

RESPONSE TO COMMENTS DRAFT NPDES PERMIT ID-002081-8 CITY OF SODA SPRINGS WASTEWATER TREATMENT PLANT

A draft National pollutant Discharge Elimination System (NPDES) permit for the City of Soda Springs Wastewater Treatment Plant was issued for public notice on July 12, 2001. This public notice initiated a public comment period that lasted 30 days. This document responds to comments received during the comment period. EPA received comments from the City of Soda Springs. The state of Idaho Department of Environmental Quality (IDEQ) submitted a final certification of this permit to EPA under Section 401 of the Clean Water Act on November 5, 2001. The stipulations of the final certification are incorporated into the final NPDES permit and response to comments. The 401 certification included the following:

- A compliance schedule has been authorized for the installation of flow proportioned sampling equipment to be completed by June 20, 2002.
- A compliance schedule has been authorized for total ammonia, therefore, the final effluent limitations for total ammonia will not be effective until December 31, 2004. IDEQ has provided a schedule that the permittee is to follow in order to achieve compliance with this effluent limitation. EPA has incorporated this schedule into the permit in accordance with the requirements of 40 CFR 122.47.
- IDEQ has authorized the use of E. coli bacterial monitoring as a substitute for fecal coliform monitoring to eliminate redundant monitoring for bacteria in the effluent.

Comments from the City of Soda Springs (the permittee)

1. <u>**Comment**</u>. The permittee commented that the proposed requirement to monitor fecal coliform bacteria five times per week is excessive for a plant their size and would require daily shipments to the laboratory in Pocatello.

<u>Response</u>. While the draft permit did specify a sample frequency of five times per week, footnote 5 indicated that this was to be done for only one week during the month. This would result in only 5 samples per month, rather than the current 8 samples per month required with 2 samples per week.

The Disinfection Requirements for Sewage Wastewater Treatment Plant Effluent in the Idaho water quality standards (IDAPA 58.01.02.420.05) specify that Fecal coliform concentrations in secondary treated effluent must not exceed a geometric mean of 200/100 mL **based on no more than one week's data and a minimum of five samples**



[emphasis added]. Therefore, the draft permit was consistent with the Idaho water quality standards.

However, this treatment requirement was designed to be protective of human health. The state of Idaho has indicated that they inadvertently missed updating this requirement when they replaced fecal coliform bacteria with E. coli bacteria in their water quality standards for human health protection. The Idaho Department of Environmental Quality (IDEQ) has indicated that compliance with the water quality standard will meet their disinfection treatment requirements. Therefore, EPA has removed fecal coliform bacteria effluent limitations and monitoring requirements in the final permit.

2. <u>**Comment**</u>. The permittee requested a sample frequency for E. coli bacteria of once per week, rather than five per month as specified in the draft permit.

<u>Response</u>. The Idaho Department of Environmental Quality (IDEQ) has specified in their certification of this permit under section 401 of the Clean Water Act that a monitoring frequency of two samples per week is necessary to determine compliance with their water quality standards. Therefore, the final permit requires E. coli bacteria monitoring twice per week.

3. <u>**Comment.**</u> The permittee commented that it is impossible for it to conduct continuous monitoring of the Bear River since it does not own the monitoring station. The permittee stated that it is currently reading the meter once every two weeks when it collects other receiving water samples.

<u>Response</u>. It was EPA's intent for the permittee to use the available continuous monitoring station on the Bear River, not to install a continuous monitoring station. EPA agrees with the permittee's comment and has modified the sample frequency requirement in the final permit to once every two weeks.

4. <u>**Comment**</u>. The permittee commented that it is difficult for it to achieve the 85 percent removal requirement because the influent is dilute from sump pumps, infiltration, etc. The permittee indicated that the City is built on a very wet area with a lot of water problems.

<u>Response</u>. The federal regulations at 40 CFR 133.103(d) allow for a lower percent removal when the POTW has a less concentrated influent only if **all** the following conditions are met:

a. The treatment works is constantly meeting its effluent concentration limits but its percent removal requirements cannot be met due to less concentrated influent. The DMRs submitted by the permittee for the past three years (1998 through 2000) indicate that the permittee is able to meet the 85 percent removal requirement. There was only one month (May 1999) during that time period that the permittee was not able to meet this requirement for BOD₅ and one month

(October 1998) where this requirement was not met for TSS. Therefore, there is not sufficient evidence that this condition has been met.

- b. The treatment works would have to achieve significantly more stringent limitations than would otherwise be required (i.e., the effluent concentrations would have to be well below an average monthly concentration of 30 mg/l and an average weekly concentration of 45 mg/l) to meet the 85 percent removal requirement. Data submitted by the permittee indicates that its effluent TSS concentration would need to be approximately 20 mg/L and its effluent BOD₅ concentration would need to be approximately 10 mg/L to meet the percent removal requirement. Therefore, there is sufficient evidence that this condition has been met.
- c. The less concentrated influent wastewater to the treatment works is not the result of excessive infiltration and inflow (I/I). Excessive I/I is determined from the definition in 40 CFR 35.2005(b)(16) and the criterion that the total flow to the POTW (i.e., wastewater plus inflow plus infiltration) is less than 275 gallons per capita per day.

40 CFR Part 35.2005(b)(16) *Excessive infiltration/inflow*. The quantities of infiltration/inflow which can be economically eliminated from a sewer system as determined in a cost-effectiveness analysis that compares the costs for correcting the infiltration/inflow conditions to the total costs for transportation and treatment of the infiltration/inflow.

The permittee has not supplied sufficient evidence to show that it has conducted a cost-effectiveness analysis and remove the excess quantities of I/I from their sewer system. This is the reason that EPA had proposed in the draft permit the requirement for the facility to conduct and I/I study.

Additionally, the permittee has not met the criterion that the total flow to the POTW is less than 257 gallons per capita per day. Based on a population of 3,381, this criterion would equate to a flow less than 0.93 mgd. The data submitted by the permittee shows that there are daily flows to the treatment works greater than 0.93 mgd. This indicates that there may be excessive I/I that the permittee will need to remove from their sewer system.

Since the permittee has not met the eligibility requirements of 40 CFR 133.103(d), EPA cannot allow a lower percent removal at this time. EPA urges the permittee to collect the required information and submit it to EPA for future analysis. The permittee would need to provide sufficient evidence that it cannot meet the percent removal requirement while meeting it's concentration limits, show that it has removed the quantities of I/I that can be economically eliminated, and provide two years of flow data (after the removal of excessive I/I) that indicates a total inflow less than 0.93 mgd.

Additionally, EPA has changed footnote 5 of Table 1 (previously footnote 8) from '*This limitation is for any single sample*.' to '*This limitation is an instantaneous maximum*.' and added in a definition of instantaneous.