
North Coast Regional Water Quality Control Board

Response to Written Comments and Staff Initiated Changes

Draft Waste Discharge Requirements Order No. R1-2018-0013 National Pollutant Discharge Elimination System (NPDES) for the DG Fairhaven Power Plant

Regional Water Quality Control Board, North Coast Region
July 11, 2018

Comment Letter Received

The deadline for submission of public comments regarding draft Waste Discharge Requirements for Order No. R1-2018-0013, National Pollutant Discharge Elimination System Permit (Draft Permit) for the DG Fairhaven Power Plant (Facility) was March 7, 2018. DG Fairhaven (Permittee) provided timely comments via email which are shown in italics and are followed by the Regional Water Board staff response. The term "Draft Permit" refers to the draft that was sent out for public comment. The term "Proposed Permit" refers to the version of the permit that has been modified in response to comments and is being presented to the Regional Water Board for consideration.

1. *Page 1. Facility design flow and maximum anticipated discharge flow rate reported as the same value (0.145 MGD)*

DGF would like to request that the Regional Board retain the maximum anticipated discharge flow rate of 0.350 MGD from the previous order (R1-2012-0027). The maximum anticipated discharge flow rate has been reduced from 0.350 MGD to 0.145 MGD from the previous Regional Board Order (R1-2012-0027). The report of waste discharge (ROWD) submitted on June 30, 2016, reports that the maximum daily flow observed was 0.634 MGD, the maximum 30-day flow observed was 0.135 MGD, and the long-term average flow observed was 0.109 MGD (SHN, 2016). The maximum instantaneous flow rate of 0.634 MGD was mistakenly reported as the maximum daily flow rate. The maximum daily flow rate during the reporting period included in the 2016 ROWD was actually 0.186 MGD.

The Current Permit contains a Maximum Anticipated Discharge Flow of 0.350 mgd and a Median Discharge Flow of 0.146 mgd. There are no flow prohibitions in the

Proposed Permit that are linked to the Maximum Anticipated Discharge. Therefore, the Proposed Permit has modified Table 1 to indicate 0.350 as the Maximum Anticipated Discharge, consistent with the Current Permit.

2. *Page 5, Table 4. Total recoverable copper mass effluent limitations for discharge point EFF-001 for maximum daily and instantaneous maximum values have been calculated using the highest 6-month median flow rate.*

DGF would like to request that the Regional Board consider calculating mass effluent limitations for total recoverable copper at EFF-001 using the maximum daily flow rate for the maximum daily discharge limit, and the instantaneous maximum flow rate for the instantaneous maximum discharge limit. Calculation of these values for compliance reporting based on the daily maximum and instantaneous maximum flow rates. Section III.C.4.k of the 2015 Ocean Plan is unclear as to the flow rate to be used in determining mass emission effluent limitations, stating only that the observed flow rate is to be used in each case. In this case, the observed daily maximum flow rate would be 0.186 MGD, and the observed instantaneous maximum flow rate would be 0.634 MGD, which would result in total recoverable copper mass emission limitations of 1.9 pounds per day (lb/d) and 17 lb/d, respectively. It should be noted that the instantaneous flow rate and mass emission rate is reported as daily values, which reflect relatively high values of flow and mass emission, when they are in fact instantaneous values that would not actually result in an emission rate of 17 pounds in any given day.

Regional Water Board staff (Staff) agrees with the proposed change. Section VII.G of the Draft Permit discusses compliance determination for mass-based effluent limitations. Each sub-section for 6-month median, daily maximum and instantaneous maximum requires the Permittee to use the corresponding flow value for each mass-based calculation. Hence, the instantaneous maximum mass-based effluent limitation requires the instantaneous flow rate at time of sampling be used in calculating compliance. The same applies to the 6-month median and the daily maximum.

Therefore, the Proposed Permit has been modified to include mass based effluent limitations using an instantaneous maximum flow rate of 0.634 MGD, a daily maximum of 0.186 MGD and a 6-month median of 0.130 MGD. Table 4 of the Proposed Permit and Section IV.C.4. of the Fact Sheet have been modified to include mass-based effluent limitations using the above flow values. In addition, the calculations of the mass-based limitations, as stated in Section IV.C.4. of the Fact Sheet, have been modified to include the above flow values.

3. *Page 6, Table 4, footnote 6. Should refer to section VII.G regarding calculation of mass results instead of VII.H which pertains to chronic toxicity.*

Staff agrees. Footnote 6, in Table 4, of the Proposed Permit has been modified to refer to section VII.G regarding the calculation of mass-based effluent limitations.

4. *Page 11, Section VI.C.2.a. Please clarify the date by which the climate change readiness study plan is to be submitted to the Regional Board. The Order indicates that the climate change readiness study plan should be submitted to the Regional Board August 1, 2022, whereas the cover letter indicates the study plan is to be submitted by June 1, 2022.*

The transmittal letter, that was sent with the Draft Permit, includes an incorrect due date of June 1, 2022. Table E-7 of the Proposed Permit has been modified to include the correct date of August 1, 2022. The August 1, 2022, due date was called out correctly on Page 11 of the Draft Permit and has not been changed in the Proposed Permit.

5. *Page 11, Section VI.C.2.a. Please clarify whether the climate change readiness study plan (due either June 1, or August 1, 2022) is to include a plan to complete items listed in the second paragraph of section VI.C.2.a, or if all items listed in the second paragraph of Section VI.C.2.a are to be completed by the due date.*

The requirements of the Climate Change Readiness Study Plan, as listed in the second paragraph Section VI.C.2.a of the Proposed Permit, shall be completed by the due date of August 1, 2022.

6. *Page 14, Section VI.C.6.a. Please clarify why potential stormwater runoff to the facility is to be included in the annual wastewater permit report. The facility currently maintains an approved notice of non-applicability (NONA) with respect to the Industrial General Permit, and there is no evidence that we are aware of that indicates stormwater runoff to the facility is an issue. See also: Fact Sheet page F-33, Section VI.B.6.a.*

All storm water is captured in a percolation/retention basin and the Permittee is currently under a NONA for the Industrial Storm Water Permit. Therefore, the second paragraph of Section VI.C.6.a. has been removed from the Proposed Permit.

7. *Page E-3, Section II, Table E-2. The monitoring location EFF-010 description of low-volume waste should no longer include screw and bearing cooling process water. See also: Page 1, Table 2.*

Screw and bearing cooling process water has been removed from Table E-2 of the Monitoring and Reporting Program (MRP) when describing Monitoring Location M-010 in the Proposed Permit. Table 2 did not mention screw and bearing cooling process water in the Draft Permit. Therefore, Table 2 has not been changed in the Proposed Permit.

- 8.** *Page E-3, Section III.A.1, Table E-3. Total recoverable zinc, flow weighted 24-hour composite sampling added.*

DGF would like to request that the Regional Board consider removing the added composite sampling requirement for zinc from EFF-001. DGF has historically low zinc concentrations at EFF-001 (less than 1 mg/L) with a single elevated sample collected on October 22, 2013 (1.89 mg/L). It is believed that the elevated concentration of zinc in this sample was an anomaly, possibly due to a lack of flushing of the sample pipe during sample collection. This may have resulted in collection of a sample with elevated zinc that leached from galvanized piping into the sample water. This sample was two orders of magnitude greater than any other monthly sample collected at EFF-001 in the 4.5 years since that time.

The Previous Permit included composite sampling for copper to properly monitor water quality based effluent limits (WQBELs) due to reasonable potential of copper to adversely impact beneficial uses. The Draft Permit does not include WQBELs for zinc. As such, Table E-3 of the MRP in the Proposed Permit has been modified to remove the flow weighted 24hour composite sampling requirement for zinc. This approach is consistent with the current permit.

- 9.** *Page E-6, Section III.C.1, Table E-5, footnote 5. Refers to MRP Section III.B regarding priority pollutant identification. Please clarify, Section III.B does not include any language about priority pollutant identification. See also: Section VIII.A regarding cooling tower maintenance chemical records.*

Footnote 5, in Table E-5 of the Draft Permit, was supposed to refer to Section VIII.A. of the MRP (Cooling Tower Maintenance Chemical Records). The Proposed Permit has been modified to refer to Section VIII.A. This language was retained from the current permit and is intended to inform Water Board staff on the use of chemicals in the Cooling Tower and the threat of priority pollutants impacting receiving waters.

The Permittee submitted Material Safety Data Sheets for each chemical used in the Cooling Tower on January 3, 2018. If new chemicals that contain priority pollutants are used in the Cooling Tower, the Permittee shall trigger monitoring requirements for those chemicals. The Permittee shall submit a summary list of added chemicals in their quarterly Self-Monitoring Reports and indicate which chemicals contain priority pollutants.

- 10.** *Page E-6, Section IV.A.1. Refers to Table E-5 regarding WET at Discharge Point 001; however, Table E-5 is for monitoring location EFF-020. Table E-3 includes Discharge Point 001 toxicity monitoring information.*

Section IV.A.1. of the MRP in the Proposed Permit has been modified to identify Table E-3 as the table regarding WET testing at Discharge Point 001.

- 11.** *Page E-11, Section IV.B.2, first paragraph. Refers to Section V.A.8 twice, regarding accelerated monitoring for toxicity testing; Section IV.A.8 includes accelerated monitoring requirements.*

The references on page E-11, Section IV.B.2, have been changed from Section V.A.8 to section IV.A.8 in the Proposed Permit to correctly identify the accelerated monitoring section.

- 12.** *Page E-12, VIII.A. Refers to Section III of the MRP regarding priority pollutant monitoring for cooling tower maintenance chemicals. The only mention of this in Section II is as noted above in Comment 9.*

Please see Response 9.

- 13.** *Page E-12, Section VIII.B. Biological Survey. Please provide more detail about what is required for the biological survey. See also: page A-2, definition of Degrade.*

Requirements for these surveys remain unclear with regard to the following:

- *Length and number of transects required for monitoring*
- *What constitutes a reference site*
- *The minimum number of species of demersal fish, benthic invertebrate, or attached algae that must be included in evaluation*
- *Whether consideration will be made for sites with low visibility regarding the time schedule for completion*

The Biological Survey is required in lieu of receiving water monitoring around the outfall. Requirements of the survey include, but are not limited to the following:

- The length and number of transects shall be enough to identify any possible impacts to the surrounding biological community.
- A reference site shall be an area far enough away from the outfall that the discharge has not influenced the area and can allow for comparison to the waste field.
- At a minimum, one species of demersal fish, benthic invertebrate and one attached algae shall be evaluated.
- Sites with low visibility will be considered for completion of the Biological Survey. The intent of the survey is to understand the impact of the discharge on the surrounding biological community and address any impacts accordingly. The due date for the workplan is August 1, 2022. This due date

provides the Permittee ample opportunity to evaluate the biological community near the outfall.

14. *Page F-3, Section I, Table F-1. Facility design flow and maximum anticipated discharge flow rate reported as the same value (0.145 MGD). See Comment 1.*

See response 1. Table F-1 of the Proposed Permit has been updated to reflect the Maximum Anticipated Discharge of 0.350 mgd.

15. *Page F-6, Section II.C, Table F-4. Discharge Point 020, total recoverable zinc monitoring data reported as 10.1 mg/L for both the highest 30-day average and highest daily discharge. Our data indicate the highest single value for Monitoring Point 020 was 0.113 mg/L on April 16, 2015. Please specify where the value of 10.1 mg/L comes from, or whether this value was possibly reported in error.*

The August 2013 eSMR reports a 10.1 mg/L sample for total recoverable zinc at Monitoring Location 020. The lab data sheets that were attached to the August 2013 eSMR shows a total recoverable zinc sample of 10.1 ug/L. This was a reporting error in CIWQS and has been fixed by the Permittee through a resubmittal of the August 2013 eSMR.