

**ATTACHMENT I - FORT BRAGG MUNICIPAL IMPROVEMENT DISTRICT NO. 1
INDIVIDUAL REQUIREMENTS**

1. FACILITY INFORMATION.

1.1. The Fort Bragg Municipal Improvement District No. 1 (hereinafter Fort Bragg or Permittee) is the owner and operator of the Fort Bragg Wastewater Treatment Facility (hereinafter Facility), a Publicly-Owned Treatment Works (POTW). The following table summarizes administrative information related to the facility.

Table G 1. Facility Information

WDID	1B84083OMEN
Permittee	Fort Bragg Municipal Improvement District No. 1
Name of Facility	Fort Bragg Wastewater Treatment Facility
Facility Address	281 Jere Melo Street Fort Bragg, CA 95437 Mendocino County
Facility Contact, Title and Phone	John Smith, Assistant Public Works Director, (707) 961-2823 ext. 136
Authorized Person to Sign and Submit Reports	Tabatha Miller, City/District Manager, (707) 961-2824
Mailing Address	416 North Franklin Street Fort Bragg, CA 95437
Billing Address	Same
Type of Facility	POTW
Major or Minor Facility	Minor
Threat to Water Quality	2
Complexity	A
Pretreatment Program	No
Recycled Water Production Authorized	No
Land Discharge Authorized	No
Facility Permitted Flow	0.8 mgd (average dry weather flow) 2.2 mgd (average wet weather flow) 4.9 mgd (peak daily wet weather flow)

Facility Design Flow	0.8 mgd (average dry weather treatment capacity) 2.2 mgd (average wet weather treatment capacity) 4.9 mgd (peak daily wet weather treatment capacity)
Permitted Initial Dilution Factor (Dm)	50:1
Instream Waste Concentration	2.0%
Watershed	Mendocino Coast Hydrologic Unit
Receiving Water	Pacific Ocean
Receiving Water Type	Ocean Waters

2. FACILITY DESCRIPTION

The Permittee owns and operates the Facility, a municipal wastewater facility that serves a population of approximately 7,273 within the City of Fort Bragg and surrounding unincorporated areas. The Facility receives wastewater from MacKerricher State Park and leachate from the County of Mendocino Casper Landfill.

2.1. Description of Wastewater and Biosolids Treatment and Controls

The treatment system has been designed with an average dry weather treatment capacity of 0.8 mgd and an average daily wet weather treatment capacity of 4.9 mgd. The treatment system consists of a Parshall flume for influent flow monitoring prior to the headworks, headworks, grit removal, equalized influent flow monitoring following the Influent Pump Station, Aero-Mod system, chlorine disinfection using sodium hypochlorite, and sodium bisulfite dichlorination. The Aero-Mod system is an extended aeration, activated sludge treatment system that includes a selector tank, two first-stage aeration (nitrification) tanks, two second-stage aeration (denitrification) tanks, and two clarification tanks.

Sludge generated from the Aero-Mod system is treated in aerobic digestion tanks and dewatered through a belt filter press. Dewatered sludge from the belt filter press is placed in the sludge drying beds prior to landfill disposal or land application.

2.2. Discharge Points and Receiving Waters

Treated wastewater is discharged at Discharge Point 001 at 39° 26' 25" N latitude and 123° 49' 04" W longitude to the Pacific Ocean. The outfall was constructed in 1977 and extends approximately 650 feet offshore to an average ocean depth of 20 feet (mean sea level datum) with a diffuser system designed to produce a 50:1 dilution at peak flow conditions. The outfall consists of a 24-inch reinforced concrete pipe anchored in a trench in bedrock by bolts every 12 feet and encased

within approximately 20 inches of concrete. Treated wastewater is discharged through a diffuser comprising 14 6-inch aluminum bronze risers that project vertically every 8 feet near the end of the outfall. Each riser terminates in a 3-inch diffuser port directed parallel to the seafloor and covered with a natural rubber flapper.

2.3. Compliance Summary

On August 13, 2021, the Assistant Executive Officer issued a Notice of Violation (NOV) and offer to participate in Expedited Payment Program Order No. R1-2021-0032 for eight violations of effluent limitations for biochemical oxygen demand (BOD5) and total coliform in Order Nos. R1-2015-0024 and R1-2019-0020. The NOV assessed a penalty of \$6,000 for these violations. On August 18, 2021, the Permittee provided a signed copy of the Acceptance of Conditional Resolution and Waiver of Right to a Hearing. On November 1, 2021, the Executive Officer signed and executed the Acceptance and Waiver. The \$6,000 penalty was paid on December 1, 2021.

On June 17, 2025, the Assistant Executive Officer issued Administrative Civil Liability (ACL) No. R1-2025-0023 for 21 violations of effluent limitations for settleable solids, residual chlorine, and total coliform in Order No. R1-2019-0020. The ACL Complaint assessed a penalty of \$48,000 for these violations. A Settlement Agreement for this complaint has not yet been finalized.

2.4. Planned Changes

No modifications or operational changes that will cause a material change in the volume or quality of discharges from the Facility have been identified for the term of this Order.

3. REASONABLE POTENTIAL ANALYSIS (RPA)

Procedures for performing an RPA are described in section 5.3.3.1 of the Fact Sheet. A summary of the RPA results is included in Table I-2 below. The RPA for the effluent was conducted using effluent monitoring data generated from Ocean Plan Table 3 parameter monitoring and routine monitoring events conducted between January 2021 through December 2025.

Table I-2. Facility RPA Summary

Pollutant	Units	Qualifier	MEC ¹	No. Samples	No. ND ²	Co ³	Cs ⁴	X-obs ⁵	Endpoint ⁶
Arsenic	µg/L	=	0.64	5	4	8	3	3.0	3
Cadmium	µg/L	<	0.060	5	5	1	0	<0.0196	3
Chromium VI	µg/L	=	0.24	5	4	2	0	0.0047	3
Copper	µg/L	=	15	5	0	3	2	2.3	2
Lead	µg/L	=	0.72	5	1	2	0	0.014	2
Mercury	µg/L	<	1.0	5	5	0.04	0.0005	<0.020	3
Nickel	µg/L	=	2.1	5	1	5	0	0.041	2
Selenium	µg/L	=	0.69	5	4	15	0	0.014	3
Silver	µg/L	<	10	5	5	0.7	0.16	<0.35	3
Zinc	µg/L	=	130	5	0	20	8	10.4	3
Cyanide	µg/L	=	5.7	5	0	1	0	0.112	2
Total Chlorine Residual	µg/L	<	100	1,860	1,851	2	0	23.5	1
Ammonia (as N)	µg/L	=	1,000	60	37	600	0	19.6	2
Phenolic Compounds (non-chlorinated)	µg/L	<	17	4	4	30	0	0.33	3
Chlorinated Phenolics	µg/L	<	10	4	4	1	0	<0.19	3
Endosulfan	µg/L	<	0.04	4	4	0.009	0	<0.0008	3
Endrin	µg/L	J	0.012	5	4	0.002	0	0.0002	3
HCH	µg/L	<	0.05	5	5	0.004	0	<0.0010	3
Acrolein	µg/L	<	3.9	5	5	220	0	<0.076	3

Pollutant	Units	Qualifier	MEC ¹	No. Samples	No. ND ²	Co ³	Cs ⁴	X-obs ⁵	Endpoint ⁶
Antimony	µg/L	=	0.53	5	1	1,200	0	0.0104	2
Bis(2-chloroethoxy) methane	µg/L	<	0.90	5	5	4.4	0	<0.0176	3
Bis(2-chloroisopropyl) ether	µg/L	<	1.0	5	5	1,200	0	<0.0196	3
Chlorobenzene	µg/L	<	1.2	5	5	570	0	<0.0235	3
Chromium (III)	µg/L	=	1.8	5	1	190,000	0	0.0353	2
Di-n-butyl Phthalate	µg/L	=	4.4	5	4	3,500	0	0.0863	3
Dichlorobenzenes	µg/L	<	0.8	4	4	5,100	0	<0.0157	3
Diethyl Phthalate	µg/L	<	1.0	5	5	33,000	0	<0.0196	3
Dimethyl Phthalate	µg/L	<	1.0	5	5	820,000	0	<0.0196	3
4,6-dinitro-2-methylphenol	µg/L	<	3.0	5	5	220	0	<0.0588	3
2,4-dinitrophenol	µg/L	<	5.0	5	5	4	0	<0.0980	3
Ethylbenzene	µg/L	<	1.2	5	5	4,100	0	<0.0235	3
Fluoranthene	µg/L	<	0.80	5	5	15	0	<0.0157	3
Hexachlorocyclopentadiene	µg/L	<	4.0	5	5	58	0	<0.0784	3
Nitrobenzene	µg/L	<	0.90	5	5	4.9	0	<0.0176	3
Thallium	µg/L	<	0.050	4	4	2	0	<0.0010	3
Toluene	µg/L	=	2.4	5	3	85,000	0	0.0471	3
Tributyltin	µg/L	<	0.060	5	5	0.0014	0	<0.0012	3
1,1,1-trichloroethane	µg/L	<	0.40	5	5	540,000	0	<0.0078	3
Acrylonitrile	µg/L	<	0.40	5	5	0.1	0	<0.0078	3

Pollutant	Units	Qualifier	MEC ¹	No. Samples	No. ND ²	Co ³	Cs ⁴	X-obs ⁵	Endpoint ⁶
Aldrin	µg/L	<	0.039	5	5	0.000022	0	<0.0008	3
Benzene	µg/L	<	0.50	5	5	5.9	0	<0.0098	3
Benzidine	µg/L	<	3.0	5	5	0.000069	0	<0.0588	3
Beryllium	µg/L	<	0.050	4	4	0.033	0	<0.0010	3
Bis(2-chloroethyl) Ether	µg/L	<	0.90	5	5	0.045	0	<0.0176	3
Bis(2-ethylhexyl) Phthalate	µg/L	=	4.4	5	3	3.5	0	0.0863	3
Carbon Tetrachloride	µg/L	<	0.40	5	5	0.9	0	<0.0078	3
Chlordane	µg/L	<	0.70	5	5	0.000023	0	<0.0137	3
Chlorodibromomethane	µg/L	=	3.4	5	0	8.6	0	0.0667	2
Chloroform	µg/L	=	98	5	0	130	0	1.92	2
DDT	µg/L	<	0.020	4	4	0.00017	0	<0.0004	3
1,4-Dichlorobenzene	µg/L	<	1.2	5	5	18	0	<0.0235	3
3,3'-Dichlorobenzidine	µg/L	<	2.0	4	4	0.0081	0	<0.0392	3
1,2-Dichloroethane	µg/L	<	0.40	4	4	28	0	<0.0078	3
1,1-Dichloroethylene	µg/L	<	0.40	4	4	0.9	0	<0.0078	3
Dichlorobromomethane	µg/L	=	20	4	0	6.2	0	0.3922	2
Dichloromethane	µg/L	<	0.50	4	4	450	0	<0.0098	3
1,3-Dichloropropene	µg/L	<	0.40	4	4	8.9	0	<0.0078	3
Dieldrin	µg/L	J	0.0098	4	3	0.00004	0	0.00019	1
2,4-Dinitrotoluene	µg/L	<	0.80	4	4	2.6	0	<0.0157	3
1,2-Diphenylhydrazine	µg/L	<	0.60	4	4	0.16	0	<0.0118	3

Pollutant	Units	Qualifier	MEC ¹	No. Samples	No. ND ²	Co ³	Cs ⁴	X-obs ⁵	Endpoint ⁶
Halomethanes	µg/L	<	1.1	4	4	130	0	<0.0216	3
Heptachlor	µg/L	<	0.034	4	4	0.00005	0	<0.0007	3
Heptachlor Epoxide	µg/L	<	0.032	4	4	0.00002	0	<0.0006	3
Hexachlorobenzene	µg/L	<	0.90	4	4	0.00021	0	<0.0176	3
Hexachlorobutadiene	µg/L	<	0.80	4	4	14	0	<0.0157	3
Hexachloroethane	µg/L	<	0.60	4	4	2.5	0	<0.0118	3
Isophorone	µg/L	<	0.90	4	4	730	0	<0.0176	3
N-Nitrosodimethylamine	µg/L	<	0.70	4	4	7.3	0	<0.0137	3
N-Nitrosodi-N-Propylamine	µg/L	<	0.80	4	4	0.38	0	<0.0157	3
N-Nitrosodiphenylamine	µg/L	<	1.0	4	4	2.5	0	<0.0196	3
PAHs	µg/L	<	8.0	4	4	0.0088	0	<0.1569	3
PCBs	µg/L	<	2.5	4	4	0.000019	0	<0.049	3
TCDD equivalents	µg/L	<	7.38E-08	4	4	3.9E-09	0	1.45E-09	3
1,1,2,2-Tetrachloroethane	µg/L	<	0.30	4	4	2.3	0	<0.0059	3
Tetrachloroethylene	µg/L	<	0.40	4	4	2	0	<0.0078	3
Toxaphene	µg/L	<	1.0	4	4	0.00021	0	<0.0196	3
Trichloroethylene	µg/L	<	0.40	4	4	27	0	<0.0078	3
1,1,2-Trichloroethane	µg/L	<	0.40	4	4	9.4	0	<0.0078	3
2,4,6-Trichlorophenol	µg/L	=	0.13	5	4	0.29	0	0.0025	3
Vinyl Chloride	µg/L	<	0.40	4	4	36	0	<0.0078	3

Pollutant	Units	Qualifier	MEC ¹	No. Samples	No. ND ²	Co ³	Cs ⁴	X-obs ⁵	Endpoint ⁶
<u>Table Notes</u>									
1. MEC = Maximum Effluent Concentration									
2. ND = Non-Detected									
3. Co = The concentration (water quality objective) to be met at the completion of initial dilution (from Table 3 of the 2019 Ocean Plan).									
4. Cs = The background seawater concentrations (from Table 5 of the 2019 Ocean Plan).									
5. X-obs = The maximum concentration after complete mixing, calculated according to Step 4 of Appendix VI of the Ocean Plan using the permitted dilution ratio (Dm) of 50 as follows: $X\text{-obs} = (C_e + D_m * C_s)/(D_m + 1)$, unless otherwise noted.									
6. RPA Results:									
Endpoint 1 = An effluent limitation must be developed for the pollutant. Monitoring is required.									
Endpoint 2 = An effluent limitation is not required for the pollutant. Monitoring may be required as appropriate.									
Endpoint 3 = RPA is inconclusive. Less than 3 detects or greater than 80% ND.									

3.1. Water Quality-Based Effluent Limitations

Water quality objectives for pollutants determined to require an effluent limitation are as follows:

Table I-3. Applicable Water Quality Objectives – Ocean Plan

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum	30-Day Average
Dieldrin	µg/L	--	--	--	0.0004
Total Residual Chlorine	µg/L	2	8	60	--

Using the equation, $C_e = C_o + D_m (C_o - C_s)$, effluent limitations are calculated as follows. Here, D_m is equal to 50 for each effluent limitation calculation. The effluent limitations established in this Order have been rounded to two significant figures.

Dieldrin

$$C_e = 0.00004 + 50 (0.00004 - 0) = 0.002 \mu\text{g/L (30-Day Average)}$$

Total Residual Chlorine

$$C_e = 2 + 50 (2 - 0) = 102 \mu\text{g/L (6-Month Median)}$$

$$C_e = 8 + 50 (8 - 0) = 408 \mu\text{g/L (Daily Maximum)}$$

$$C_e = 60 + 50 (60 - 0) = 3,060 \mu\text{g/L (Instantaneous Maximum)}$$

3.2. Facility Specific Effluent Limitation Summary

Effluent limitations applicable to the Fort Bragg Wastewater Treatment Facility, for discharges from Discharge Points 001 (Monitoring Location EFF-001) are as follows:

Table I-4. Facility Specific Effluent Limitations – Discharge Point EFF-001

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Six-Month Median
Biochemical Oxygen Demand 5-day @ 20°C (BOD ₅)	mg/L	30	45	--	--	--	--
Total Suspended Solids (TSS)	mg/L	30	45	--	--	--	--
pH	s.u.	--	--	--	6.0	9.0	--
Oil and Grease	mg/L	25	40	--	--	75	--
Settleable Solids	mL/L	1.0	1.5	--	--	3.0	--

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum	Six-Month Median
Turbidity	NTU	75	100	--	--	225	--
Dieldrin	µg/L	0.002	--	--	--	--	--
Total Residual Chlorine ¹	µg/L	--	--	408	--	3,060	102

Table Notes

1. See section 8.13 of this General Order regarding compliance with chlorine residual effluent limitations.

3.2.1. **Percent Removal:** The average monthly percent removal of BOD₅ and total suspended solids shall not be less than 85 percent. Percent removal shall be determined from the monthly average value of influent wastewater concentration in comparison to the monthly average value of effluent concentration for the same constituent over the same time period as measured at Monitoring Locations INF-001 and EFF-001, respectively.

3.2.2. **Disinfection.** Disinfected effluent discharged from the Facility through Discharge Point 001 to the Pacific Ocean shall not contain bacteria exceeding the following concentrations, as measured at Monitoring Location EFF-001:

3.2.2.1. **Enterococci**

3.2.2.1.1. The 6-week rolling geometric mean of enterococci shall not exceed 30 colony forming units (CFU) per 100 mL; and

3.2.2.1.2. Not more than 10 percent of the samples collected in a calendar month exceed an MPN of 110 per 100 mL.

3.2.2.2. Total Coliform Bacteria

3.2.2.2.1. The median value of total coliform bacteria shall not exceed an MPN of 70 per 100 mL in a calendar month; and

3.2.2.2.2. Not more than 10 percent of the samples collected in a calendar month exceed an MPN of 230 per 100 mL.

3.2.2.3. Fecal Coliform

The 30-day geometric mean of fecal coliform density not to exceed 200 per 100 mL;

No sample shall exceed an MPN of 400 per 100 mL.

3.2.3. Whole Effluent Toxicity (WET)

There are two types of WET tests – acute and chronic. An acute toxicity test is conducted over a short time period and measures mortality. A chronic test is conducted over a longer period of time and may measure mortality, reproduction, and/or growth. The in-stream waste concentration for chronic toxicity for Fort Bragg is 2.0 percent effluent. The adjusted chronic toxicity value unit for Fort Bragg is 51.

Compliance with the accelerated monitoring and TRE provisions shall constitute compliance with the chronic aquatic toxicity requirements, as specified in the MRP (Attachment E, sections 5.1 and 5.2).

4. RECYCLED WATER PRODUCTION

Fort Bragg is not authorized to produce recycled water under this General Order.

5. LAND DISCHARGE SPECIFICATIONS

Fort Bragg is not authorized to discharge to land under this General Order.