



King County

Department of Natural Resources and Parks
Wastewater Treatment Division

Creating Resources from Wastewater

WEST POINT NEWS

Fall 2009

King County's Wastewater Treatment Plants Win National Awards

A commitment to environmental excellence and an outstanding record of compliance with state and federal permits earned the King County Wastewater Treatment Division two prestigious awards from the National Association of Clean Water Agencies in 2008.

Both the county's West Point Treatment Plant and South Treatment Plant in Renton received Platinum Peak Performance awards for attaining 100 percent compliance with their respective National Pollutant Discharge Elimination System permit limits under the federal Clean Water Act and the state's Water Pollution Control Law. Platinum level awards indicate multiple consecutive years of compliance.

To date, West Point Treatment Plant has attained seven years of 100 percent permit compliance with its effluent limits, and South Treatment Plant has attained 11 years.

To comply with state and federal discharge permit effluent requirements, the county's treatment plants must remove various pollutants from the wastewater in order to meet set limits for biochemical oxygen demand, total suspended solids, fecal coliform counts and total residual chlorine. The permit conditions also require each plant to conduct regular sampling and testing of both its untreated and treated wastewater.



Before West Point Treatment Plant was built, raw sewage from the City of Seattle was discharged into Puget Sound off West Point Beach. West Point in 1936



West Point beach today

More information about wastewater discharge permits in Washington State can be found at <http://www.ecy.wa.gov/pubs/wqr019.pdf>

Projects Improve Operations at West Point

As part of WTD's mission to protect public health and the environment, WTD constantly works to maintain and improve its facilities and insure safe, reliable service. At the county's treatment plants, inspection, maintenance, and repair projects occur routinely. Several projects are planned for West Point Treatment Plant to improve plant efficiency and operations and insure compliance with regulations.

Alternative Disinfection System

The West Point Treatment Plant treats on average 100 million gallons of wastewater each day. After removing trash and dirt and biologically treating the water to remove organic solids, the treated wastewater must be disinfected to kill bacteria and pathogens. Currently, chlorine gas is used to disinfect.

To increase system reliability King County will install a disinfection system that uses a sodium hypochlorite solution instead of chlorine gas. Sodium hypochlorite is a safer product than chlorine gas and is similar to household liquid bleach.

In 2009, a back up system delivering sodium hypochlorite was installed to prevent disinfection failures like those experienced with the current system. In 2010, the county plans to install a sodium hypochlorite system and the chlorine gas system will be decommissioned.

Screenings upgrade project

In response to new regulations from the Washington Department of Ecology (DOE), King County is planning a project to improve trash removal from incoming wastewater at West Point. DOE requires finer screening to remove more materials than the current system is designed to handle. This project will benefit biosolids fertilizer quality and improve in-plant processes by removing additional material from the influent stream. The project entered design in July 2009 and is expected to begin construction in late 2012 or early 2013.

You can help limit maintenance costs and improve the treatment process by flushing only human waste and toilet paper. Trash and rags break pumping equipment and can cause sewer overflows.



Trash from drains and toilets can cause overflows and damage equipment. Only human waste and toilet paper should be flushed down toilets.

Waste-to-Energy

King County plans to install waste gas generators to allow on site electricity production.

During the treatment process, methane gas is produced by digesters that treat the organic solids captured from wastewater. Right now West Point uses the gas as a fuel source for influent pumps and as a heat supply. The new cogeneration equipment will also allow for the production of electricity.

King County is currently seeking bids on the construction contract. We will begin the project in 2010 and begin generating energy from waste in 2012.

Using digester gas to run equipment and generate electricity:

- recycles a by-product of the wastewater treatment process
- creates a renewable source of energy
- reduces plant dependence on non-renewable energy sources.

Learn more! Community Meeting

Thursday, October 15 2009, 6:30-8:30 p.m.

Magnolia Community Center

2550 34th Ave W

Seattle, WA 98199-3240

DON'T FLUSH TROUBLE!



These items belong in the TRASH CAN!



Cleaning wipes



Disposable diapers,
nursing pads & baby wipes



Hair



Grease



Condoms



Facial wipes



Tampons and pads

Is it flushable?

The label might say “flushable,” but disposable wipes and other products are clogging our sewer lines and damaging pumps and other equipment.

Not only are these problems expensive to fix, they can also cause raw sewage overflows into homes, businesses and local waterways. So, think trash, not toilets!

To learn more, including how to get rid of things you no longer want or need, visit us on the Web at <http://www.kingcounty.gov/wtd> or call the Wastewater Treatment Division at 206-684-1280 or 711 TTY.

Use the trash can, NOT the toilet!



West Point NPDES Permit Renewed

Every five years, King County's discharge permits must be renewed for each of King County's wastewater treatment plants. These permits are issued under the National Pollution Discharge Elimination System (NPDES), which regulates point sources of discharge under the federal Clean Water Act.

The Washington Department of Ecology renewed the county's discharge permit for West Point Treatment Plant on June 22, 2009 after a DOE review process that included opportunities for public comment. Information about the updated permit can be found on the Web at <http://www.ecy.wa.gov/news/2009news/2009-149.html>



Raw sewage during primary treatment.

Wastewater effluent after secondary treatment.





Department of
Natural Resources and Parks
Wastewater Treatment Division
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SEATTLE WA
PERMIT NO 836

West Point Treatment Plant OPEN HOUSE Saturday, Oct. 3 10 a.m. - 1 p.m.



West Point 1936

Community Open House - all ages welcome!

When: Saturday, October 3, 2009 from 10 a.m.-1 p.m.

Where: West Point Treatment Plant in Seattle's
Discovery Park, 1400 Utah St. W., Seattle, WA

What: Tours available at 10 a.m., 11 a.m., and noon

- Treatment Plant Tours by King County Staff; closed-toe shoes required for tours
 - ▲ Learn about projects at West Point Treatment Plant and the conveyance system
 - ▲ Archeology tours by Burke Museum Staff
 - ▲ Tours of Daybreak Star Indian Cultural Center
- Get information and visit with staff from
 - ▲ Discovery Park
 - ▲ Daybreak Star Indian Cultural Center
 - ▲ Magnolia Historical Society
 - ▲ Burke Museum



Follow signs to the plant from the Government Way park entrance. Some parking is available at the plant. Consider biking, hiking or carpooling to the event.

Alternative Formats Available

206-263-6028 or TTY Relay: 711