



City of Seattle

Department of Planning & Development
D. M. Sugimura, Director

**CITY OF SEATTLE
ANALYSIS AND RECOMMENDATION OF THE DIRECTOR
OF THE DEPARTMENT OF PLANNING & DEVELOPMENT**

Application Number: 3014631

Applicant Name: King County, Department of Natural Resources,
Wastewater Treatment Division

Address of Proposal: 1400 Discovery Park Blvd.

Council File Number: CF 312839

SUMMARY OF PROPOSED ACTION

Council Land Use Application to install 1,200 sq. ft. of tanks and equipment to upgrade a bio-gas fuel treatment system and reduce engine emissions. Project also includes less than 300 cu. yds. of grading.

The following approval is required:

Council Conditional Use for reconfiguration of sewage treatment plant (SMC 23.51A.002.D)

SEPA DETERMINATION: Exempt* DNS MDNS EIS

DNS with conditions

DNS involving non-exempt grading, or demolition,
or involving another agency with jurisdiction.

*On January 28, 2013, King County Environmental Planning Unit issued a Determination that the above project is Categorically Exempt under SEPA and no further environmental review is required.

BACKGROUND DATA

Site and Vicinity Description

The West Point Treatment Plant (the Plant) is located about four miles northwest of downtown Seattle in Discovery Park on the shores of Puget Sound. It is part of King County's regional system that treats wastewater for about 1.5 million people and covers 420 square miles in the Puget Sound region. West Point Plant treats wastewater and stormwater from homes, offices, schools, agencies, businesses and industries in Seattle, north King County, south Snohomish County, and some areas of Lake Washington.

The history of the Plant actually began in 1958, when voters in Seattle and King County created Metro, an agency charged with developing and operating a regional wastewater treatment system.

In 1966, construction of a primary treatment plant was completed at West Point.

In 1994, following a voter approved proposal to merge Metro with King County, King County assumed responsibility for West Point Plant.

In 1991, to comply with the 1972 federal Clean Water Act, Metro began an expansion of the Plant to provide secondary treatment. Expansion and upgrading to secondary treatment was completed in 1996. The average capacity for wet weather flow is 133 million gallons per day. The maximum capacity is 440 million gallons per day during peak storms.

West Point Treatment Plant is surrounded by retaining walls, berms, and extensive native landscaping to blend in with the surrounding Discovery Park.

Proposal Description

This project is required to comply with a recent compliance settlement order from Puget Sound Clean Air Agency (PSCAA) to improve the quality of the onsite generated biogas (methane). The cleaner biogas fuel will continue to be utilized in the treatment plant's four existing Raw Sewage Pump Engines resulting in reduced air emissions.

The proposed project will involve minimal excavation and will utilize existing equipment at the West Point Treatment Plant with the addition of a single biogas treatment system, a new air-to-fuel ratio controller for each engine, and a 3-way catalyst for each engine. The new biogas treatment system will be constructed on 4 main skids with an approximate footprint of 1,200 square feet and the 3-way catalyst will be located in a housing attached in line to each Raw Sewage Pump engine exhaust pipe. The improvements require a short retaining wall to match roadway grade. The new and reconfigured equipment will be located adjacent to the existing digesters and within the Treatment Plant's perimeter fencing area next to the Raw Sewage Pump engine.

PUBLIC COMMENT

Public notice was issued on February 28, 2013 and the comment period ended on March 13, 2013. One comment was received from Seattle Parks and Recreation requesting verification of the exact location of the proposed project.

ANALYSIS—COUNCIL CONDITIONAL USE

The Seattle Land Use Code provides as follows: “The decision on an application for the expansion or reconfiguration of a sewage treatment plant is a Type IV Council land use decision.” (SMC § 23.51A.002 D) The Code then sets forth specific criteria that shall be considered in evaluating and approving, conditioning or denying proposals for the expansion or reconfiguration of an existing sewage treatment plant.

D. Sewage Treatment Plants. The expansion or reconfiguration (which term shall include reconstruction, redevelopment, relocation on the site, or intensification of treatment capacity) of existing sewage treatment plants in single-family zones may be permitted if there is no feasible alternative location in a zone where the use is permitted and the conditions imposed under subsections 23.51A.002.D.3 and D4 are met.

2. Need for Feasible Alternative Determination. The proponent shall demonstrate that there is no feasible alternative location in a zone where establishment of that use is permitted.

a. The Council’s decision as to the feasibility of alternative location(s) shall be based upon a full consideration of the environmental, social and economic impacts on the community, and the intent to preserve and to protect the physical character of single-family areas, and to protect single-family areas from intrusions of non-single-family uses.

There is no feasible alternative to locating the proposed new biogas treatment equipment on the West Point site as it is an element of an existing larger sewage treatment process. The equipment must be located adjacent to the existing digester lines. The site is physically isolated from other non-single-family homes.

Environmental Impacts

The environmental impacts by the project are temporary construction impacts that have been identified and reviewed the proponent’s SEPA document, including odor, height, exhaust emissions from construction vehicles and fugitive dust. No long term environmental impacts are anticipated from the proposal

Social Impacts

The proposed new equipment is completely contained within the interior of the existing Sewage Treatment Plant and does not exceed the height of surrounding structures. None of the equipment will exceed 28 feet in height. The building is screened by high retaining walls, berms and native plantings on the outer perimeters of the Plant. No social impacts are anticipated from the proposal.

Economic Impacts

The construction of the Raw Sewage Pump Engine Emissions Project Works will create short term construction jobs in the region. No long-term economic impacts are expected from the proposal.

Intent to Protect the Physical Character of Single-Family Areas

The Plant is located within Discovery Park. Residential housing is further than one-half mile away. The proposed equipment is within the perimeter walls of the existing West Point Treatment Plant.

Protect Single Family Areas from Intrusions of Non-Single-Family Uses

The proposed new equipment will have no impacts on single-family uses due to its great distance from such uses.

Intrusion of Non-Single-Family Uses Shall not Increase Under the Proposed Project

The proposed new biogas treatment equipment will have no impacts on single-family uses. The new equipment will be within the footprint of the existing Plant.

b. The determination of feasibility may be the subject of a separate application for a Council land use decision prior to submission of an application for a project-specific approval if the Director determines that the expansion or reconfiguration proposal is complex, involves the phasing of programmatic and project-specific decisions or affects more than one site in a single-family zone.

The West Point Treatment Plant biogas project is not a complex proposal. There is no change in the ability/capacity to treat wastewater. All wastewater treatment will remain as it currently exists; there is no footprint increase to any wastewater treatment operations. The project is a mandated technological update that will upgrade the quality of the onsite biogas to comply with a compliance settlement agreement with the PSCAA.

The reconfiguration does not affect more than one site in a single-family zone. The West Point Treatment Plant has been in its present 32 acre configuration since the late 1990's, since the secondary treatment upgrades.

A separate determination of feasibility does not appear warranted here.

Conditions for Approval of Proposal.

a. The project is located so that adverse impacts on residential areas are minimized;

The proposed new equipment is completely contained within the interior of the Treatment Plant and does not exceed the heights of surroundings structures. None of the equipment will exceed 28 feet in height. Existing lighting will be used in the outdoor areas or will be focused on the new equipment only; additional site lighting is currently not planned with this installation. The Plant is located within Discovery Park and residential housing is more than one-half mile away from the site.

b. The expansion of a facility does not result in a concentration of institutions or facilities that would create or appreciably aggravate impacts that are incompatible with single-family residences.

This project is not an expansion of the facility. There is no change in the ability/capacity to treat wastewater. All wastewater treatment will remain the as it currently exists; there is no footprint increase to any wastewater treatment operations. The project is a mandated technological update that will upgrade the quality of the onsite biogas to comply with a compliance settlement agreement with the PSCAA.

c. A facility management and transportation plan is required. The level and kind of detail to be disclosed in the plan shall be based on the probable impacts and/or scale of the proposed facility, and shall at a minimum include discussion of sludge transportation, noise control, and hours of operation. Increased traffic and parking expected to occur with use of the facility shall not create a serious safety problem or a blighting influence on the neighborhood;

The Treatment Plant's Transportation Plan, developed as part of the 1996 secondary upgrade project conditions, will not change.

Sludge transportation would not be affected by this project.

The West Point Treatment Plant has a Facility Plan¹ registered with the Department of Ecology and a Transportation Plan developed as part of the secondary upgrade.

There will be a temporary, short-term increase in traffic during construction. The equipment is built off-site and will be delivered on skids to be placed on new concrete pads and bolted into place. The delivery trucks would require pre-delivery route analysis for obstructions/clearance, turning radii, and feasibility. One or two new truck trips are anticipated per year to change filter media.

There will be some construction noise during normal working hours and will comply with Seattle's noise ordinance. New equipment will generate some noise, but would not be above existing ambient noise levels.

Hours of operation - The Plant is operated continuously.

No increased truck or passenger vehicle trips are anticipated, except for during the construction phase of the project when a minor amount of additional traffic would be expected. Truck traffic will be by the access road from West government Way. Delivery of modular units would be few in number, but would require pre-delivery route analysis for obstructions; clearance and turning radii feasibility.

¹ West Point Secondary Treatment Facilities Project. Addendum to the March 1989 West Point Facilities Plan. Municipality of Metropolitan Seattle. Publication 408. October 1990.

d. Measures to minimize potential odor emission and airborne pollutants including methane shall meet standards of and be consistent with best available technology as determined in consultation with the Puget Sound Clean Air Agency (PSCAA), and shall be incorporated into the design and operation of the facility;

West Point Treatment plant is regulated under PSCCA's Air Operating Permit #10088. This project is directly driven by a PSCCA compliance deadline. The project was designed to meet Best Available Control Technology (BACT) as approved by PSCCA. The biogas produced from the digestion of the wastewater is piped to the raw sewage influent pump engines where the engines burn the biogas to power the pumps. The project will improve the exhaust emissions of the raw sewage influent pump engines as well as the exhaust of any other equipment that receives biogas from the upgraded biogas system. The proposed project will not increase the generation of biogas, nor increase odor or fugitive emissions.

e. Methods of storing and transporting chlorine and other hazardous and potentially hazardous chemicals shall be determined in consultation with the Seattle Fire Department and incorporated into the design and operation of the facility;

The project does not involve chlorine or other hazardous chemicals.

f. Vehicular access suitable for trucks is available or provided from the plant to a designated arterial improved to City standards;

This project will not alter the existing access route via W. Government Way. .

g. The bulk of facilities shall be compatible with the surrounding community. Public facilities that do not meet bulk requirements may be located in single-family residential areas if there is a public necessity for their location there;

The upgraded biogas system will be located within the perimeter berm of the Plant. The system is comprised of a siloxane removal skid, a chiller skid, a gas conditioning skid, and a hydrogen sulfide removal skid, along with a free-standing control panel. The new skids will not be visible when looking into the plant from the outside.

h. Landscaping and screening, separation from less intensive zones, noise, light and glare controls and other measures to ensure the compatibility of the use with the surrounding area and to mitigate adverse impacts shall be incorporated into the design and operation of the facility.

The existing site is 100% impervious surface. It is not feasible to install landscaping where construction will occur because operational facilities are located in, and around the vicinity of the project site which is located within the interior of the Plant. There is existing landscaping surrounding the Plant that serves to screen noise and light which was provide as a condition of the 1996 secondary upgrade approval.

i. No residential structures, including those modified for nonresidential use, are demolished for facility expansion unless a need has been demonstrated for the services of the institution or facility in the surrounding community.

No residential structures will be affected by this project.

RECOMMENDED DECISION—COUNCIL CONDITIONAL USE

DPD recommends approval of the proposal.

RECOMMENDED CONDITIONS—COUNCIL CONDITIONAL USE

None recommended.

Signature: _____ (signature on file) Date: June 6, 2013

Marti Stave, Senior Land Use Planner
Department of Planning & Development

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