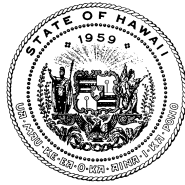


DAVID Y. IGE
GOVERNOR OF HAWAII



BRUCE S. ANDERSON, Ph.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
File:

April 29, 2019

51-80 and 51-81 ROD.docx

Record of Decision

Applicant: City and County of Honolulu – Department of Environmental Services

CWSRF Project Nos.: C150051-80
C150051-81

CWSRF Project Names: Honouliuli WWTP Secondary Treatment Phase 1A – Sludge Drying and Related Facilities
Honouliuli WWTP Secondary Treatment Phase 1B – Secondary Compliance Facilities

I have reviewed and evaluated, in light of the overall public interest, the documents and factors concerning the permit application for the proposed action, as well as the stated views of interested agencies and the public. In doing so, I have considered the possible consequences of the proposed action in accordance with regulations published in 40 Code of Federal Regulations (CFR) Part 230.

Project Name:

Honouliuli/Waipahu/Pearl City Wastewater Facilities Plan: Honouliuli Wastewater Treatment Plant Secondary Treatment and Facilities

Proposing Agency:

City and County of Honolulu (CCH) – Department of Environmental Services (ENV)
1000 Uluohia Street, Suite 308, Kapolei, HI 96707
Lori Kahikina, P.E., Director

Accepting Authority:

CCH – ENV
1000 Uluohia Street, Suite 308, Kapolei, HI 96707
Lori Kahikina, P.E., Director

Location:

Ewa District, Oahu, Hawai'i

Project Area:

The project area includes the existing Honouliuli WWTP site and the recently acquired parcel adjacent to the existing WWTP to the north and east (expansion area).

Tax Map Keys:

Honouliuli WWTP: (1) 9-1-013:007 and (1) 9-1-069:004
Honouliuli WWTP Expansion Area: (1) 9-1-069:003

Brief Description of the Action:

The evaluation described in this Final Environmental Impact Statement (FEIS) is focused on the upgrade of the Honouliuli WWTP required to comply with a First Amended Consent Decree. This FEIS for the Honouliuli WWTP is intended to inform the public and various stakeholders of potential impacts the project may have on the environment and has been prepared in accordance with the Hawaii Revised Statutes Chapter 343.

This project proposes to upgrade and expand the existing Honouliuli WWTP to provide secondary treatment and accommodate projected wastewater flows. The project may also result in a future increase in effluent discharged to Mamala Bay via the Barbers Point Deep Ocean Outfall.

Regardless of which treatment alternative is selected, additional improvements at the Honouliuli WWTP are proposed for the following: Central Laboratory, Ocean Team Facilities, Administration Building, Operations Building, Leeward Region Maintenance, Central Shops, Warehouse, truck wash, central supervisory control and data acquisition operations, septage receiving station, odor control, grounds keeping, janitorial service and security, and Honouliuli Water Recycling Facility. This FEIS also addresses the potential siting of new facilities at the Honouliuli WWTP to help consolidate island-wide wastewater system administrative services.

Improvements to the Honouliuli major sewer conveyance system will be the subject of separate, subsequent environmental review documents.

Significant Beneficial and Adverse Impacts and Proposed Mitigation Measures:

Short-Term Impacts: The proposed project would result in some unavoidable short-term impacts, as described below. These potential impacts are generally minor and would be further minimized through the implementation of BMPs.

- Soils – Construction activities would result in unavoidable impacts to soils in the project area due to grading and excavation activities and due to the potential for localized contamination of soils from construction activities (i.e., accidental release of construction equipment fluids). Construction methods to preserve the integrity of existing facilities would be implemented and construction equipment would be maintained in good working condition to reduce the potential for accidental spills. In addition, erosion and sedimentation controls would be implemented to reduce impacts to the natural environment. Soil which is not immediately used for backfilling would be stockpiled and covered or otherwise protected to prevent erosion or sedimentation. In addition, temporary seeding and mulching may be used to minimize soil erosion and provide soil stabilization on slopes.
- Groundwater – Construction activities could potentially impact groundwater if encountered during construction. Mitigation measures would be implemented during construction activities to preserve the integrity of existing infrastructure and keep construction equipment in good working condition to prevent accidental spills. Also, dewatering may be necessary for construction below the groundwater table, if necessary, and the construction contractor would be required to include provisions for dewatering. Appropriate BMPs, monitoring of groundwater for contaminants and careful site preparation would be utilized to minimize adverse impacts. Proposed designs would comply with stormwater runoff requirements, pursuant to the Clean Water Act.
- Wetlands – It is anticipated that an abandoned irrigation ditch located on the project site would need to be filled to construct the various site components in that location. All work would be performed in accordance with Federal, State, and CCH regulatory requirements

including, but not limited to the Section 404 of the Clean Water Act, if applicable. The project team would consult with the Army Corps of Engineers, U.S. Fish and Wildlife, DLNR Commission on Water Resource Management, CCH, and other regulatory agencies, as necessary, to determine whether filling the former irrigation ditch is jurisdictional under current regulations. If the ditch is determined to be jurisdictional by one or more agencies, then the project team would work with the appropriate agencies to determine acceptable mitigation options.

- Flora – Vegetation would need to be removed within the expansion property area for construction activities. Native Hawaiian plants are recommended for landscaping within the project area, including species such as: ko'oloa'ula, kou, 'ilie'e, and 'a'ali'i to minimize unavoidable impacts to vegetation and trees.
- Air Quality - Construction-related air quality impacts would result from site preparation and earth moving activities, the movement of construction vehicles on unpaved areas of the site, emissions from construction equipment, and construction of structures. The construction contractor is responsible for complying with DOH regulations which prohibit visible dust emissions at property boundaries. Although short-term air quality impacts are anticipated to be less than significant, the presence of nearby residences and buildings near the project site suggests that open-air areas and naturally ventilated structures could be impacted by dust in spite of compliance with these regulations. BMPs to control dust emissions would be implemented to minimize visible fugitive dust emissions at the property line. The BMPs would include watering of active work areas, using wind screens, keeping adjacent paved roads clean, and covering open-bodied trucks. Measures to control construction emissions from equipment and vehicles can also be considered if necessary, such as using newer equipment and reducing on-site truck idling time. In addition, increased vehicular emissions due to disruption of traffic by construction equipment and/or commuting construction personnel can be alleviated by moving construction materials and workers to the site during off-peak traffic hours.
- Noise – Construction noise would be unavoidable during the project construction period. Short-term increases in noise levels would result from construction activities, vehicles and equipment. The use of muffled equipment, noise barriers, and restrictions on construction hours, as well as adherence to DOH regulations on noise mitigation, would minimize construction and traffic-related noise. For construction work to be performed at night or on weekends and holidays, a Community Noise Variance permit from the DOH would be required if it exceeds regulatory noise levels.
- Traffic – An unavoidable slight increase in entering and exiting proposed project traffic is anticipated in some areas during construction activities. Therefore, roadway improvements, including road widening, are recommended at the affected intersections.
- Visual and Aesthetic Resources – During construction activities, the presence of cranes and other heavy construction equipment would alter a portion of the viewshed from nearby buildings within the WWTP site. In addition, the proposed improvements would alter the viewshed of the surrounding area by adding new three-dimensional, man-made features. During construction, fencing surrounding the construction site may be provided as needed to provide a visual screen. Any construction impacts regarding visual aesthetics are expected to be short-term and would cease after construction.

Long-Term Impacts: The following unavoidable long-term impacts may result from development of the proposed project.

- Soils – Following upgrades to the existing WWTP, the potential would still remain for wastewater spills to occur which could result in soil contamination. Soils stability inspections in the vicinity of the foundations of proposed facilities would need to be conducted periodically.
- Water Quality – The proposed project will provide wastewater treatment facilities needed to comply with secondary treatment standards. It is also anticipated to have beneficial impacts due to expansion of the WWTP to handle flows from future population increases and development.
- Sludge – There will be an increase in the amount of sludge that is produced, handled, and disposed of due to the upgrade to secondary treatment.
- Groundwater – The stormwater detention/infiltration basins proposed at several locations within the project area may have an effect on the local groundwater table. However, these basins would be designed as part of a larger stormwater BMP system and are therefore anticipated to enhance the quality of stormwater recharge to groundwater. In addition, localized effects on groundwater levels may occur due to the potential reduction to local groundwater recharge.
- Surface and Coastal Waters – There is a potential for indirect impacts due to additional development allowed by sewerage areas, including an increase in wastewater flow to the Honouliuli WWTP and effluent discharged to Mamala Bay.
- Air Quality – The primary air quality concern associated with the proposed project could be potential odor nuisances. The proposed alternatives include odor control for some of the existing facilities and all new facilities. Compliance with all applicable ambient standards, including odor in terms of H₂S concentration levels, would be demonstrated 1) during the final design stage of the project when the air permit is modified for applicable criteria pollutants and 2) after the completion of construction with an ambient monitoring program for odor. There is potential to increase on-site stationary and mobile source emissions due to an increase in the plant operational capacity. However, the possibility of nuisance odor from the Honouliuli WWTP would likely be reduced by the upgrade to the odor control system, which would help minimize nuisance odor downwind of the Honouliuli WWTP. Operation of the plant under future proposed conditions would involve installation of new standby generators to provide expanded emergency power supply, which may cause potential short-term increase in combustion source emissions. However, given their emergency usage purposes, potential air quality impacts would be short in duration and would be unlikely to cause significant air quality impacts. Thus, mitigation measures would unlikely be necessary during the operational period. If a CHP facility is incorporated at the Honouliuli WWTP, it would need to be permitted according to State and Federal air regulations, as operation of the facility has the potential to produce additional emissions over the long term. The potential air emissions from the facility cannot be defined at this time, since the design is currently conceptual, but would be specified in air quality permit applications.
- Traffic – An unavoidable slight increase in entering/exiting project traffic is anticipated during peak hours as a result of the proposed project. Road improvements are proposed to minimize long term local impacts to traffic.
- Noise – The adverse noise impacts resulting from the proposed activity may include increased vehicular noise due to additional vehicles traveling to and from the facilities, and increased stationary noise resulting from new equipment at the facilities. During the operation of the project, compliance with the DOH property line noise limits for fixed

machinery would also be required, and it is expected that the long-term noise impacts associated with the proposed improvements would be minimized by the adherence to the DOH rules regarding noise limits for fixed machinery. Mitigation measures include soundproofing or muffling equipment noise such that noise levels remain below the maximum allowable levels. All CCH wastewater facilities must comply with the noise requirements of the DOH, pursuant to Chapter 46, Title 11, Community Noise Control, HAR.

- Energy Consumption – Implementation of the proposed project would increase demand in energy consumption as all alternatives involve operation of new pumps, blowers, and other equipment required to convey and treat wastewater, which would require use of fuel and electricity. There is a potential for energy recovery from digester gas or by utilizing new emerging technology for gasification of sewage sludge. CCH is currently evaluating alternatives to use the digester gas for energy recovery.

Alternatives Considered:

Alternatives considered for the WWTP upgrade include the following treatment upgrades:

- No Action Alternative
- Option 1 – Expand Existing Trickling Filter/Solids Contact (TF/SC) Process to Full Capacity
- Option 2 – Replace Existing TF/SC Process with Activated Sludge (AS) to Full Capacity
- Option 3 – Add to Existing TF/SC Process with AS to Full Capacity

Unresolved Issues:

Project descriptions for every treatment option offer conceptual designs based on available information. It is likely that adjustments will need to be made as the detailed design of the selected option proceeds. As such, the conceptual designs should be regarded as estimates and approximations.

The proposed site layout presented in this FEIS is intended to conceptualize the potential for land use at the Honouliuli WWTP site for the ultimate build-out in Year 2050. It is anticipated that further changes to the site layout, support structures, and buildings will occur as part of later detailed design efforts and results which may vary from those documented herein and could require additional environmental review in the future.

The Honouliuli Wastewater Basin Odor Control Project is ongoing. The project scope addresses odor and corrosion concerns in both the WWTP and tributary collection system. Design of improvements is anticipated to be completed by mid to late 2016. The required environmental review associated with the Honouliuli WWTP upgrades are included in the FEIS while future improvements outside the WWTP will be the subject of additional environmental review documents to be prepared and submitted when the collection system improvements are better defined.

The project assessed in this FEIS only concerns the upgrade and expansion of the Honouliuli WWTP to provide secondary treatment and accommodate projected wastewater flows, as well as addresses the potential relocation of non-process facilities that support island-wide wastewater system functions that are currently located at Sand Island WWTP to the Honouliuli WWTP site. The required environmental review associated with the Honouliuli WWTP upgrades, including estimating the flows that will be conveyed to the WWTP, is included in this FEIS. The improvements to the conveyance system will be the subject of separate environmental review documents to be prepared and submitted when the system improvements are better defined.

Compatibility with Land Use Plans and Policies:

State Land Use – The project site is located in the following state land use districts: Urban and Agriculture. The proposed uses are permissible uses in these districts.

Zoning – Zoning of the site is Restricted Agriculture District (AG-1) and Intensive Industrial District (I-2). The proposed uses are permissible uses in the Industrial zoning but will require a Special Use Permit or Land Use Change for construction on the Agriculture district land.

Compatibility with State and Local Land Use Plans – The project alternatives generally conform with the various relevant land use plans, policies and regulatory controls, including, but not limited to, the Hawaii State Plan, Recreation State Functional Plan, Historic Preservation State Functional Plan, State Coastal Zone Management Program, Ocean Recreation Management Plan, and the CCH's General Plan, Primary Urban Center Development Plan, Central Oahu Sustainable Communities Plan, and Ewa Development Plan.

Flood Insurance Rate Map – The Project Area is not located within a flood zone.

Required and Potential Permits and Approvals:

Required and potential clearances and permits needed from the various Federal, State and CCH agencies include but are not limited to the following:

Federal:

U.S. Army Corps of Engineers
Department of the Army Permit (CWA Section 404; Rivers and Harbors Act Section 10)
U.S. Environmental Protection Agency:
CWA Section 301(h) Review
FAA
Air Traffic Flight Path Approval

State of Hawaii:

Department of Business, Economic Development and Tourism, Office of Planning:
Coastal Zone Management Consistency Determination

Department of Health (DOH):

Air Pollution Control Permits (Covered Source Permit and/or Noncovered Source Permit)
Construction Plan Review and Approval
Noise Variance Permit
Clean Water Branch (CWB) Individual NPDES Form – Coverage for Discharge of Municipal Wastewater from New and Existing Publicly Owned Treatment Works (Modification)
CWB NOI Form – Coverage under the NPDES General Permit for Storm Water Discharges Associated with Construction Activities
CWB NOI Form – Coverage under the NPDES General Permit for Discharges Associated with Construction Activity Dewatering (if required)

Department of Land and Natural Resources – Commission on Water Resource Management
Stream Channel Alteration Permit (SCAP)

Land Use Commission
Special Use Permit

Record of Decision
April 29, 2019
Page 7 of 7

City and County of Honolulu (CCH):
Board of Water Supply (BWS):
Water and Water System Requirements
Construction Plan Review and Approval

Department of Transportation
Street Usage Permit for Construction

Department of Environmental Services:
EIS Approval
Permission to Discharge into CCH storm drain system (required for CWB NPDES stormwater permits)

Department of Planning and Permitting (DPP):
Building Permit
Conditional Use Permit
Construction Plan Review and Approval
Public Infrastructure Map Revision
Dewatering Permit
Electrical Permit
Flood Certification
Grading and Erosion Control Plan Review
Grading, Grubbing, and Stockpiling Permit
Height Variance
Plumbing Permit
Shoreline Setback Variance
Sidewalk/Driveway Work Permit
Special Use Permit
Trenching Permit

Other:
Utility Companies
Utility Service Requirements
Permit Regarding Work on Utility Lines
OR&P RR Crossing
Traffic Control Plans

Should you have any questions, please call Jon Nagato of our Branch at 586-4294.

Sincerely,

SINA PRUDER, P.E., CHIEF
Wastewater Branch

JN:sp