

STATE OF HAWAII

DEPARTMENT OF HEALTH
NOTICE OF VIOLATION AND ORDER

<p>TO: U.S. Department of the Navy Navy Region Hawaii 850 Ticonderoga Street, Suite 110 (Attn: N465) JBPHH, Hawaii 96860</p> <p>Attention: Sherri R. Eng Director, Regional Environmental Department</p> <p>Respondent</p>	<p>NOVO No. 2022-CW-EO-37 <i>Please write this NOVO number on all correspondence</i></p> <p>Re: Violation of National Pollutant Discharge Elimination System (NPDES) Permit, Permit No. HI0110086</p> <p>Facility: NAVFAC Hawaii Wastewater Treatment Plant</p>
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The Department of Health (**DOH**) issues this Notice of Violation and Order (**NOVO**) under Hawaii Revised Statutes (**HRS**) Chapters 91 and 342D based on findings from the July 26, 2022 inspection and self-disclosures by Respondent of discharge limitation exceedances for the NAVFAC Hawaii Wastewater Treatment Plant located at Fort Kamehameha Road and Seaman Avenue, JBPHH, Hawaii 96853 (**Facility**) and subsequent file reviews performed by the DOH, Clean Water Branch (**CWB**).

Attached as exhibits are:

- The NPDES Permit No. HI 0110086 issued to U.S. Department of the Navy dated April 9, 2020 (**Permit**, Exhibit A);
- The Permit , as modified on August 12, 2021 (**Modified Permit**, Exhibit B);
- The NPDES Permit issued to U.S. Department of the Navy dated October 7, 2011 (**Expired Permit**, Exhibit C);
- Inspection Report No. PA2005 from the July 26, 2022 inspection (Exhibit D);
- Discharge Monitoring Report Deficiency and Violation Report for NAVFAC (Exhibit E).

This case deals only with violations alleged below. The DOH may bring other cases for other violations. This case does not limit cases by any other public agency or private party.

Statutes/Rules

Nature of the Violation

<p>HRS §342D-9, HRS §342D-31, HRS §342D-50(a), HRS §342D-50(d)</p>	<p>Naval Facilities Engineering Command (NAVFAC) Hawaii Wastewater Treatment Plant</p> <p>The U.S. Department of the Navy owns the Facility that is operated by NAVFAC. Respondent was issued the Permit for the Facility, which authorizes the discharge of treated wastewater to Mamala Bay subject to final effluent limits and reporting requirements. The Permit became effective on June 1, 2020, and expires on May 31, 2025. The Permit was modified on August 12, 2021.</p> <p>Respondent has self-reported numerous NPDES effluent limit exceedances between January 2020 and July 2022. The Facility has reported enterococci effluent limit exceedances regularly beginning January 2020 while still covered under the Expired Permit.</p> <p>On July 26, 2022, the DOH-CWB conducted an inspection of the Facility, in response to notification from Respondent of an unanticipated bypass. Based on observations made during the inspection, the DOH confirmed an unapproved bypass of effluent. Further, the DOH finds that the Facility is not operated and maintained properly.</p> <p>HRS §342D-9 authorizes the Director of Health to order measures to be taken to correct violations and impose penalties for violations of HRS Chapter 342D.</p> <p>HRS §342D-31 states that “the [D]irector is authorized to impose by order the penalties specified in [HRS §]342D-30.”</p> <p>HRS §342D-30 states that violators shall be fined not more than \$25,000 per day for each separate offense and that each day of each violation constitutes a separate offense.</p> <p>HRS §342D-50(a) states that “[n]o person, including any public body, shall discharge any water pollutant into state waters, or cause or allow any water pollutant to enter state waters except in compliance with this chapter, rules adopted pursuant to this chapter, or a permit or variance issued by the [D]irector.”</p> <p>HRS §342D-50(d), states that “[n]o person, including any public body, shall violate any rule adopted pursuant to this chapter or any permit or variance issued or modified pursuant to this chapter.”</p>
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1. Discharges Exceeding Final Effluent Enterococci Limitations

Part A.1.a of the Permit and the Expired Permit establish average monthly and maximum daily discharge limitations for enterococci. The Modified Permit does not provide for less stringent enterococci discharge limitations than those set forth in the Permit (Exhibits A, B, and C).

Respondent submitted Discharge Monitoring Reports (DMRs) reporting average monthly enterococci effluent limit exceedances for the monthly monitoring periods ending:

January (31), February (29), March (31), April (30), May (31), June (30), July (31), August (31), September (30), October (31), November (30), and December (31) 2020 (366 days);

January (31), March (31), April (30), May (31), June (30), July (31), August (31), September (30), and December (31) 2021 (276 days); and

April (30), May (31), June (30), and July (31) 2022 (122 days);

for a total of 764 days (Exhibit E).

Based on the details above, the DOH finds that Respondent violated HRS §342D-50(a) on 764 counts by discharging wastewater from the Facility in exceedance of NPDES effluent limits between January 2020 and July 2022.

2. Discharges Exceeding Final Effluent dichloro-diphenyl-trichloroethane (DDT)/ dichloro-diphenyl-dichloroethane (DDD)/ dichloro-diphenyl-dichloroethylene (DDE) Limitations

Part A.1.a of the Permit and the Expired Permit establish average annual and maximum daily discharge limitations for 4,4'-DDT, 4,4'-DDE, and 4,4'-DDD represented as DDT (Exhibit B). The Modified Permit does not provide for less stringent DDT discharge limitations than those set forth in the Permit.

Respondent submitted DMRs reporting that effluent discharged from the Facility exceeded the daily maximum DDT effluent limit in August 2020 and January 2021, a total of two days (Exhibit E).

Based on the details above, the DOH finds that Respondent violated HRS §342D-50(a) on two counts by discharging wastewater from the Facility in exceedance of NPDES effluent limits between August 2020 and January 2021.

3. Unauthorized Bypass of Sand Filters Due to Opened Bypass Valve

Paragraph 17.b of the Standard NPDES Permit Conditions (Exhibit A) prohibits unanticipated bypasses. Exceptions to the bypass prohibition is allowable under certain circumstances detailed in Paragraph 17.c of the Standard NPDES Permit Conditions, including bypasses necessary to conduct essential maintenance for operational purposes.

On July 12, 2022, Respondent notified the DOH of an ongoing partial bypass of the sand filters at the Facility. Respondent stated that the valve for the sand filter bypass pipe was found to be in a partially open position. Respondent stated that the duration of the bypass was unknown (Exhibit D). Respondent does not know why the valve was partially open nor when it was opened. Further, Respondent stated that the valve was frozen and could not be closed.

During the July 26, 2022 inspection, DOH-CWB inspectors confirmed the partial bypass of the sand filters (Exhibit D). The bypass was ongoing until Respondent reported that the sand filter bypass line was plugged on July 28, 2022 (Attachment 2 of Exhibit D). This notice of violation only includes a finding of 16 days when the bypass was ongoing between notification by the Respondent on July 12, 2022, and the plugging of the line on July 28, 2022. The unauthorized bypass is believed to have occurred for a period prior to July 12, 2022, but could not be confirmed at the date of the issuance of this action. The DOH reserves the right to take action for unauthorized bypasses and days of violations not specifically identified in this Notice of Violation.

Based on the details above, the DOH finds that Respondent violated HRS §342D-50(a) on 16 counts for an unauthorized bypass at the Facility.

4. Failure to Operate and Maintain Aeration Basin Treatment Units

Paragraph 9 of the Standard NPDES Permit Conditions associated with the Facility (Exhibit A) requires the Permittee to at all times properly operate and maintain all facilities and systems of treatment and control to achieve compliance with the conditions of the Permit.

During the July 26, 2022 inspection, DOH-CWB inspectors observed significant degradation of the concrete walls within aeration basin no. 1, exposing corroded rebar. The degradation was first observed during an inspection of the Facility conducted on October 6, 2021 (Attachment 3 of Exhibit D). The damage has intensified and has been ongoing since at

least October 6, 2021. Further, the extent of damage is unknown as well as the condition of the other aeration basins. Respondent has not provided any formal plans to address the damage to the aeration basins and its potentially compromised structural integrity. The damaged aeration basins have been offline and improperly operated and maintained from before October 6, 2021 to July 26, 2022 for a total of more than 196 days.

Based on the details above, the DOH finds that Respondent violated HRS §342D-50(d) on 196 counts by failing to operate and maintain the aeration basins at Facility in compliance with the Permit.

5. Failure to Operate and Maintain Sand Filter Bypass Valve

Paragraph 9 of the Standard NPDES Permit Conditions associated with the Facility (Exhibit A) requires the Permittee to at all times properly operate and maintain all facilities and systems of treatment and control to achieve compliance with the conditions of the Permit.

As noted in violation #3, on July 12, 2022 Respondent notified the DOH of an ongoing partial bypass of the sand filters at the Facility. Respondent stated that the valve for the sand filter bypass pipe was found to be in a partially open position. Respondent stated that the duration of the bypass was unknown (Exhibit D). Respondent does not know why the valve was partially open nor when it was opened. Further, Respondent stated that the valve was frozen and could not be closed. During the inspection on July 26, 2022, Respondent could not answer when the sand filter bypass pipe valve had been exercised or otherwise maintained to prevent the valve from being in an inoperable condition on July 12, 2022.

Based on the details above, the DOH finds that Respondent violated HRS §342D-50(d) on one count by failing to operate and maintain the Facility as required by the Permit.

6. Failure to Operate and Maintain Ultraviolet Disinfection Systems

Paragraph 9 of the Standard NPDES Permit Conditions associated with the Facility (Exhibit A) requires the Permittee to at all times properly operate and maintain all facilities and systems of treatment and control to achieve compliance with the conditions of the Permit.

During the July 26, 2022 inspection, DOH-CWB inspectors found that 6 of 8 ultraviolet (UV) channels were permanently offline and, accordingly, inoperable. Respondent stated that each UV channel in operation can effectively treat a flow of approximately fifteen million gallons per day (MGD). The Facility experiences peak flows of greater than 20 MGD. With

only two of eight UV channels in operation, the Facility may not adequately be able to disinfect its effluent to levels required by the Permit if there is damage to any one unit during peak flow events. It is unknown how long the Facility has been operating with only two UV channels, but is believed to have been occurring for an extended duration (Exhibit D). While two channels may be sufficient during normal flows, it is not sufficient to provide adequate treatment during peak flows if systems are inoperable or need to be taken offline for maintenance or repairs. As such, the UV disinfection system has been improperly operated and maintained.

Based on the details above, the DOH finds that Respondent violated HRS §342D-50(d) on one count by failing to operate and maintain the UV disinfection system at Facility in compliance with the Permit.

7. Failure to Operate and Maintain Critical Final Effluent Pumps

On August 22, 2022, Respondent notified the DOH-CWB that two of three effluent pumps critical to operation of the Facility were inoperable due to damage. Respondent stated that the two pumps were damaged on August 12, 2022. A single 15 MGD effluent pump is unable to adequately pump effluent from the Facility in peak flow conditions where two or more pumps may be needed. A lack of adequate effluent pump capacity will likely result in wastewater spills in peak flow conditions, which jeopardize human and environmental health.

During a virtual meeting held on August 26, 2022 between the DOH and Respondent, Respondent verbally reported that repairs to pump #2 were completed. The pump failures occurred between August 12, 2022 and August 26, 2022 for a total of 14 days.

Based on the details above, the DOH finds that Respondent violated HRS §342D-50(d) on 14 counts by failing to operate and maintain the Facility as required by the Permit.

8. Unauthorized Bypass of Sand Filters Due to Poor Operation and Maintenance

Paragraph 17.b of the Standard NPDES Permit Conditions (Exhibit A) prohibits unanticipated bypasses. Exceptions to the bypass prohibition is allowable under certain circumstances detailed in Paragraph 17.c of the Standard NPDES Permit Conditions, including bypasses necessary to conduct essential maintenance for operational purposes.

On August 30, 2022, Respondent notified the DOH of a bypass of the sand filters at the Facility. Respondent stated that a secondary clarifier return

	<p>pump failed, pumping excess solids to the sand filters which caused the sand filters to clog. As a result, poor quality effluent overflowed and bypassed sand filtration prior to ultraviolet disinfection and discharge. The bypass was identified at approximately 7 a.m. but not reported to the DOH until approximately 4 p.m. Respondent estimated approximately 300,000 gallons of effluent bypassed treatment. Further, Respondent stated that the bypass ceased on August 30, 2022.</p> <p>Based on the details above, the DOH finds that Respondent violated HRS §342D-50(a) on one count for an unauthorized bypass at the Facility.</p>
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The facts of this case and the law justify the following order.

ORDER

Respondent is ordered to:

- 1) Within 30 calendar days from the date this NOVO becomes final (**Effective Date**), hire an independent third-party wastewater engineering contractor experienced with wastewater design and operation to conduct a comprehensive condition and criticality assessment of the Facility and complete Orders # 2-4 below. The contractor shall provide all technical reports (drafts and finals) to both Respondent and the DOH.
- 2) Within 60 calendar days from the Effective Date, the contractor retained pursuant to Order #1 shall initiate assessment and ranking of both condition and criticality of *all* equipment, valves, pumps, pipelines, controls, components, and structural parts of the Facility. The contractor shall identify any critical issues/items that require immediate repair or replacement to prevent harm to human health (e.g., operators, inspectors, onsite personnel, etc.), non-compliance with the Permit, or failure of the treatment system. A report of all activities conducted by the contractor as well as the contractor’s findings of critical issues/items ranked in order of urgency shall be provided to the DOH for review.
- 3) Within 90 calendar days from the Effective Date, Respondent shall complete all repair or replacement of critical issues/items and submit a report to the DOH certifying such repairs or replacements were completed. If there are any issues/items that Respondent is unable to complete in the allotted 90 days, Respondent shall submit a date certain to the DOH as to when the repair or replacement shall be completed. The final date shall be as aggressive as feasible to complete repair or replace issues/items identified by the contractor.

- 4) Within one year from the Effective Date, the contractor shall provide a full report from the condition and criticality assessment conducted pursuant to Order #2. The report shall include a schedule to repair/rehabilitate/or replace any issue/item identified as at or beyond expected lifespan OR preventing the Facility from being operated as designed. The duration of the schedule shall not exceed two years from the Effective Date.

If any critical issues identified during the assessment are already captured under the Federal Facilities Compliance Agreement (FFCA) with EPA, effective June 21, 2021, then the FFCA schedule applies.

- 5) Within six months from the Effective Date, ensure the UV system is capable of providing treatment of all effluent, including during peak flow events, and has adequate backup capabilities to ensure treatment when one of the units is inoperable. Within 30 calendar days of completion, submit a report certifying completion of the upgrade.
- 6) Within six months from the Effective Date, submit a report identifying all open and preventive maintenance and corrective maintenance backlogs for the Facility. The report shall state details for each backlogged preventative maintenance and corrective maintenance item and state when that item will be cleared from being a backlog to being up to date with any necessary maintenance. For maintenance items anticipated to require longer than six months to complete and already identified on the criticality list, the criticality schedule takes precedence.
- 7) Within three months from the Effective Date, exercise all valves at the Facility to ensure full functionality. Valves that are found to be inoperable must be placed on the criticality list developed pursuant to Order #2 for repair, rehabilitation, and/or replacement. Within 30 calendar days of completion, submit a report certifying completion.
- 8) Within 30 calendar days from the Effective Date, hire a structural engineer to assess the structural integrity of the aeration basins. If the aeration basins are found to be structurally compromised, submit for approval, a Corrective Action Plan (CAP) for repairs to the aeration basin(s). Repairs must be completed within six months from the Effective Date. If repairs cannot be completed within six months, submit to the DOH for comment a Contingency Plan to address failure of the unit.
- 9) Within 30 calendar days from the Effective Date, hire a third-party wastewater engineer to perform a root cause analysis to determine the cause of the failures of the effluent pumps reported damaged on August 22, 2022. The analysis shall include the cause of the failure and corrective actions necessary to prevent similar failures. Within 30 calendar days of assessment, submit the completed written analysis to the DOH for review.

- 10) Within 30 calendar days from the Effective Date, hire a third-party contractor with expertise in wastewater treatment operation and maintenance to evaluate and assess current operations, process control, and reporting practices at the Facility.
- 11) Within 180 calendar days, the third-party contractor retained pursuant to Order #10 (above) shall complete the evaluation and assessment and develop an Operation and Maintenance Assessment Report (OMAR). The OMAR shall include a detailed assessment of current operation and maintenance practices and protocols and determine whether best practices and standards of operation are being met.
- 12) Within 270 calendar days, Respondent shall develop and implement a Process Control Optimization Plan (PCOP) that details procedures and practices to optimize operations and process control protocols for the Facility based on the conclusions made in the OMAR completed pursuant to Order #11 (above). The PCOP shall detail how the Facility will produce the highest quality effluent achievable with the given treatment system and include quantifiable process control specifications for each treatment unit (e.g. aeration basins, primary treatment units, secondary treatment units, sand filters, etc.). The PCOP shall also state any necessary details and practices (e.g. monitoring methods, frequencies, etc.) to ensure successful implementation and sustainability. Respondent shall submit the PCOP to the DOH within 14 calendar days of completion.
- 13) Within 360 calendar days, Respondent shall revise the Facility's Operation and Maintenance Manual based on the Assessment Report and PCOP. Within 30 calendar days of completion, Respondent shall submit a report to the DOH certifying completion.
- 14) Pay an administrative penalty of \$8,776,250.00 within 20 calendar days of either the service of this NOVO or the Effective Date, whichever is later. Send a certified check for \$8,776,250.00 to: Clean Water Branch, Department of Health, 2827 Waimano Home Road #225, Pearl City, Hawaii 96782. The payment should be made payable to "State of Hawaii" and include the NOVO reference number, 2022-CW-EO-37.

All submittals made pursuant to any Order in this NOVO shall be certified and signed by a person legally authorized to sign on behalf of Respondent. All documents submitted pursuant to any Order in this NOVO must include the following Certification Statement:

"I certify under penalty of law that this document and its attachments were prepared either by me personally or under my direction or supervision in a manner designed to ensure that qualified and knowledgeable personnel properly gathered and presented the information contained therein. I further certify, based on my personal knowledge or on my inquiry of those individuals immediately responsible for obtaining the information, that to the best of my knowledge and belief the information is true, accurate and complete. I am aware that there are significant penalties for

submitting false information including the possibility of fines and imprisonment for knowing and willful submission of a materially false statement.”

The provisions of this NOVO shall become final unless, within 20 calendar days after receipt, Respondent submits a **written** request for a hearing, along with a copy of the NOVO, without exhibit(s), to:

Hearings Officer
c/o Director of Health
1250 Punchbowl Street, Third Floor
Honolulu, Hawaii 96813

Respondent may file the hearing request in person at the Director’s office listed above during regular business hours, or may mail the same to the above address within the allotted time. **Failure to timely file the hearing request and related documents may result in a denial of the hearing request.**

The hearing will be conducted in accordance with HRS Chapter 91 and Hawaii Administrative Rules Chapter 11-1. At the hearing, the parties may seek to avoid any penalty, and the DOH may seek the maximum penalty of \$25,000 per day, per violation, although the actual penalty amount may be lower, or none.

Parties may be represented by legal counsel at their own expense. An individual may appear on his/her own behalf, or a member of a partnership may represent the partnership, or an officer or authorized employee of a corporation, or trust, or association may represent the corporation, trust or association.

All inquiries regarding this matter, other than the request for hearing, shall be directed to: Mr. Matthew Kurano, Supervisor of the Enforcement Section, CWB, at (808) 586-4309.

If due to a disability you have special needs that will aid you in participating in the hearing or pre-hearing conference, please contact the Hearings Officer at (808) 586-4409 (voice) or through the Telecommunications Relay Service (711), at least 10 working days before the hearing or pre-hearing conference date.

Kathleen Ho

KATHLEEN S. HO
Deputy Director for Environmental Health

Date: Sep 22, 2022

Dale K. Sakata

Approved as To Form By:
Dale Sakata
Deputy Attorney General