSC verifies the identity of dangerous waste in a shipment, they move the waste containers into storage. Wastes are placed into separate secondary containment areas according to their hazard class. From the container storage area, waste can be moved to permitted processing areas, to tank area load/unload pads where they are pumped into tanks, or it can be shipped off-site for treatment and disposal.

PSC must inspect dangerous waste containers when they first arrive at the facility to ensure they are closed securely to prevent unnecessary emissions. To minimize air emissions during verification sampling, PSC must ensure a container is open only when it is actively being sampled and then promptly closed. Each container is also kept closed during staging or processing unless dangerous waste is actively being added or removed. The container must be closed if addition or removal of wastes will not occur within 15 minutes, if the person performing the operation leaves the immediate vicinity of the container, or if the container is full.

The permit requires a comprehensive inspection program for waste containers and their management structures. PSC inspects containers daily to ensure they are properly labeled, properly stacked, in good shape, and not leaking. They also inspect secondary containment structures daily to ensure their integrity and to remove any liquids (such as stormwater) from sumps. The secondary containment systems have sufficient capacity to hold wastes from ten percent of the quantity in all containers in its area, or the largest container, whichever is greater, plus, if unroofed, precipitation from a maximum 25-year storm of 24-hour duration. PSC must maintain container management areas so they have impervious surfaces with no penetrating cracks. For more information, see “Inspections” in this fact sheet.

PSC will build new areas and structures under this permit to support their container management operations. The permit has a schedule to ensure construction is complete by November 2015. The schedule considers requirements to complete a State Environmental Policy Act (SEPA) determination on the project and obtain building permits from the City of Kent. The schedule also accommodates a phased approach that allows PSC to continue reduced dangerous waste management activities during construction. The following summarizes areas and structures to be built or improved:

- South Check-in Area. This area will be expanded to increase its capacity and allow better separation of different hazard classifications of wastes. Berms and firewalls will be installed to separate incompatible hazard classes. Sumps in this area will be coated to be more impervious to liquids.
- North and South Container Storage Areas. Firewalls will be installed to separate incompatible hazard classes. A canopy will be built over the storage area used to manage dangerous wastes that are classified as “DOT 4.3 – Dangerous when Wet.”

- Concrete Transport Areas. Concrete pavement with waterstops will be used to replace asphalt in all areas used to transport waste containers with forklifts.
- North and South Docks. The south dock will be reconstructed and the north dock will be improved. Concrete secondary containment with waterstops will used for the docks and passageways used by forklifts to transport wastes.
- Central Process Area. Firewalls will be installed to isolate this area from adjacent waste management areas. Air emission control equipment will be installed on the waste compactor and two bailers.
- North Central Process Area. This will be a new waste management area. It is designed to meet all requirements for dangerous waste management and will include firewalls to isolate this area from adjacent waste management areas.
- Oxidizer Container Storage Area. This will be a new waste management area used to manage oxidizers and peroxides. It is designed to meet all requirements for dangerous waste management and will include firewalls to isolate this area from adjacent waste management areas.

Constructing these improvements will occur in three phases. The figure on page 19 shows areas of the facility under construction during each of the phases. The permit has specific requirements that must be met before construction begins, during each of the construction phases, and post constructions.

New construction benefits the environment and operations at the PSC facility:

- Better separation of incompatible waste during check-in, verification, storage, and processing.
- More space for safer and more efficient movement and storage of waste containers.
- Concrete with waterstops in the facility's container transport area will help prevent potential accidental spills from reaching the environment.
- Covered storage area will help protect dangerous wastes classified as "dangerous when wet" from precipitation.
- Better air emission controls from waste processing areas.

### Dangerous Waste Tank Operations

The facility has one tank farm with three tanks used for dangerous waste management. This tank system is used to store and treat liquid dangerous wastes (hereafter called "dangerous wastewaters"). "Dangerous wastewaters" are treated in the tanks and then discharged to a King County publically owned treatment works (POTW) for additional treatment. As described below, all operations are within secondary containment to protect the environmental from potential spills.

PSC has a permit from King County's Industrial Waste Program to treat oily and organic "dangerous wastewaters" before PSC discharges treated water to the POTW. The following are examples of "dangerous wastewaters" allowed in PSC's system: oil-water emulsions; coolants; oil spill clean-up wastewater; bilge rinse waters; tank clean-out wash water; water with small amounts of solvent; oil/or mixtures from parts cleaning operations; wastewater from paint washes; landfill leachate, contaminated groundwater; solvent and paint bearing wash waters; and wastewaters from organic chemical production operations. After receiving the pretreated water from PSC, the County combines them with other wastewaters, performs additional treatment, and discharges the combined treated water from the POTW to the environment.

The facility's tank system receives "dangerous wastewater" from bulk tankers and containers. Before the newly arrived "dangerous wastewaters" are pumped into a tank, PSC must verify their identity and do testing to ensure they are compatible with wastewater already in that tank.

This avoids unexpected and potentially dangerous reaction in the tank and helps ensure PSC can adequately treat the "dangerous wastewaters." PSC must also inspect hoses, pipes, valves, and pumps for damage or deterioration before using them to transfer "dangerous wastewaters." All loading, unloading, storage, and treatment operations are in a secondary containment system.

The secondary containment systems have sufficient capacity to hold wastes from the largest tank in its area, plus precipitation from a maximum 25-year storm of 24-hour duration. Like container areas, PSC must maintain tank secondary containment areas to have impervious surfaces with no cracks.

The unloading area (North Truck Load/Unload Area) is where waste verification and compatibility testing occurs, and it meets regulatory requirements for loading and unloading and for container storage. The tank secondary containment area is protected by chemical resistant coating, and concrete joints are sealed with an elastomeric joint compound.

This secondary containment system was not constructed with waterstops at concrete joints. Therefore, the permit requires special inspection procedures to ensure the area meets performance requirements for tank secondary containment. The inspection requirements include specific observations of the concrete joint surface treatments, and the permit includes criteria for repairing the surface treatment.

The "dangerous wastewater" tanks must be inspected and recertified by an independent certified professional engineer every five years to ensure they are properly designed, and are being operated within their design limitations. If problems are found, the tank must be repaired, and may be required to be inspected and recertified more frequently.

The permit also includes requirements for an ongoing comprehensive inspection program for tank systems. PSC does different types of inspections on a daily, weekly, monthly, quarterly, and biannual basis. For details, see the "Inspections" section.

The permit includes requirements for air emission control from dangerous tanks. These tanks have conservation vents to allow pressures within the tanks to equilibrate to outside pressures when wastes are added or removed or when ambient temperatures change. The vents remain closed at other times. PSC must inspect these vents annually to ensure seals are intact and not leaking.

The PSC Kent facility has other tank systems used to store and treat wastewaters that do not designate as dangerous waste. Those tanks are located in separate containment areas, and wastewaters managed in these tanks are not mixed with "dangerous wastewaters." The dangerous waste permit does not address operating requirements of this non-dangerous waste treatment system.

During review of the permit application, Ecology ensured the design of all areas, structures, and equipment used to manage dangerous waste met dangerous waste facility standards. The permit is specific about how PSC must comply with environmental standards and includes detailed conditions on how management areas must be used, inspected, and maintained. If PSC needs to change equipment or procedures for waste management operation, they must first modify the permit. The permit and regulations prescribe the process for permit modifications and includes Ecology approval and notification of changes to the public.

The permit requires the facility to properly operate and maintain all systems of waste management to achieve compliance with the Dangerous Waste Regulations and specific conditions of the permit. PSC must ensure adequate funding, staffing, personnel training, and process controls to maintain compliance. PSC must tell Ecology if they are out of compliance with any of the permit requirements.

### Waste Analysis Requirements

Requirements for waste analysis are complex and critical for safe operation of the facility.

WAC 173-303-300 requires facilities to have comprehensive and accurate information about the composition of all dangerous waste they manage. PSC's waste analysis plan (WAP) has detailed procedures to meet this requirement. These include characterizing wastes before shipment to the facility, verifying the identity of wastes when they enter the facility, and ensuring safe and effective treatment of wastes by doing certain analyses before and after waste processing.

PSC conducts limited treatment operations at the Kent facility, including consolidation of dangerous wastes in containers and tanks and dangerous wastewater treatment. The major activity is receipt and storage of dangerous waste in containers. Most of the dangerous waste PSC manages at the Kent facility is not treated there. Instead, PSC accumulates and stores these wastes, then ships them to another facility for processing or disposal. PSC does not burn or dispose of any waste at the Kent facility. They discharge treated waste water to a King County Publicly Owned Treatment Works (POTW) for additional treatment and discharge. PSC is not allowed to accept dangerous wastes that are explosive, radioactive, or infectious at the Kent facility.

## Key Terms and Definitions

The WAP defines key terms to ensure a clear understanding of requirements for waste analysis. Ecology defines and describes these critical terms below to facilitate later discussion on WAP requirements.

*Waste stream* is dangerous waste from a single generator that is specific and unique to the waste generation process. For example, two otherwise identical dangerous wastes generated from identical processes by two different generators are different waste streams in the WAP. Also, two wastes generated by the same person using slightly different processes are different waste streams in the WAP. Waste stream is a critical concept in the WAP. All requirements in the WAP are keyed to the individual waste stream.

*Waste profile questionnaire (or WPQ)* is a document provided by the waste generator that meets the initial information needs for a waste stream. It includes a detailed and comprehensive physical, chemical, and regulatory description of a waste stream to assist PSC in determining whether that waste can be safely managed in compliance with the Permit.

*Profile* is a detailed and comprehensive physical, chemical, and regulatory description of a waste stream. PSC can use information in the generator's WPQ to develop the profile, but in many cases, PSC must supplement the generator's information to develop the profile. PSC is responsible for ensuring an adequate and accurate profile for every waste stream they accept.

*Confirmation* is checking that the generator's information is accurate and complete before approving the waste stream for shipment to the facility. PSC takes whatever steps are necessary to supplement generator information to develop an adequate and accurate profile during the confirmation process.

*Verification* is a set of procedures with criteria for determining that the waste stream received at PSC is the same as that described on the manifest and profile. This includes visual inspection and screening analysis for every waste stream that is shipped to the facility. (There are a few exceptions discussed in the "verification" subsection).

*Process limits* means equipment and treatment limits at the Kent facility. PSC's treatment and storage structures and equipment must be operated within specified safe limits. These limits are stated in the permit. Wastes having properties outside these process limits must not be managed at the facility because they could damage the equipment or create other hazards.

## Waste Characterization/Waste Profile System

Under the permit, PSC must obtain reliable information on the composition of every "waste

stream" before they allow the generator to ship it to their Kent facility. The permit allows both acceptable knowledge about the dangerous wastes and laboratory analyses to characterize a waste stream and develop its profile. The WAP has procedures for determining when laboratory analyses are needed. However, PSC ultimately makes the decision and has the responsibility of determining the extent of laboratory analyses required for each waste stream. PSC must evaluate, supplement when necessary, and document the information and their decision. If they use knowledge about the waste stream from the generator, PSC must document how they determined that it was acceptable.

PSC uses the following general steps to ensure they have sufficient and reliable information on every new waste stream before it is shipped to their facility.

1. **Obtains information on the waste stream from the generator.** The generator provides the information in a WPQ.
2. **Confirms information on the WPQ.** During the confirmation process, PSC determines what they need to do to substantiate and supplement information from the generator to ensure it is sufficient and reliable to meet performance requirements in the permit. This may include visiting the generator site, collecting additional documentation to support the generator's information, doing additional laboratory analyses of the wastes, or completing a combination of these steps.
3. **Compiles and evaluates all information on the waste stream.** PSC's trained staff review and evaluate waste analysis information for each waste stream. Their staff reviews the information to ensure PSC can manage the waste safely within process limits in the permit, and ensures that PSC can legally accept and manage the waste at the facility. Field staff may conduct a site audit of the generator site to substantiate generator information. During these reviews, PSC determines whether additional information is needed about the waste stream. If so, PSC is responsible for collecting that information. They make sure they have accurate and sufficient information to be in compliance with process limits, ensure proper waste codes and shipping names, and meet other requirements in the permit. The compiled information is PSC's profile for that specific waste stream.
4. **Documents information and decision.** PSC documents information in the WPQ, additional laboratory analyses, process information, results of site audit, and communication with the generator to support their decisions on the adequacy of the profile information and acceptability of the waste stream at the Kent facility. PSC must keep this information for each waste stream until closure of the facility.
5. **Re-evaluates information.** If PSC continues to accept the same waste stream from a generator, they must repeats steps 1 through 4 when:
   - The generator significantly changes the process or operation producing the waste. (For example, when the generator modifies their manufacturing process or changes chemical ingredients.)
   - PSC determines the waste does not match its profile when they do verification analysis. (This fact sheet discusses verification analysis in a later section)
   - Two years elapse since the last time PSC evaluated information using steps 1 - 4.

The permit stresses that PSC is responsible for obtaining accurate and complete information for every waste stream it plans to manage. Deficient or inaccurate information from the generator is not an acceptable defense for receiving unacceptable waste or mismanaging waste at the Kent facility.

## Waste Verification

PSC must verify each waste stream in every waste shipment received at the Kent facility. Verification consists of a series of observations and screening tests to ensure that characteristics of the waste stream received are consistent with the information included on the waste's profile and within PSC's process limits.

For waste containers, PSC uses the following steps to verify each waste stream.

1. **Ensure current waste profile.** When a waste shipment arrives at the facility, PSC's administrative staff ensures each waste stream on the shipment has a current profile. This confirms trained PSC staff previously reviewed the acceptability of the waste stream before it was shipped to the facility.
2. **Visual check of shipment.** Check-in staff ensures the correct number of containers in the shipment for each waste stream and they compare information on the container labels with information on the manifest. This helps verify the identity of the shipment by determining whether there are obvious discrepancies between information on the waste manifest and the actual waste shipment.
3. **Accept or reject waste shipment.** If information on the manifest, the profiles, and the container labels are in agreement, the number of containers is correct, and the containers are in good condition, PSC signs the manifest and formally accepts the waste into the facility.
4. **Unload transport vehicle.** While unloading the vehicle, PSC ensures dangerous waste containers are not leaking and are properly closed. If necessary, PSC staff replaces or overpacks waste containers that are in substandard condition and tightens any openings that are not secured. Then they assign a waste tracking to each container so its location at the facility is always known.
5. **Sample for verification screening analysis.** PSC is required to sample at least one container of every waste stream in every waste shipment or ten percent of the containers of a single waste stream, whichever is more. They randomly select the containers when there is more than one container for a single waste stream.
6. **Conduct screening analyses.** PSC conducts the following analyses on the waste sample to verify the waste stream matches its profile:
   - Physical description (all waste streams)
   - Ignitibility screen (liquid waste streams)
   - pH (non-organic waste streams)
   - Halogen (organic waste streams)
   - Specific gravity (all waste streams)
   - Radiation screen (all waste streams)
   - Cyanide and sulfide screening tests on waste streams from industries that might generate those constituents.
   - Waste compatibility testing for all wastes that will be mixed together.
   - Water compatibility testing for all non aqueous waste that will contact water during its management.
7. **Conduct supplemental analyses:** PSC does additional analyses, including but not limited to heat of combustion, flash point, total chlorine, total cyanide, total sulfides, and Toxicity Characteristic Leaching Procedures (TCLP) if additional information is needed to verify that the waste stream matches its profile or if these analyses are needed to safely manage the waste.
8. **Record results of testing and whether each waste stream passed verification screening.** If a waste stream does not pass verification testing, it is isolated from other wastes and subject to waste discrepancy procedures described below.

PSC also samples and verifies the waste identity in every bulk waste shipment arriving in a tanker truck. In this case, they sample and conduct the screening analyses (steps 5, 6 and 7) before they sign the manifest and offload the vehicle. Before they pump the arriving waste stream into any of

their tanks, they conduct the compatibility test to ensure the mixture will not cause an unexpected reaction with materials already in the tank.

The permit specifies that PSC has to complete these waste stream acceptance and verification steps, and place the waste stream into long term storage or processing, within 24 hours of receiving the shipment.

### Procedures for Waste Discrepancies

There is one exception to the usual requirements for accepting a waste stream into the facility. If a waste stream in a container does not pass verification analysis (i.e., there is a "waste discrepancy"), PSC must place that container in a secondary containment tray in a separate part of the container check-in area. Bulk loads that fail verification will be marked and placed in the 10 day transfer area of the facility. Then they must work with the generator and conduct additional analyses if necessary to resolve the discrepancy.

After they resolve the discrepancy, PSC may store or process the waste if it meets their permitting limits or ship it back to the generator or to another permitted facility. PSC must report the discrepancy to Ecology if they cannot resolve it within 15 days. In either case, PSC must document all of their analyses, communications, and determinations in their operating record.

The permit also includes procedures for damaged waste shipments that pose a threat to human health or the environment. These include steps to make the shipment secure, clean up any released materials, and notify Ecology and other agencies of the problem.

### Waste Processing Analyses

PSC is required to do certain processing analyses to ensure safe, legal, and effective treatment of wastes. PSC conducts compatibility testing before wastes are consolidated in tanks to ensure no unexpected adverse reactions. Except compatibility testing is not required when certain solid wastes having no free liquids, such as personal protection equipment, are consolidated. PSC also does bench testing before they treat waste waters to ensure effective and safe treatment.

In addition, when PSC has an unusual waste or one that has particularly hazardous characteristics or constituents, they treat it using a "Process Under Supervision Only" or "PUSO." That means PSC managers and other experts directly oversee the treatment of that waste.

### Data Quality Assurance

The permit specifies methods for sampling and analyzing waste streams. PSC operates a laboratory at the facility to do the required screening analysis. That laboratory must follow quality assurance and quality control (QA/QC) measures included in the permit.

Some sample and analytical methods used by PSC include:

- physical description
- pH
- flashpoint
- specific gravity
- heat of combustion
- compatibility screen
- halogens
- cyanide
- VOCs
- sulfides
- metals

All analytical data are documented and retained until facility closure.

PSC uses off-site laboratories for more detailed analyses. If the laboratory is located in the state of Washington, it must be accredited by Ecology. In all cases, the off-site laboratory must follow QA/QC procedures for the approved method.

The plant manager is responsible for laboratory quality control, implements the Quality Assurance Plan, and provides technical advice to the laboratory personnel. He/She will also direct quarterly audits of analyses and measurement systems performed in the Kent laboratory and of the record keeping systems in the laboratory.

Samples are collected in containers compatible with the sampled material and labeled. The permit requires the PSC laboratory to observe good standard laboratory practices to minimize the possibility of cross contamination.

Personnel obtaining samples are trained in proper sampling techniques. Samples collected at generator locations are accompanied by a chain of custody.

### Waste Tracking

PSC must accurately track every dangerous waste from the time it enters the facility until it is discharged to the King County POTW as treated wastewater or manifested offsite as a dangerous waste. The waste analyses plan specifies procedures for waste tracking.

### Waste Generated by PSC

PSC generates new waste streams as they process wastes they receive from off site. Examples are sludges from their wastewater tanks and used personal protection equipment. PSC is required to properly characterize and designate these wastes before they are placed into storage at their facility or manifested off site for disposal.

### Security

The active area of the Kent facility is completely surrounded by a six foot high chain link fence. The main gates are electrically operated and require a pass code or a pre-programmed security device to enter the facility. All electrical gates close automatically after being opened. The plant is illuminated by automatic outdoor lighting. There are numerous surveillance cameras installed throughout the facility to monitor incoming and outgoing traffic activity.

Access to the active area of the facility is restricted to waste transportation vehicles, authorized personnel, and authorized visitors. To prevent unauthorized persons from entering the active part of the facility from the 10-day transfer facility, a chain/rope with signs stating, "authorized entry only" is placed across access points. All visitors are required to sign in at the office before entering the active waste management areas. Gates to the active area are closed or attended by employees while open.

During non-operational hours, all gates are closed and locked. The locks are heavy-duty units, keyed alike, issued to authorized personnel only, and stamped "DO NOT DUPLICATE."

Signs in English, printed with the legend, "DANGER: Unauthorized Personnel Keep Out" are posted on the gates and approximately every 50 feet along the perimeter fence. The signs are attached to the fence at an approximate height of five feet, are visible from any approach to the facility, and legible from a distance of 25 feet.

### Inspections

PSC will conduct periodic inspections of the facility. These inspections detect and prevent malfunctions, deterioration, operator error, and unplanned releases from the unit that could cause harm to human health and the environment.

Some inspections required under the permit are:

- **Daily Inspections** of safety, emergency, and security equipment; sumps and secondary containment structures, load/unload areas, and treatment systems for leaks, spills, or accumulated rainwater.

  All spills and releases are removed as soon as detected during operational hours. During non-operational hours, if security personnel detect a release or spill they will contact the Emergency Coordinator (EC) for an immediate response.

  Tank systems, ancillary and process equipment, and containers are inspected daily for structural integrity, maintenance, signs of corrosion, erosion, spills, overfilling, labeling, orientation, aisle spacing, compatibility, segregation of incompatible materials, and puncture and weld breaks.

- **Weekly Inspections** of all secondary containment systems and load/unload areas for

unacceptable gaps, cracks, deterioration, corrosion, and erosion.

- **Monthly Inspections** of emergency response equipment (including self-contained breathing apparatus-SCBA and fire extinguishers) to confirm they are in working condition.
- **Quarterly Inspections** of emergency response equipment to confirm that materials are present in minimum stock quantities and are in satisfactory condition.
- **Semi Annual Inspections** of secondary containment by a qualified engineer to determine if any additional deterioration has occurred.
- **Annual Inspections** of fire hydrant pressure checks, fire suppression system checks and annual fire inspection certification by outside sources.
- **Five Year Integrity Assessment** of tanks by an independent qualified professional engineer to determine if tanks need repair, additional operating limitations, or replacement. Tanks that had a major repair, corrosion, or failure in coating are inspected two years from their last inspection.

The permit also requires PSC to correct unsatisfactory conditions discovered during the above mentioned inspections. Records of inspections must be kept at the facility for a minimum of five years.

## Emergency Planning

This permit includes a Contingency Plan in the case of an emergency at the facility. This plan describes specific emergency response procedures PSC will follow when responding to emergencies at the facility, such as natural disasters, explosions, fires, spills, or releases. The facility is equipped with internal and external communications, emergency equipment, and access to water for fire control. The plan also addresses procedures if an incident requires evacuation of the facility or an area.

PSC has established coordination agreements with local emergency response providers and with state and local emergency response teams. The agencies listed below are provided with current copies of the contingency plan to familiarize them with the types, locations, and properties of the dangerous waste handled at the facility.

- Kent Fire Department
- Kent Police Department
- Valley Medical Center
- Highline Work Clinic
- Washington Department of Ecology
- Puget Sound Clean Air Agency
- King County Industrial Waste Program
- NRC Environmental Services

The permit lists emergency response supplies and equipment at the facility and PSC must regularly inspect and maintain them. All facility employees must be trained on the contingency plan and a refresher must be provided according to the training schedule. These permit requirements help ensure PSC is always prepared for an emergency.

The permit specifies criteria for incidents that PSC must immediately report to Ecology. It also specifies criteria for incidents that require full use of contingency plan procedures. If the facility needs to implement the contingency plan, PSC must provide a written report to Ecology within 15 days. The report describes:

- The contact information.
- The date, time, and cause of the incident.
- The name and quantity of material(s) involved and extent of any injuries.
- An assessment of actual or potential hazards to human health or the environment.
- An estimated quantity and disposition of recovered materials from the incident.
- Corrective action taken to prevent reoccurrence of the incident.

The permit identifies a trained emergency coordinator (EC) who directs and coordinates

emergency response procedures. The EC is thoroughly familiar with all aspects of the Contingency Plan and operations, activities, locations and properties of waste managed, location of records, and facility layout. The EC or his/her designee has complete authority to commit needed resources of the company in the event of an emergency. The permit also specifies two alternate ECs to assume emergency response duties and responsibilities in case the primary EC is not available at the time of the incident.

PSC must submit a permit modification if they make changes to the contingency plan, list of emergency coordinators, or emergency equipment.

### Training

The permit requires all personnel employed at the PSC facility to undergo training.

Effective training is essential for competent and safe operation of the facility in compliance with regulatory requirements, including the dangerous waste permit. The training includes:

- Orientation Training
- Task/Process Specific Training
- Continuing Training

All new employees including personnel who support dangerous waste management operations and requirements of the dangerous waste permit receive orientation training regarding:

- Facility operations
- Regulatory requirements
- Applicable OSHA, and WISHA standards
- Health and safety policies

Job-specific training is a very important element of PSC's required training program. Each facility employee is assigned a job title(s), and every job title has required training courses or modules within a required timeframe. Employees will work only in the job duties they have been trained for. They will not work unsupervised in the new job title until training courses relevant to those titles are completed.

In addition, the facility conducts a continuing training program. This is designed to maintain proficiency in job skills, increase safety, quality, compliance consciousness, ensure employee knowledge retention, and teach new skills.

The permit requires that a person knowledgeable in dangerous waste management must direct the facility's training. The Operations Manager has overall responsibility for directing the facility's training plan. He/She along with Environment, Health and Safety-(EHS) personnel, will approve the training program content and format, designate qualified instructors, and provide the necessary resources to ensure an effective training program is maintained.

The Plant Manager is responsible for ensuring all employees receive all required training in the timeframe specified. Evaluation of a trainee's proficiency is done through oral examination and on-the-job performance. The training program itself is evaluated annually by EHS and Operations Management personnel.

The permit requires PSC to keep records of their training program. These records include:

- All training taken by each current employee until facility closure.
- Records for former employees for at least three years after they last worked at the facility.
- Class sign in roster.
- Personal training history on each employee.

Personnel training records need to be kept at the corporate offices for at least three years after closure of the facility.

## Closure and Corrective Action

PSC Kent must close the current dangerous waste facility when they stop using it to manage dangerous waste. To close, they must remove all the dangerous waste from the facility and decontaminate or remove equipment, structures, and contaminated environmental media (for example, contaminated soil).

If this cannot be accomplished, the facility must then conduct post-closure care to ensure that any contamination remaining onsite will not cause additional contamination to the environment. Post-closure care may include ongoing corrective action.

The re-issued permit includes a closure plan with detailed procedures and a schedule which PSC must follow to close the facility. PSC will remove all waste inventory, decontaminate tanks and equipment, decontaminate concrete secondary containment structures, sample the concrete surfaces and underlying soils, and then confirm by observation or laboratory analyses that they achieve closure performance standards. These closure operations will require thirty weeks to complete.

PSC will use high-pressure washing to decontaminate tanks, equipment, and concrete containment pads. They will confirm successful decontamination of tanks and equipment by documenting that they achieve a "clean debris surface." They will conduct concrete chip sampling and analyses to confirm clean closure of concrete pads. Finally, they will sample and analyze surface soils at bias and random locations beneath secondary containment systems to check whether contamination from facility operations reached the soil. Bias sampling locations are below sumps, areas where the concrete cracked or is stained, and any area of a known release. PSC will conduct soil sampling at three foot intervals down to the ground water surface beneath the tank farms. If all results are below cleanup standards, then the facility qualifies for clean closure. If results are above the cleanup standards PSC must remove or cleanup the soils.

The closure plan includes general sampling and analytical procedures, minimum number of samples, criteria for selecting additional sampling locations, and minimum laboratory analyses. PSC must submit an updated Sampling and Analysis Plan at least eight weeks before final closure begins. Certain information needed to develop the final detailed sampling and analysis plan, including current analytical procedures and up-to-date facility operating history, will not be available until that time. The updated plan will be subject to Ecology review and approval.

Closure activities at the PSC-Kent facility are designed to meet federal and state closure performance standards. The closure activities will accomplish the following performance standards in WAC 173-303-610(2)(a):

- Minimize the need for further maintenance.
- Control, minimize, or eliminate to the extent necessary to protect human health and the environment, post-closure escape of dangerous waste, dangerous constituents, leachate, contaminated run-off, or dangerous waste decomposition products to the ground, surface water, groundwater, or atmosphere; and
- Return the land to the appearance and use of surrounding land areas to the degree possible given the nature of the previous dangerous waste activity.

Where removal or decontamination of dangerous waste management units, equipment, soils, dangerous wastes or residues, or other materials is done, the removal or decontamination will assure that the levels of dangerous waste or dangerous waste residues do not exceed:

1. For soils, the numeric cleanup levels calculated using residential exposure assumptions according to the MTCA Cleanup Regulation (Chapter 173-340 WAC). Primarily, these will be unrestricted numeric cleanup levels calculated according to MTCA Method B, although MTCA Method A may be used as appropriate.

2. For structures, equipment, bases, liners, etc., clean closure standards are set by Ecology on a case by case basis in accordance with the closure performance standards (WAC 173-303-610(2)(a)(ii) and -610(5)) and in a manner that minimizes or eliminates post-closure escape of dangerous waste constituents.

An independent qualified professional engineer will observe many of the closure activities. PSC staff and the independent engineer will monitor and document closure activities to ensure they are done according to the approved closure plan. PSC and the engineer will document their observations and closure results in a report and certified statement to Ecology.

### Corrective Action

PSC Kent is a 6.25 acre site with active commercial operations overlying much of the facility. Commercial waste management operations have taken place continuously at this location from 1989, when the facility was owned and operated by Crosby and Overton, to the present. These waste management activities have resulted in dangerous wastes being released to the environment. The distribution of dangerous waste constituents in soil, groundwater, and surface water is summarized in remedial investigation (RI) reports. The most comprehensive of these RI reports is titled, ***Final Remedial Investigation Report***, prepared for the PSC Kent facility by Geomatrix consultants in December 2007.

This permit requires that PSC Kent complete the cleanup work necessary at the site to ensure the protection of human health and the environment in accordance with state and federal laws. Cleanup of contaminated media such as soil and groundwater must take place to the extent that concentration of dangerous constituents present in soil, groundwater, and surface water do not exceed the cleanup standards established for the site.

In the Corrective Action Part (Part 2) of this permit, Ecology requires that PSC-Kent, with oversight from the department, complete site investigations, evaluate cleanup alternatives, recommend a preferred cleanup option, and draft a cleanup action plan. Ecology will select the preferred cleanup option. Following public notice and comment, Ecology will incorporate the approved cleanup action plan into this permit. The cleanup action plan will include schedules for implementation of the work to be performed and will also include continued groundwater monitoring to determine the effectiveness of the cleanup after the implementation work is complete.

During the time that PSC Kent remains an active facility, there will be areas of known or suspected soil contamination which may not be fully cleaned up until final closure of the facility or discontinued use of the active units. This is due to the soil contamination being located directly below active plant operations. Leaking tanks, which managed dangerous waste, have been removed and replaced during partial closures in the past. Cleanup of the soils during partial closure was transferred to take place as part of the corrective action.

During corrective action, Ecology will focus initial cleanup efforts on accessible areas of soil contamination and on groundwater under the facility. Cleanup alternatives will be presented that address soil, groundwater, and surface water contamination to the greatest possible degree, given the constraints of the active facility.

The cleanup action plan will include provisions for monitoring the success of the cleanup action. If the cleanup levels for the dangerous waste constituents in soil, groundwater or surface water cannot be reached at the point of compliance within five years of implementation of the cleanup action, or sooner if the agency deems necessary, Ecology has the option of pursuing additional cleanup actions, WAC 173-303-6420(4)(e) ,WAC 173-340-420(2)(c), and WAC 173-340-420(6). Also, Ecology may require that active operations be discontinued for a period of time to complete soil cleanup to prevent a threat to human health or the environment due to leaching of dangerous constituents from soil to the groundwater, WAC 173-303-64620(2).

At the time of final facility closure, soils will be investigated beneath the secondary containment, as described in the facility closure plan (Section I of the permit application) which has been incorporated by reference into the permit and is a fully enforceable part of the permit.

### Financial Assurance
PSC will have enough money set aside to cover the estimated cost of all closure activities, including groundwater monitoring.

### Record keeping
The facility must maintain detailed operating records. These records document compliance with conditions of the permit and the Dangerous Waste Regulations. The facility must also maintain records of spills, releases, incidents of noncompliance, and emergencies. These records must be kept for periods ranging from three years to when facility closure is completed, depending on the type. The permit lists specific record keeping requirements.

### Reporting
PSC must report certain information to Ecology, for example:

- Waste shipments received that do not agree with the accompanying manifest or shipping paper, if the discrepancy cannot be resolved within 15 days.
- Incidents that cause the facility to implement its Contingency Plan.
- Noncompliance with permit.
- Annual reports on the facility's operation, including information on waste minimization efforts.

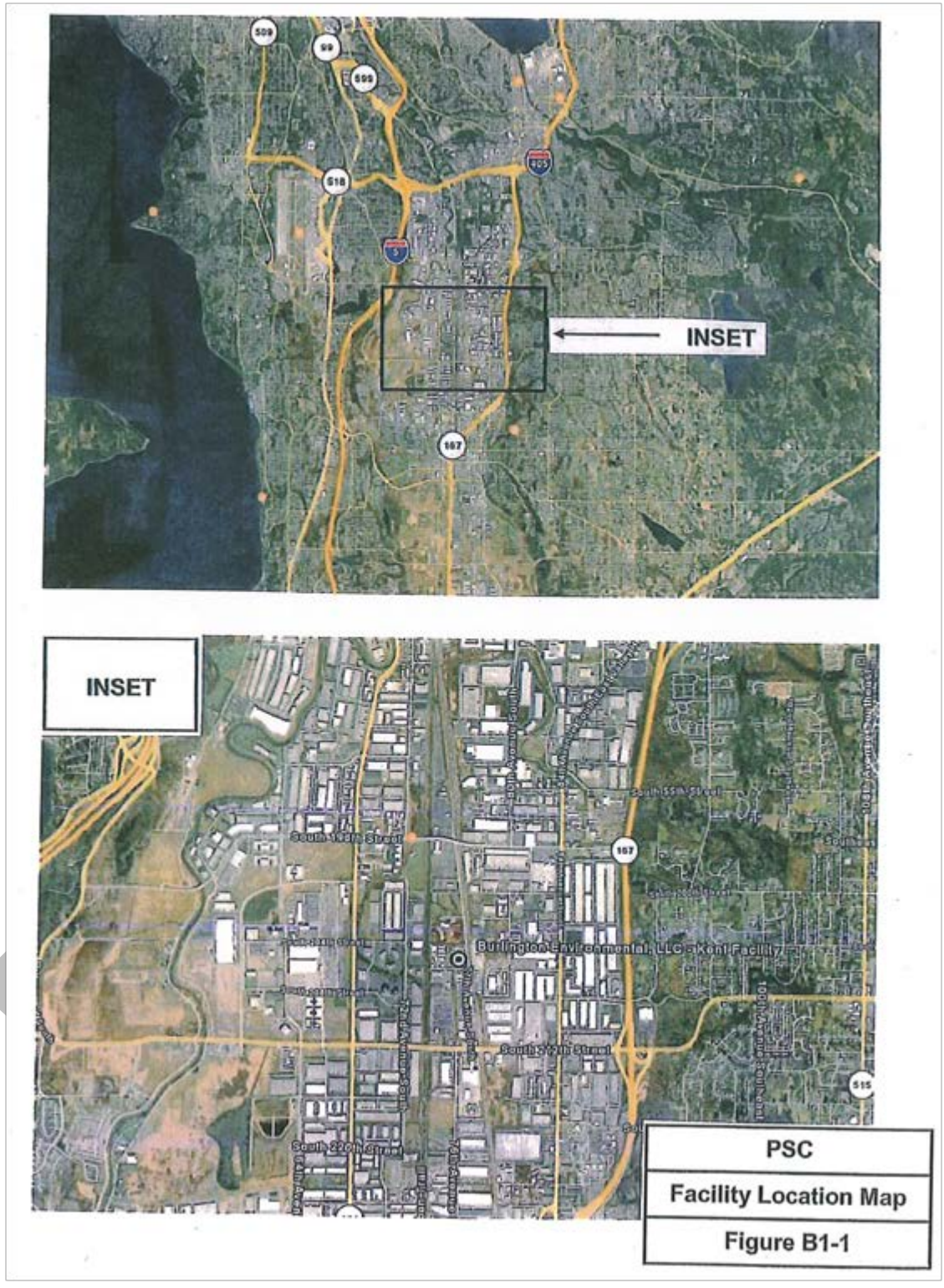
This list does not include all reports PSC must submit to Ecology.

## E. Changes to RCRA Rules under the Hazardous and Solid Waste Amendments

In general, new or amended requirements in the Hazardous and Solid Waste Amendments of 1984 and related regulations will automatically apply to PSC dangerous waste management activities. The exception is for new requirements that are less stringent than those in effect when Ecology issues the final permit.

## F. Conclusion

In this permit application; PSC has demonstrated it is capable of safely operating its dangerous waste management facility under the conditions required for a final permit. Therefore, Ecology has made a tentative decision to re-issue a final status permit to the facility.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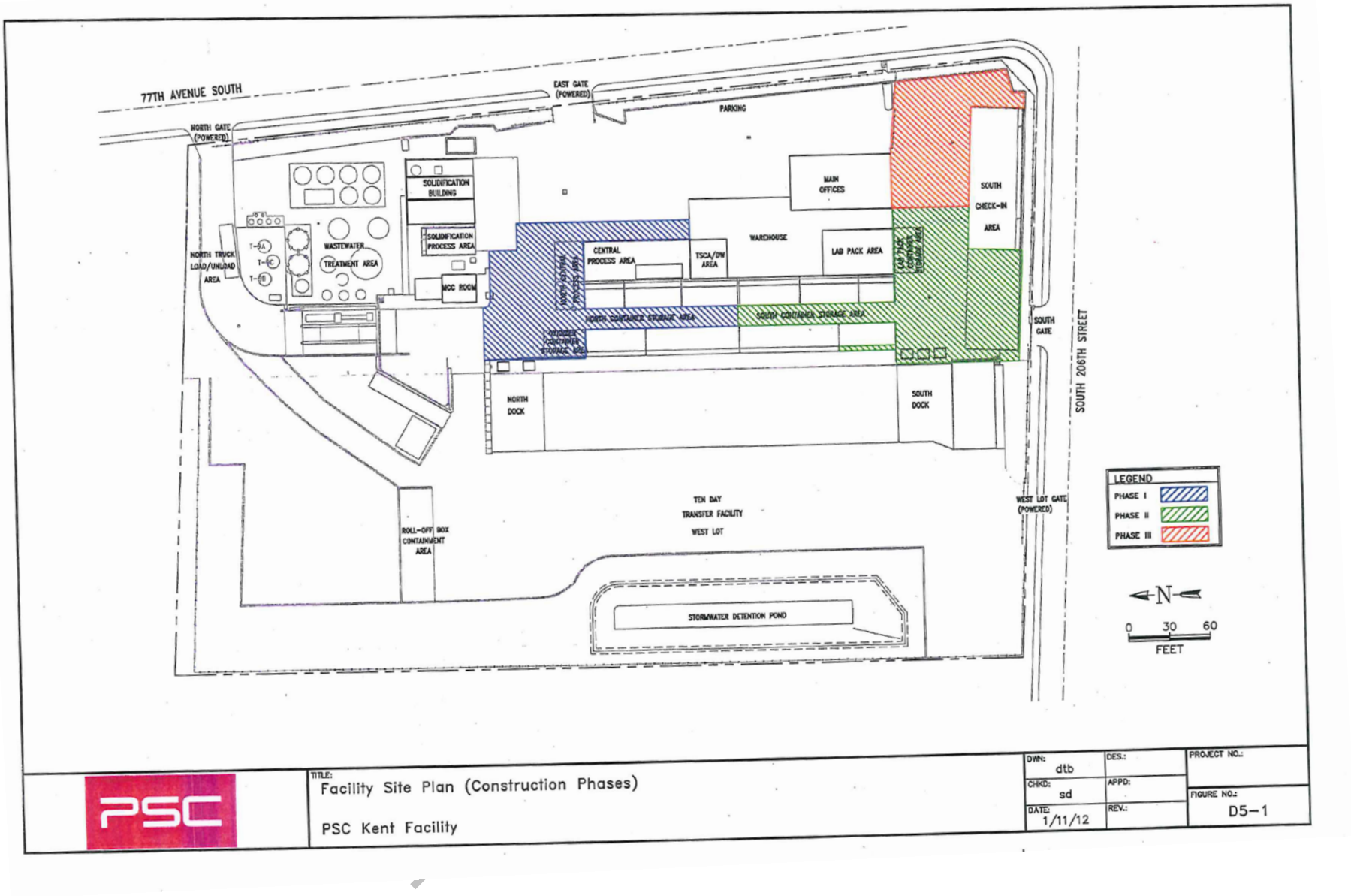
Burlington Environmental, LLC - Kent Facility
PSC
Facility Location Map
Figure B1-1


77TH AVENUE SOUTH
EAST GATE (POWERED)
NORTH GATE (POWERED)
PARKING
SOLIDIFICATION BUILDING
SOLIDIFICATION PROCESS AREA
MCC ROOM
WASTEWATER TREATMENT AREA
NORTH TRUCK LOAD/UNLOAD AREA
CENTRAL PROCESS AREA
NORTH CENTRAL PROCESS AREA
NORTH CONTAINER STORAGE AREA
NORTH CONTAINER STORAGE AREA
TSCA/DW AREA
WAREHOUSE
MAIN OFFICES
LAB PACK AREA
SOUTH CONTAINER STORAGE AREA
SOUTH CHECK-IN AREA
SOUTH GATE
SOUTH 206TH STREET
NORTH DOCK
SOUTH DOCK
TEN DAY TRANSFER FACILITY
WEST LOT
WEST LOT GATE (POWERED)
ROLL-OFF BOX CONTAINMENT AREA
STORMWATER DETENTION POND
LEGEND
PHASE I
PHASE II
PHASE III
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FEET
PSC
TITLE:
Facility Site Plan (Construction Phases)
PSC Kent Facility
DWN: dtb
CHKD: sd
DATE: 1/11/12
DES.:
APPD:
REV.:
PROJECT NO.:
FIGURE NO.: D5-1

DEPARTMENT OF ECOLOGY
State of Washington

PO Box 47600
Olympia, WA 98504-7600

Ecology Seeks Public Comment on Draft Dangerous Waste Permit Re-issuance for:

**Burlington Environmental, LLC**
**Kent Facility**
**Kent, Washington**

Public Comment Period:

**April 5, 2012**
**through May 21, 2012**

**Special Accommodations**

If you require special accommodations or need this document in a version for the visually impaired call the Hazardous Waste and Toxics Reduction Program at 360-407-6700.

Persons with hearing loss, call 711 for Washington Relay Service. Persons with a speech disability, call 877-833-6341.

If you request a public hearing and have a special accommodation need, contact Pallavi Mukerjee by May 14, 2012 at 360-407-7018 for assistance.