

RESPONSE TO COMMENTS

City of Emmett, Idaho

NPDES Permit No.: ID-002031-1

Public Comment Period: July 18 - September 4, 2001

During the public comment period specified above, only the City submitted comments. This document summarizes the comments and the EPA responses to the comments.

1. Comment: The location of the City of Emmett Treatment Facility is at River Mile Post 31.5.

 Response: The permit has been revised to show the location at River Mile 31.5 instead of River Mile 30.

2. Comment: The BOD value needs to be revised based on the 65 percent reduction being deleted during summer high wastewater flows (May through September) ; see Fact Sheet Item IV.B and Fact Sheet Appendix B-Item A.

 Response: EPA agrees and the permit has been revised to delete the BOD percent removal requirement during May 1 through September 30 and include only the loading requirement.

3. Comment: The 65% removal requirement for TSS for lagoon systems is unreasonable. IDAPA [58].01.02.420.02 [exempts] lagoons from any type of percentage removal for TSS. The permit should conform to the State exceptions. The natural biological process produces algae and duckweed along with associated organisms that prevent 65% removal condition from being met. In addition, the City of Emmett facility has extremely low influent, approximately 40 mg/L, especially during the irrigation months of May through September. The 65 percent removal requirement would mean that the City of Emmett facility would need to achieve an effluent value of 26 mg/L; as a result, the facility would have met the 65 percent removal requirement only 3 out of the last 36 months.

 Response: IDAPA 58.01.02.420.02, Idaho's alternative state requirements, only address BOD₅ and TSS concentrations. The state is not authorized to allow for deletion of the TSS removal rate requirement. There are only two situations where the removal rate for TSS for lagoons may be less than 65 percent. The first situation is where there is less concentrated influent for separate sewer systems and the second applies to less concentrated effluent for combined sewer systems. The City of Emmett facility is eligible for the exception under the first situation, according to

40 CFR § 133.103(d).

To be eligible for this exemption, the permittee must demonstrate satisfactorily that:

- (1) the treatment works is consistently meeting its permit effluent concentration limits but its percent removal requirements cannot be met because of less concentrated influent wastewater;
- (2) to meet the percent removal requirements, the treatment works would have to achieve significantly more stringent limitations than would otherwise be required by the concentration-based standards, and
- (3) the less concentrated wastewater is not the result of excessive inflow/infiltration (I/I).

EPA has determined that the Emmett facility meets the requirements of 40 CFR § 133.103(d) that state that the percent removal requirement may be reduced or a mass loading limit may be substituted. Loading limits of 385 lbs/day (average monthly) and 580 lbs/day (average weekly) have been incorporated into the final permit. These limits were calculated as shown below. EPA used a per capita basis to calculate the mass loading limits because they are more representative of actual conditions than are the limits in the 2001 draft permit. Those TSS loading limits were calculated based on the design flow of the Emmett WWTP (5.7 MGD). The capacity of the plant is based on the I/I, not on actual population served.

$5,490 \text{ population} \times 0.2 \text{ lbs/day/capita TSS} \times 0.35 \text{ removal} = \text{average monthly limit (AML)} = 385 \text{ lbs/day}$

$\text{Average weekly limit} = 1.5 \times \text{AML} = 580 \text{ lbs/day.}$

In addition, the final permit requires the City to calculate TSS percent removal monthly. This information will be used during the next permit cycle to update the TSS removal requirement as necessary.

- 4. Comment: The chlorine residual requirement shown in Table 1 should be revised using the Water Pollution Control Federation (WPCF) 1976 value of 0.5 mg/L free chlorine residual as used in the City of Fruitland, Idaho permits.

Response: EPA disagrees for two reasons. The total residual chlorine limit for the City of Emmett facility is water quality-based, not technology-based, as are the limits for the City of Fruitland, Idaho permits. EPA also disagrees with the City's interpretation of the WPCF 1976 value. The recommendation of 0.5 mg/L is for total residual, not free chlorine residual. The paragraph on page 40 of the document goes on to say that for virus control, the World Health Organization recommended a free chlorine residual of 0.5 mg/L after 1 hour contact, while that of Montgomery County, Maryland is 3.0 mg/L free residual. EPA believes that requiring a total residual chlorine limit of 0.5 mg/L is an appropriate technology-based requirement.

5. Comment: The fecal coliform bacteria parameter should be replaced by the *E. coli* bacteria parameter as adopted by the Stat of Idaho. However, the fecal coliform bacteria parameter, if not removed, is required to be sampled once per week as shown in Table 1. The weekly sampling will provide 52 data points per year and 12 monthly average, which should provide adequate information for the City of Emmett facility. The requirement of an average weekly limit as shown in Table 1 and in Note 3 of Table 1 should not apply. A revised Note 3 of Table 1 should apply to the average monthly limit requirement for fecal coliform bacteria, for May 1 through September 30, allowing for a geometric mean of weekly values.

Response: EPA disagrees. The average monthly limit for fecal coliform for May 1 through September 30 is the wasteload allocation established for the City of Emmett under the Lower Payette Watershed TMDL. EPA believes that the City is requesting that the average weekly limitation for fecal coliform be deleted. EPA cannot remove the average weekly limit since it is required under IDAPA 58.01.02.420.05.a. That regulation also specifies that the minimum monitoring frequency is 5 samples per week.

EPA, based on comments from IDEQ on permits in other watersheds, had reduced the frequency to 1 sample per week. However, EPA has revised the permit to allow for the deletion of the fecal coliform average weekly limit once the State has revised their water quality standards and EPA has approved the revisions. This is expected to occur in early 2002. This would mean that once the water quality standards revisions are adopted and approved, the permittee would no longer need to monitor for fecal coliform October 1 through April 30.

In addition, monitoring frequency for fecal coliform would then revert to once per month during May 1 through September 30.

6. Comment: The *E. coli* bacteria parameter should follow the same sampling requirements of one per week, which will provide a monthly geometric mean, as discussed above.

Response: EPA agrees and has revised the permit to require weekly monitoring for *E. coli*.

7. Comment: The toxicity testing results will be reported on the discharge monitoring report (DMR) that is submitted after the test results are received. This will avoid any delay on behalf of the City.

Response: Comment noted. Submitting a report early is not a permit violation.

8. Comment: Surface water monitoring required by the permit is an unfunded mandate that should not be imposed on the City. It does not seem right for the City to pay for data collection simply to facilitate the TMDL process.

Response. The surface water monitoring requirement is not an unfunded mandate. The Unfunded Mandate Reform Act of 1995 is inapplicable to NPDES permit decisions. Facility-specific NPDES permits such as the one held by the City are not regulations, but instead are licenses. The Unfunded Mandate Reform Act applies only to regulations. (Order Denying Petition for Review, In re: City of Blackfoot WWTF, NPDES Appeal No. 00-32)

The information is being required in support of TMDL development. In order to make reasonable potential evaluations based on actual data, rather than statistical calculations accounting for limited data, EPA believes that at least ten data points need to be collected. For surface water monitoring, a sufficient database is needed to establish background concentrations. This information is used in developing TMDLs and establishing wasteload allocations for point and nonpoint sources. It is to the City's benefit to be able to provide the most representative background data in order for them to receive appropriate wasteload allocations.

9. Comment: The required sampling frequency on the river will pose a financial hardship on the City of Emmett due to the amount of time and effort required to provide samples at three locations on the river including upstream and downstream of the discharge.
- Response: In response to budgetary concerns, the permit has reduced the total number of samples to be collected during the surface water monitoring from 24 to 12. In addition, the requirement for surface water monitoring has been changed to require only upstream monitoring and to delete downstream monitoring.
10. Comment: The use of grab-composite sample type needs to be revised. Since the City of Emmett is required to sample both sides and the middle of the river, a grab-composite sample type will require more time than is reasonable and necessary to provide a realistic sample of the river. Part I.D.3 of the permit only requires the use of a grab sample.
- Response: Part I.D.3 should have specified that the grab sample should consist of samples from both banks and in the middle of the river. The permit has been revised to include this requirement. The City did not propose an alternate method to insure that a representative sample from the surface water would be obtained. The permit will not be revised to delete the requirement for obtaining grab-composite samples for the surface water parameters.
11. Comment: If EPA does not delete the surface water monitoring requirement, the City requests the following considerations.
- (1) Change the sampling months to February through November. The amount of ice on the river in December can be a major obstacle to providing an adequate sampling event.
 - (2) How will we develop a QA/QC manual for procedures on river sampling? The document that is addressed within the document, EPA QA/G-5 does not appear to have any application to river sampling.
 - (3) Who will set up the QA/QC for the river flow measurement? We ask that we be allowed to use the nearest USGS gauging station to supply the flow measurements that are required.
 - (4) What method detection levels (MDL) values should be used for the parameters other than mercury, since Table 2 is blank except for

mercury? The mercury MDL should be 0.1 ug/L, since any lower MDLs are not cost-effective or reasonable.

- (5) The concept of taking downstream samples is unreasonable, since under low flow conditions, the dilution factor exceeds 28:1. Please remove the downstream monitoring requirement.
- (6) We will provide the data as collected on the DMR for the month it was collected in, rather than holding it for four years as shown in the permit.

Response:

- (1) EPA believes that collecting surface water samples February through November is adequate. The permit has been revised to require surface water monitoring February through November.
- (2) EPA disagrees. The document referenced describes the general format for setting up any QA program. The principles described can be applied to river monitoring as well as effluent monitoring. However, another helpful reference are the following documents.
U.S. Environmental Protection Agency, Method 1669: Sampling Ambient Water for Trace Metals at EPA Water Quality Criteria Levels, 1995 (EPA-821-R-95-034), and U.S. Environmental Protection Agency, Sampling Ambient and Effluent Waters for Trace Metals (EPA-821-V-97-001).
- (3) EPA did not intend for the City to establish a new gauging station. The permit has been revised to clarify that river flow is to be determined from the current gauging station.
- (4) EPA did not specify MDLs for the other parameters because no special methods are needed to analyze those parameters other than methods the City currently uses or are contained in Standard Methods. The permit specifies the MDL for mercury because the criterion is so low that an appropriate method needs to be used.

The mercury monitoring will not be deleted. This information will be needed to help determine whether or not the receiving water should be listed for mercury and whether or not the discharge from the City is contributing to any exceedance of the criteria for mercury. The most stringent criterion is the aquatic life chronic criterion of 0.012 ug/L. Because this criterion is so low, if methods are used which indicate “not detected,” it will not be clear whether or not there may be an impact on the environment. In addition, if the method detection limit used is too

high, then the receiving water could be listed as impaired, since the detection limit used greatly exceeds the criterion. It is to the City's benefit to use as low a method detection limit as possible when analyzing effluent as well. If too high a method detection limit is used for analysis, the reasonable potential evaluation may indicate that an effluent limit is needed, when it might not be needed if a lower method detection limit (i.e., closer to the criterion) had been used.

EPA believes that laboratories should be capable of producing blank levels 10 times less than the regulatory compliance level. EPA recognizes that trying to achieve a method detection limit of 0.001 ug/L may cost more than achieving a 0.01 ug/L method detection limit. In the interest of easing the financial burden of mercury monitoring, EPA has revised the permit in several ways regarding mercury monitoring.

The permit has been revised to require a range of 0.01 to 0.005 µg/L for the method detection limit. The permittee now has a year in which to find a suitable laboratory before beginning the mercury monitoring. The number of samples required have been reduced to 10 effluent (from 12 in the draft permit) as well as 10 upstream samples. The permit has also been revised to allow reduction or deletion of the mercury monitoring upon approval from EPA. Before EPA could consider the request, the permittee must show that the first five samples taken from the monitoring location resulted in non-detects in the range of 0.01 to 0.005 µg/L. Finally, the permit has been revised to allow quarterly monitoring for the mercury monitoring.

- (5) As stated earlier in these Response to Comments, the permit has been revised to remove downstream monitoring requirements.
- (6) The comment has been noted.

- 12. Comment: We request a minimum of 180 days for minor improvements resulting from the issuance of the new permit to allow the City of Emmett to plan, budget, and perform the required work. We request a minimum of 24 months for major improvements, such as chlorination equipment, resulting from the issuance of the new permit to allow the City of Emmett to plan, budget, and perform the required work.

- Response: Based on the information provided by the City, EPA believes that the request is reasonable. As a result, the permit has been revised to allow 180 days for development of the surface water monitoring program and the quality assurance plan. In addition, the permit has been revised to include a compliance schedule of 24 months for the facility to achieve compliance with the total residual chlorine limitations.
13. Comment: We ask that all plans and changes to the wastewater treatment facility be cleared and approved by IDEQ as required by IDAPA. Submittal to EPA should not be required.
- Response: The regulations at 40 CFR § 122.41(l) require the permittee to notify EPA of any planned changes when the addition or alteration could significantly change the nature of or increase the amount of pollutants discharged. While EPA would not approve the plans, we would still need to be notified of any significant changes. Because EPA issues the NPDES permits and not IDEQ, EPA needs the information to determine whether or not a modification to the permit may be necessary. The permittee should supply EPA with a copy of any cover letter transmitting the plans to IDEQ.
14. Comment: Right of entry should be changed to read that “at a reasonable time” as is noted in 4-G-2,-3, and -4.
- Response: This condition is a regulation found at 40 CFR § 122.41(i) that must be included in all NPDES permits. Because it is a regulation, it cannot be challenged in the context of an NPDES permit action.
15. Comment: The reopening clause discussed in K needs to be addressed in conjunction with the TMDL process discussed in the fact sheet. If EPA plans to reopen permits to address TMDL issues, it should be stated up front in the permit. The reopening clause presented in the draft does not involve TMDL issues.
- Response: The reopener clause in K is required by 40 CFR § 122.44(c) and specifically addresses sludge. The general reopener provision is found at Part IV.A., “Permit Actions.” EPA has not made any decisions at the present time regarding the reopening of the permit to incorporate any wasteload allocations established under the TMDL. The general reopener give EPA the authority to do so.

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16. Comment. Item C of the definitions should be changed to read, “average monthly discharge means the highest allowable average of discharge values.” The word “limitations” there is a misnomer and should not be included.
- Response. EPA disagrees. The definition for average weekly discharge limitation is taken from the regulatory definition at 40 CFR § 122.2.
17. Comment. Under definition J, the 15-minute time frame regarding a grab sample is an unusual definition for grab sample. In all the literature we have ever seen, there is no time limit on a grab sample. Grab sample is normally defined as an incident in time when a sample is removed from the stream to be sampled.
- Response. EPA agrees and has revised the definition to conform to the definition included in the USEPA NPDES Permit Writers’ Manual, EPA-833-B-96-003, December 1996, page G-6: “Grab” sample is a sample taken from a wastestream or receiving water on a one-time basis without consideration of the flow rate of the wastestream or receiving water and without consideration of time.
18. Comment: The population base for the City of Emmett is 5,490 based on 2000 census data.
- Response: This information will be updated in the permit file.
19. Comment: In the fact sheet, the discussion on fecal coliform bacteria notes that a dilution factor is not used. We feel that the 28:1 dilution factor and up to 1,000:1 dilution factor should be used. The use of fecal coliform as a permit parameter is questionable. The State of Idaho has established the *E. coli* bacteria limits for use and therefore the fecal coliform requirement should be removed from the permit.
- Response: The Payette river is limited for fecal coliform bacteria which means that fecal coliform concentrations in the river exceed the criterion. In effect, there is no allowable dilution. As a result, a TMDL was established and wasteload allocations were developed. The permit has not been revised to remove fecal coliform requirements.

Additional revisions to the draft permit.

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In addition to the changes noted above, the draft permit has been revised to correct typographical errors. Also, upon review of the permits in the Lower Payette watershed, EPA has revised the effluent and receiving water monitoring for nutrients and mercury to quarterly. A requirement to sample the effluent for dissolved oxygen has been added to the permit. This requirement was inadvertently left out of the draft permit.

In a letter dated November 16, 2001, the State of Idaho certified under section 401 of the Clean Water Act that the activities allowed under this permit that there is a reasonable assurance that this permit will comply with the *Idaho Water Quality Standards and Wastewater Requirements*.