

OAK LODGE WATER SERVICES DISTRICT



STORM WATER POLLUTION CONTROL PLAN

for

Oak Lodge Water Services

Revised: October 2019

CHANGE LOG:

Date: October 2019 Initials: LC Change(s):
Added “iron” under Potential Pollutants.

Date: Initials: Change(s):
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**OAK LODGE WATER SERVICES DISTRICT
STORM WATER POLLUTION CONTROL PLAN
FOR WASTEWATER TREATMENT FACILITY
2019 REVISION**

Title Page

Permit SIC Code:
TW

Site Name:
Oak Lodge Water Services District Wastewater Treatment Plant

Site Owner:
Oak Lodge Water Services District

Plan Prepared By:
David Mendenhall, Operations Manager

DEQ Permit File
File Number 62795
503-353-4211

Site Contact:
David Mendenhall, Operations Manager

Site Address:
13750 SE Renton Avenue
Milwaukie, Oregon 97267

Site Mailing Address:
14611 SE River Rd.
Milwaukie, OR 97267

County:

Clackamas County

Plan Date:

October 2019

Certification Statement:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sarah Jo Chaplen
General Manager, CFO

Date _____

Introduction

This document describes the storm water pollution control activities for the Oak Lodge Water Services District (OLWSD) wastewater treatment facility as required by the State of Oregon Department of Environmental Quality (DEQ) in accordance with the District's 1200Z permit. OLWS operates a wastewater treatment plant under National Pollutant Discharge Elimination System (NPDES) waste discharge permit number 100986 issued by DEQ. This Stormwater Pollution Control Plan describes the activities to prevent nonpoint source water pollution from the treatment plant site.

Following a formal facility inspection in April 2014 by DEQ (Jurries), the DEQ requested revision of this plan. This document revises all previous versions of OLWS's Pollution Control Plan.

This Stormwater Pollution Control Plan only covers the permitted activities for discharge of storm water.

Per this permit, care must be taken to prevent the entry of "significant materials" into the storm drain system. Significant materials include, but are not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of CERCLA; any chemical the facility is required to report pursuant to Section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.

In addition to significant materials, no employee shall cause or permit the discharge of process wastewaters, vehicle wash waters or other wastewaters associated with this facility to enter the storm drain system.

Site Description

Located on the Willamette River at River Mile 20.1, the treatment plant has provided wastewater treatment service since 1962. The General Location map is included as figure 1. Stormwater that flows off site moves from the plant site to the Willamette River through a storm sewer system.

The onsite activities include pumping of wastewater, preliminary treatment, biological secondary treatment, clarifiers, disinfection facilities, sludge thickening and dewatering facilities, anaerobic digestion of sludge, biosolids loading and storage, field maintenance facilities, plant maintenance facilities, and administrative support facilities.

The plant structures include covered and uncovered buildings, tanks, pavement, sidewalks, and other facilities to support wastewater treatment activities. The attached site map (figure 2) shows drainage patterns, structures, paved areas, equipment, tanks, buildings, control measures, loading areas, sampling points and location of spill prevention and clean up materials.

Potential Pollutants

Potential pollutants include:

- Oil and grease from parking and road areas
- Suspended and dissolved solids from parking and road areas
- Trace elements such as cadmium, copper, iron, lead, and zinc from parking and road areas
- Bacterial contamination from treatment activities
- Nutrient contamination from treatment activities
- Spills of raw sewage, partially treated sewage, sludges or treated biosolids from treatment activities.

- Solid waste from operations and maintenance activities
- Soil and other erosion related products from materials storage and handling.
- Chemicals from landscaping activities such as fertilizers, insecticides, and herbicides. These chemicals are being phased out due to outsourcing landscape maintenance services.
- Spills of chemicals (such as lubricants, oils, greases, cleaning agents, solvents, sealants, adhesives) from maintenance/repair activities

Storage, disposal and management of these materials is described in the Stormwater Best Management Practices section located on page 7 of this plan.

Impervious Area

The impervious area includes access roads, parking lots and building roofs totaling 7.7 acres. Details are shown on figure 2.

- Area 1 represents 0.7 acres and discharges to Outfall number 1.
- Area 2 represents 0.7 acres and discharges to Outfall number 2.
- Area 3 represents 0.4 acres of administrative parking lot which flows via natural overland flow to the Willamette River.
- Area 4 represents 2.7 acres currently under construction. While this site is under construction it is under a separate 1200C permit issued by Clackamas County. Upon completion (as reflected in Figure 2) this area will flow via overland flow to the Willamette River.
- Area 5 represents 3.2 acres and drains to the onsite sanitary sewer system and is treated prior to discharge into the Willamette River via the plants submerged outfall diffuser.

Receiving Waters

The receiving water for the site's stormwater discharge is the Willamette River.

Monitoring Locations

Grab samples are collected at Outfall number 1 as identified on the General Site Map located on Figure 2 page 10. All sampling and analysis shall be completed per schedule B2. Following a site inspection with DEQ in April 2014 and a subsequent recommendation to discontinue sampling from Outfall 2. The reason for discontinuing sampling from Outfall 2 is based on the fact that no flow discharges from this pipe due to a very deep sump at the upstream manhole. All flow from this portion of the drainage system infiltrates in that manhole versus flowing out of the manhole and into the receiving waterbody.

Based on this change, the District will conduct sampling only from Outfall 1 beginning July 1, 2014. See the attached inspection report (Appendix A) with the recommendation included.

Also note that catchbasin WCT-3822, which is located in drainage Area 5, is offline and does not convey stormwater from the treatment plant. Figure 2 has been updated accordingly to show the status of that catchbasin.

Site Controls

The following Best Management Practices are employed to meet requirements in schedule A.1

- **Minimize Exposure - Containment**
The majority of the treatment and maintenance activities take place in Area 5. All the stormwater flows in this area are contained and routed to the influent pump station. Any operations or maintenance activities with the potential to cause stormwater pollution are performed in Area 5. Vehicle washing and other cleaning activities take place in facilities provided in Area 5.
- **Oil and Grease Disposal/Storage**
Lubricants and fuels are stored in containment units at approved locations and containers in the Service Building in Area 1. Waste oil is disposed into approved containers and recycled at an approved location. All oil containers are located indoors and do not connect to the stormwater system. Spill containment kits are maintained on site. All catch basins are trapped to remove any oil that reaches the stormwater system. Operators are instructed to prevent oil and grease products from entering the stormwater system. All vehicle fueling operations are performed offsite.
- **Waste Chemicals and Materials Disposal**
All waste chemicals for the plant, mostly cleaning supplies, lubricants, landscaping materials, and paint, are collected and sent to the Metro chemical waste facilities. Disposal of any waste product by dumping into the catch basins is prohibited. All chemicals are stored in the Service Building with approved container or methods. Staff will utilize chemicals in accordance with manufactures recommendations. Floor drains in the areas where chemicals are stored are connected to the sanitary sewer system.
- **Erosion and Sediment Control**
Construction, materials handling, materials storage and excavation activities will be conducted in accordance with an approved erosion control plan. Sediments will be prevented from entering the storm system or flowing off site. Erosion control measures shall be in accordance with OLWS erosion control regulations.
- **Debris Control**
Plant staff will control debris by immediate cleanup of trash or other debris generated during plant activities. Plant staff polices the plant site on a daily basis to collect any other debris that enters the site. Catch basins and other collection areas are cleaned annually or as needed.
- **Dust Generation and Vehicle Tracking**
Street sweeping is employed on a regular schedule, and as needed.
- **Diversion**
In the event that a spill or maintenance activity takes place in an area that could reach the river, staff is instructed to block or dam the contaminated flow. Plant staff will use pumps or vactor equipment to remove the contaminated stormwater and discharge it to the sanitary treatment process. Sandbags, pipe plugs, and other diversion devices are available in the Service Building.
- **Covering**
Several treatment areas are covered to minimize the creation of contaminated water flow or slurry. These areas drain to the main pump station and do not provide stormwater pollution risks.
- **Housekeeping**
Plant staff will perform housekeeping activities to avoid any type of pollution from entering the stormwater system. Housekeeping will consist of keeping work areas orderly, immediate cleanup

after work activities, cleanup of any debris or pollution that appears or enters the site, and other activities.

- **Spill prevention and Response**
Plant staff will follow procedures outlined in the Procedures and Schedules portion of this document.
- **Preventive Maintenance**
Preventive maintenance includes monthly inspection of the catch basins and outfalls.
- **Employee Education**
Employee education is completed utilizing this plan as the training outline. Training is done in a classroom setting and includes field identification of the identified areas.
- **Non Stormwater Discharges**
Non Stormwater discharges are prohibited and are responded to as a spill.
- **Schedule E Sector Specific Requirement for Industrial Activity**
Subpart T- Sector T – Treatment Works

E.T.1 Additional Technology –Based Effluent limits

- Whenever possible Stormwater has been routed to the treatment works. Process areas are contained, covered and secured.
- In addition to training covering this plan, employee training is conducted for chemical hygiene, fueling procedures, hazard communication and spill prevention and control.
- Inspections of the facility are conducted daily, catch basin and outfall inspections are conducted monthly and safety/housekeeping inspections are conducted quarterly.

E.T.2 Additional SWMP Requirements

- No process areas are exposed to surface run off.
- Potential pollutant sources are located in process areas that are either covered or contained. In all cases these areas are served by the plant drain system.

E.T.3 Additional Inspection Requirements

- Inspection areas include all areas, roads and surfaces within the plan area.

Procedures and Schedules

Spill Prevention Procedures

All employees bear responsibility to protect the storm drain systems from becoming contaminated. All employees are informed of this plan and instructed as to proper procedures to prevent or correct storm drain system contamination. Waste chemicals such as antifreeze, degreaser, used oil, etc will be recycled or disposed of in an approved manner and in a way that prevents them from entering the storm drain system. Building maintenance, vehicle maintenance and general grounds clean up must be conducted in a manner that will not impact storm drains. If a situation occurs that negatively impacts storm water quality a supervisor must be notified. This includes notification to Oregon Emergency Response System (OERS). An emergency contact list is included as Appendix B.

Clean Up and Notification Procedures

Spills-General Procedures:

In the event of unexpected spill of a potential pollutant in the treatment plant site, the following general procedure should be followed:

In the event of unexpected spill of a potential pollutant in the treatment plant site, the following general procedure should be followed:

1. Block, dam, or divert the pollutant from entering the storm drainage system.
2. Correct the problem.
3. Remove as much of the product before washing down. If the use of water is necessary, direct wash water flow to drains feeding the plant drain system or use the Vactor to remove the silt and debris instead of allowing the material to flow downstream.
4. Clean the areas.
5. If product entered the storm drain system or is suspected to have entered the storm drain system, contact a supervisor. The supervisor will contact DEQ and notify them of the event. Verbal notification to DEQ must occur within twenty-four (24) hours from the time the Permittee becomes aware of any circumstances resulting in non-compliance. If a supervisor is unavailable, follow the District's emergency communications plan. Staff will take all effective remedial measures to prevent or mitigate any off-site pollution.
- 6.

Biosolids or Sludge Spills:

The digesters and biosolids loading area is served by the plant drain system. Any spill from this area will flow into the plant drain and be treated. If a spill occurs in an area served by the storm sewer the following procedure will be used:

1. Contain or correct the spill.
2. Block the storm drains.
3. Remove as much product as possible before washing down. If the use of water is necessary, direct wash water flow to plant drain system or use the VacCon to remove the silt material instead of allowing the material to flow downstream.
4. Clean the area.
5. If product entered the storm drain system or is suspected to have entered the storm drain system, contact a supervisor. The supervisor will contact DEQ and notify them of the problem. Verbal notification to DEQ must occur within twenty-four (24) hours from the time the permittee becomes aware of any circumstances resulting in non-compliance. If a supervisor is unavailable, follow the District's emergency event communications plan. Staff will take all effective remedial measures to prevent or mitigate any off-site pollution.

Vehicle Washing

This activity will occur in areas where the resulting water containing detergents and degreasers will not impact storm drain quality. The designated location for vehicle washing is the paved area in front of the headworks building. Drains in this area return to the treatment plant through the plant drain system.

Pavement Cleaning

If the activity will result in significant amounts of debris and sediment entering the storm drain the following procedures will be used:

1. Remove as much debris and sediment as possible without the use of water.
2. If the use of water is necessary, direct wash water flow to plant drain system or use the Vactor to remove the silt and debris instead of allowing the material to flow downstream.
3. Clean the area.

Preventive Maintenance Procedures

Preventive maintenance will consist of checking system catch basins at least monthly for signs of oil or other debris. Catch basins will be cleaned annually or on as needed basis. Pavement areas will be swept or cleaned as needed to remove potential sediments. Operations staff will perform monthly inspections to assure the stormwater system is not compromised or that a source of non-stormwater is not entering the system.

Recordkeeping and Reporting

Incidents of spills or leaks of significant materials, which could impact storm water runoff, along with corrective actions, surface water discharge (if any) and other relevant information will be included in plant records. Inspection and maintenance activities such as cleaning and repairing storm water control and treatment facilities will be documented and recorded. This information will be included in the annual report.

Employee Education Schedule

New employees receive training on this Storm Water Pollution Control Plan and general stormwater pollution practices as part their new employee orientation or within 30 days of being hired. Existing employees will receive refresher training annually each October.

Appendix A

DEQ Site Inspection Report

Appendix B

Emergency Contact List

Emergency contacts shall be contacted using cell phone or telephone.

Primary Emergency Contact

Operations Manager, David Mendenhall	971-940-6264 cell 503-353-4211
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Secondary Emergency Contact

Pollution Control Specialist, Marty Guenther	503-753-9689 cell 503- 353-4218
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Local Emergency Services

Fire Department	911
Clackamas County Sherriff	911
Clackamas County Emergency Management	503-655-8211

Regulatory Agencies

Oregon DEQ	503-229-5349
Oregon Emergency Response System (OERS)	800-452-0311
OERS local	503-378-6377
US EPA Region 10	206-553-1200
National Response Center	800-424-8802