

# RESPONSE TO COMMENTS

## City of Weiser Wastewater Treatment Plant NPDES Permit #ID002029-0 November 23, 2011

On January 28, 2010, the U.S. Environmental Protection Agency (EPA) issued a public notice for the proposed reissuance of the City of Weiser Wastewater Treatment Plant (WWTP) draft National Pollutant Discharge Elimination System (NPDES) Permit No. WA-002029-0. The WWTP discharges to the Snake River (River). On March 31, 2011 the EPA reopened the public comment period on the draft permit pursuant to 40 CFR 124.14(c) to seek comment on adding a 7.5 year compliance schedule that allows the City to land apply to meet the phosphorus effluent limits in the permit, an antidegradation analysis and changing the annual total phosphorus limitations to seasonal limitations.

This Response to Comments provides a summary of significant comments and provides corresponding the EPA responses. Where indicated, the EPA has made appropriate changes to the final NPDES Permit.

Comments were received from the following during the first comment period:

Glenn Holdren, PE., Project Manager for the City of Weiser (City),  
Justin Hayes, Program Director, Idaho Conservation League (ICL), and  
Pete Wagner, Regional Administrator for the Idaho Department of Environmental Quality, Boise Regional Office (IDEQ).

Comments were received from the following during the second comment period:

Justin Hayes, Program Director, Idaho Conservation League (ICL 2),  
Honorable Mayor John Walker, City of Weiser (City 2)

### Comments Received During the First Comment Period

- 1. Comment (City):** Schedule of Submissions. Weekly Biochemical Oxygen Demand (BOD), total suspended solids (TSS) and Total Phosphorus monitoring is once per week. Thus, it is possible that the permittee will be monitoring on the last day of the month. Standard turnaround time for laboratory analysis ranges between 10 to 14 working days. Consequently, the permittee may not have all monitoring results available until the 14<sup>th</sup> of the month. The permittee needs time to assemble and analyze the data prepare the monthly report, conduct quality assurance/ quality control on the data and report and sign and submit the final report. A reasonable amount of time to obtain all the monitoring data and complete obtain all the monitoring data and complete a monitoring report is 28 days. Change the report date to the 28<sup>th</sup>.

**Response:** This is a common provision and no other permittee has had an issue with this submittal date. However, the EPA has changed the report date in Section III.B. to allow the City to post mark the report by the 15<sup>th</sup> of the month. This provides the City an additional five days to prepare and sign the discharge monitoring reports (DMRs). This is a reasonable time for preparing reports under NPDES permits.

2. **Comment (City, IDEQ):** Change the Total Phosphorus effluent limits, interim and final, to seasonal limits from May 1 to September 30 with no limits from October 1 to April 30 consistent with the Snake River – Hells Canyon Total Maximum Daily Load (SR-HC TMDL) Revised June 2004 by IDEQ. During October 1 to April 30, effluent monitoring is appropriate. 40 CFR 122.44d(1)(vii)(B) requires effluent limits developed to protect a narrative water quality criterion, a numeric water quality criterion, or both, are consistent with the assumptions and requirements of any available waste load allocation (WLA) for the discharge prepared by the State and approved by the EPA pursuant to 40 CFR 130.7. Thus, the permit limit must be changed to a seasonal load allocation of 14 pounds per day from May 1 to September 30 and no effluent phosphorus limit from October 1 to April 30 to meet the SR – HC TMDL.

**Response:** As explained in the revised Fact Sheet, to ensure consistency with the SR-HC TMDL, the interim and final phosphorus limits have been changed to seasonal from May 1 to September 30 and no limits from October 1 to April 30. Compliance monitoring is required from May 1 to September 30. In addition, monitoring is also required from October 1 to April 30 to gather data for the next permit cycle.

3. **Comment (City):** The City’s phosphorus effluent limits both monthly and weekly should be a net total mass daily load of phosphorus from the City of Weiser. For Section I.B.1 add a footnote 14 to take into account total phosphorus withdrawal from the Snake River (River) by the City’s wastewater treatment plant. The footnote will require the average monthly plant effluent of phosphorus calculated by the subtracting the mass intake loading from the mass discharge loading. The City will monitor raw water total phosphorus on the same sample frequency as the discharges from the wastewater treatment plant and report the net discharge of total phosphorus.

**Response:** The total phosphorus effluent limitation is derived from a WLA to the City in the SR-HC TMDL. This WLA does not take into account total phosphorus withdrawal from the River. The WLA is not a net phosphorus allocation. Instead, it applies to the gross discharge of total phosphorus from the WWTP. Pursuant to 40 CFR 122.44(d)(1)(vii)(B), the EPA is required to implement a TMDL WLA in a NPDES permit. Since the TMDL does not take into account total phosphorus withdrawal from the River, the total phosphorus effluent limits cannot be changed to a net total mass daily load.

4. **Comment (City):** Change footnote 6 of Table 1 to read “Interim limits lasting nine years and eleven months.” The City needs two permit cycles to comply with the new discharge limits for phosphorus. The City is currently having a Facilities Planning Study prepared to plan for the upgrades to the treatment plant necessary to meet the permit limit. Due to

the time required to locate suitable property, negotiate and complete a purchase, and complete environmental impact study for the new site, the City would not be able to consider a new plant site as an option with a five year compliance schedule. More specifically the two options being considered would reduce or remove effluent flow to the Snake River.

One option is to purchase new property and build an entire new lagoon treatment system at a new location. The new treatment system would consist of a facultative lagoon, winter storage lagoon and a land application site. Wastewater would be treated year round in the facultative lagoon and discharged to the winter storage lagoon. The effluent in the winter storage lagoon would be used to grow alfalfa or other suitable crops on the land application site during the summer. All of the stored water would be used each summer. Thus, discharge to the Snake River would be eliminated year-round.

A second option would be to upgrade the existing plant and purchase new property for land application during the summer. The treatment system upgrades would be those necessary to keep the plant operating for 20 plus years to meet all the permit limits during the period when phosphorus limits do not apply (May 1 to September 30). Water would be treated at the plant year-round and discharged to the Snake River from October 1 to April 30 and to a summer storage lagoon from May 1 to September 30. The water in the summer storage lagoon would be used to grow alfalfa (or other suitable crops) on the land application site during the summer. All the stored water would be used each summer. This discharge to the Snake River would be eliminated from May 1 to September 30. The city finds acceptable a compliance schedule of seven years and six months shown in the figure below.

The City would not be able to adequately consider these options with a five year compliance schedule, since this is not enough time to complete all of the necessary steps:



The schedule shows a seven year six month time to achieve 80 percent reduction in total phosphorus. The City would like an additional year to provide a factor of safety for a total of eight years six months.

Alternatively, the City is considering several treatment options of upgrading the existing facility to meet the TMDL allocation of 14 pounds per day. These treatment options can be completed within the draft permit compliance schedule of four years and eleven months.

**Response:** The City’s comment has been addressed in the revised draft permit. The EPA has included an alternative compliance schedule that allows the City to eliminate the discharge to the Snake River.

5. **Comment (City):** In footnote 9 of Table 1 delete the sentence “The permittee must achieve a ML of 10 µg/L.” The description of Method 350.1, Determination of Ammonia Nitrogen by Semi-automated Colorimeter, Revision 2.9, August 1993, indicates that the applicable range for the method is 0.01 to 2.0 mg/L NH<sub>3</sub> as N, thus indicating the ML is 0.01 mg/L. The method also indicates that interferences for the method occur with cyanate, chlorine residual or method interferences. The method describes the calculation of the method detection limit (MDL) and it is clear that the MDL can vary from laboratory to laboratory and be above 0.01 mg/L. The City will require that the EPA Method 350.1 with an ML of 0.01 mg/L be used for effluent ammonia samples. The laboratory will report the results below the MDL as < {numeric value to the MDL}. The City should not be held in violation of the permit for an ML below 0.01 mg/L as this is allowed by Method 350.1. The laboratory should be required to provide an explanation of the interferences that prevent the laboratory from meeting the 0.01 mg/L ML. The laboratories hold the samples, often for a few weeks, and when the sample is run and the interferences are discovered, there may not be time to resample within the monitoring period. Since ammonia does not have an effluent limit, it is unreasonable to specify an ML and put the City at risk for violations for laboratory or sample interferences.

**Response:** The City will not be held for a violation below an ML of 0.01 mg/L. The ML of 0.01 mg/L is the same ML as required in the permit but with different units. The conversion is:

$$0.01 \text{ mg/L} \times \frac{1000 \text{ } \mu\text{g}}{\text{mg}} = 10 \frac{\text{ } \mu\text{g}}{\text{L}}$$

The City must comply with 40 Part 136 testing methods. Those methods indicate an ML of 0.01 mg/L must be achieved. If the City fails to meet the ML and MDL the City must identify the reasons for the failure, the source of any interference and submit data showing interference.

6. **Comment (City):** In footnote 10 of Table 1 delete the sentence “The permittee must achieve MDL of 1.8 ng/L and a ML of 5.0 ng/L (0.005 µg/L)” *Method 1631, Revision E: Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Atomic Fluorescence*

*Spectrometry*, August 2002, indicates in paragraph 1.5 that: “The method detection limit (MDL; 40 CFR 136, Appendix B) for Hg has been determined to be 0.2 ng/L when no interferences are present. The minimum level of quantification (ML) has been established as 0.5 ng/L”. It is unreasonable to require the City to achieve an MDL that is lower than the MDL defined in the method. Also, note that interferences are established in the method for gold and iodide and if these are present in the City’s drinking water supply (Snake River) in sufficient quantity the MDL and ML may not be attainable.

Method 245.7: Mercury in Water by Cold Vapor Atomic Fluorescence Spectrometry, Revision 2.0, February 2005 indicates in paragraph 1.5 that; “The method detection limit (MDL) and minimum level of Quantitation (ML) using this procedure usually are dependent on the level of interferences rather than instrumental limitations. The MDL determined from a single –laboratory and interlaboratory laboratory validation studies is 1.8 ng/L and the ML has been established as 5.0 ng/L. “In paragraph 4.4.1 of the method, gold, silver and iodide are identified as known interferences. High purity argon gas (99.998%) must be used as the carrier gas. Less pure argon gas will cause a reduction in sensitivity and thus higher MDL and ML.

It is reasonable to require the City to use the EPA Methods 1631E and 245.7 and provide an explanation from the laboratory if they are not able to achieve the MDL or ML established by the method. Interferences from the drinking water supply, discharges to the plant, and the laboratory that increases the MDL and ML but are still within the definition of the method are not controllable by the City. The Fact Sheet indicates in Section V, Paragraph B.2. last sentence of the first paragraph that “samples can be used for averaging if they are conducted using the EPA approved test methods (generally found in 40 CFR 136) and if the Method Detection Limits (MDLs) are less than the effluent limits.” There is no effluent limit for mercury and thus any MDL will be below the effluent limit. The City should not be subject to violations because a laboratory is not able to achieve the required MDL or ML for the specified method, particularly when there is not an effluent limit for mercury.

**Response:** The ML for mercury in the permit is 5.0 nanograms per liter (ng/L). This ML is not less than the Method 1631E ML of 0.5 ng/L or the Method 245.7 ML of 5.0 ng/L. The MDL in the permit is 1.8 ng/L. This MDL is not less than the Method 1631E MDL of 0.2 ng/L or the Method 245.7 MDL of 1.8 ng/L.

The City has not provided documentation that indicates that these metals exist in the wastewater at levels that may or may not cause interference. If the City is finding interference and the City fails to meet the ML and MDL, the City must identify the reasons for the failure, the source of any interference and submit data showing interference. At that time, the City may submit a request to the EPA for approval of alternate test methods pursuant to Condition III.C. which allows the EPA to approve alternate test procedures under 40 CFR 136.5. Therefore, the EPA did not change the permit.

7. **Comment (City):** As indicated in the Fact Sheet on page 13 “EPA has determined that the discharge does not have the reasonable potential to cause or contribute to an excursion above Idaho’s narrative criteria for toxicity.” Not only does the discharge not have the reasonable potential to cause or contribute to an excursion about Idaho’s narrative criteria for toxicity, the Weiser WWTP has a nuisance problem with excessive growth of Ceriodaphnia dubia in their secondary clarifiers. The City has to chlorinate the clarifiers to control the growth of Ceriodaphnia dubia and prevent the continual clogging problems they have in their utility water filters. The cost for a toxicity test is approximately \$950 per species. Thus testing for Ceriodaphnia dubia will cost the City almost \$4,000 for a species that they are currently spending money to slow its out-of-control growth. The City requests elimination of the requirement to use Ceriodaphnia dubia.

**Response:** Compliance monitoring including compliance monitoring for toxicity must be by methods approved by the EPA and the State of Idaho. Specifically, compliance monitoring must be done using the testing protocol specified in Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, EPA/821-R-02-012, October 2002. This method requires the City to use Ceriodaphnia dubia in conducting toxicity testing. Therefore, the monitoring remains unchanged.

8. **Comment (ICL):** Upon review of the Weiser draft permit, fact sheet and 401 certification we are concerned that neither the State of Idaho nor the EPA has substantively reviewed the draft permit’s effluent limits to ensure that this discharge does not result in an unacceptable degradation of the water quality in the receiving water and waters downstream.

As you know, Idaho currently lacks an anti-degradation implementation plan. Such an implementation plan is required pursuant to the Clean Water Act and Idaho’s failure to have a lawful anti-degradation plan is in violation of the Clean Water Act. Since Idaho does not have a lawful anti-degradation policy it is not possible for the EPA to assure that the draft permit conditions are sufficient to protect downstream waters from degradation.

Statements in the draft permit, fact sheet and the draft 401 certification that state that the permit is in compliance with the Clean Water Act and Idaho’s IDAPA rules governing water quality (inclusive of Idaho’s anti-degradation policy) are not supported by fact as neither the State nor the EPA has conducted a lawful anti-degradation analysis. Illustrative of this shortcoming, neither the EPA nor the State has revealed what level of antidegradation review was (presumably) conducted or what anti-degradation tier(s) the receiving water is classified as. In other words, irrespective of the fact that Idaho lacks a valid anti-degradation, no sufficient analysis was done anyway. As such, the issuance of this permit and the 401 certification is arbitrary and capricious and it cannot be issued until this matter is resolved.

**Response:** On August 18, 2011, EPA approved the State’s antidegradation implementation methods. As such, IDEQ now does the antidegradation analysis for

NPDES permits. IDEQ conducted an anti-degradation analysis on August 31, 2011 that is included with the final 401 Water Quality Certification.

- 9. Comment (ICL):** In the draft 401 certification, DEQ states that effluent limits in the proposed Weiser NPDES are sufficient to ensure that the State's numeric and narrative criteria *will* be met. However, it is not clear when the State's WQ criteria *will* be met. The receiving water is listed as 303(d) for a number of pollutants that are discharged from the Weiser facility. Discharge of these pollutants, even at levels prescribed by the germane TMDLs and proposed permit limits, results in (or contributes to) the unacceptable degradation of the Snake River and harms existing and designated uses. First time limits (such as flow, temperature and total phosphorus) are not demonstrated to be sufficient to ensure that designated and existing uses are protected to the level required by anti-degradation requirements in the CWA. Merely having a limit does not ensure that the limit is sufficient. Indeed, the fact that DEQ and the EPA have crafted an interim limit to total phosphorus that is approximately 5 times less stringent than the final limit infers that the current discharges and the interim limits are causing degradation. If not, why require a more stringent final limit?

**Response:** The discharges from the City will achieve compliance with IDEQ's water quality standards for phosphorus by July 1, 2019 if control is by cessation of discharge or alternatively December 1, 2016 if control is by treatment. IDEQ's antidegradation analysis demonstrates that the effluent limits in the permit will ensure that designated and existing uses are protected consistent with Idaho's antidegradation requirements.

The approved TMDL identifies levels of pollutant reduction necessary to meet the applicable water quality standards. The final effluent limits for phosphorus, temperature, and TSS are consistent with the WLA as required at 40 CFR 122.44(d)(vii)(B).

Compliance schedules are allowed under CWA Section 301(b)(1)(C), CWA Section 502(17) and 40 CFR 122.47. The more stringent final limit ensures compliance with Idaho water quality standards and is consistent with the WLA in the TMDL.

- 10. Comment (ICL):** Similarly, as in the case of total ammonia-nitrogen, the lack of a limit offers no assurance that the receiving water will not be degraded. Indeed, the State's issuance of a mixing zone for ammonia demonstrates that ammonia discharges are indeed causing degradation of the receiving water and harm to existing and designated uses. In this instance we note that the issuance of a mixing zone for a pollutant that does not even have a discharge limit is counter to the CWA requirements under anti-deg which requires that all appropriate best management practices (which includes operational changes and permit limits) be implemented before harm to uses is allowed.

**Response:** The State of Idaho issued a mixing zone for the purpose of determining whether the level of ammonia in the discharge had the reasonable potential to exceed the ammonia water quality standard. Whether an effluent limit is required for a particular pollutant is determined based on the procedures identified in the *Technical Support Document for Water Quality-based Toxics Control*, US Environmental Protection

Agency, Office of Water, EPA/505/2-90-001, EPA 1991. This document provides the procedures for implementing the Clean Water Act requirements in NPDES permits. Using these procedures the EPA found ammonia discharges are so low they do not have a reasonable potential to violate Idaho's water quality standards at the edge of the mixing zone granted by Idaho in the September 1, 2011 401 Certification. As the level of ammonia in the effluent discharge does not have a reasonable potential to violate (exceed) the ammonia water quality standards during critical flow conditions, the EPA has not included an effluent limit for this parameter in the permit. (See Fact Sheet pages 27 and 30).

As discussed in IDEQ's antidegradation review, August 31, 2011, those pollutants present in the discharge that have no effluent limits will not cause a lowering of water quality.

### **Comments Received During the Second Comment Period**

- 11. Comment (City 2):** Address future correspondence regarding the Weiser Wastewater Treatment Plant to Jim Edwards, Superintendent Wastewater Treatment Plant.

**Response:** Future correspondence will be addressed to Jim Edwards, Superintendent Wastewater Treatment Plant.

- 12. Comment (City 2):** Change all references from "Jon-Lin Foods, LCC to "Fry Foods"

**Response:** Only the fact sheet references Jon-Lin Foods, LCC. The fact sheet is not changed with the reissued permit. Comment is noted.

- 13. Comment (City 2):** The City respectively requests two permit cycles (nine years and 11 months) to comply with the new phosphorus load limits in the new permit. The costs for implementing the necessary infrastructure improvements are substantial and will required time to build public support for passing a bond election which is required in the state of Idaho to acquire debt. This is made particularly difficult by the current economic conditions in Weiser and throughout Idaho.

**Response:** Pursuant to 40 CFR 122.47(a)(1), "Any schedules of compliance under this section shall require compliance as soon as possible." The EPA determined the compliance schedule was as soon as possible based on submission of the City's timeline; consultation with IDEQ's land application specialist; discussions with and a July 29, 2010 e-mail from Glen Holdren, Project Manager with Keller Associates on behalf of the City; and, elimination of the margin of safety set forth in the City's timeline.

- 14. Comment (City 2):** There is a discrepancy in the required monthly date of submission of DMRs. The Schedule of Submissions requires submission by the 10<sup>th</sup> of the month. Section III.B.1. says the 15<sup>th</sup> of the month. The City respectfully requests the date to be the 15<sup>th</sup> to provide time to process the necessary tests to be submitted with the DMR reports.

**Response:** The typographical error in the Schedule of Submissions is corrected to the 15<sup>th</sup> of the month for submission of DMRs.

**15. Comment (City 2):** The completion date of Task 1 is not feasible since it has already occurred. The completion date should be changed to June 1, 2011 and the task activity clarified to read, “*Facility Planning Study, Deliverable: The permittee must provide EPA with written notice that the study is complete and submitted to the Idaho Department of Environmental Quality (IDEQ)*”. Completion of the facility planning study has been delayed until the final permit is issued to confirm what the regulatory requirements will be moving forward.

**Response:** The Facilities Planning Study has been completed and submitted to IDEQ and written notice provided to EPA. Task 1 Facilities Planning Study is eliminated.

**16. Comment (ICL 2):** It seems counter intuitive that going to land application will take longer to orchestrate than upgrading their WWTP.

**Response:** The land application option will take longer due to the need to locate a site and negotiate the purchase for wastewater reuse (Land Application).

**17. Comment (ICL 2):** The task list for Option 1 (cessation of discharge) offers good milestones to ensuring that this activity is completed at the compliance date. There does not appear to be a detailed task list for Option 2 (continuing discharge). Failure to have adequate “milestones” on option 2 violates the guidance the EPA follows when providing for compliance schedules.

**Response:** A compliance schedule task list is added for Option 2, Treatment and Continuing of Discharge.

**18. Comment (ICL 2):** The "fork in the road" moment is July 1, 2013. If Weiser chooses the "Continue Discharging" option at this date, it seems improbable that the City could actually pull off the necessary upgrades in the approx. 18 months that would be available to it prior to the need to achieve the final P limits for discharge.

**Response:** The task of obtaining funding will occur prior to the final decision date of February 1, 2014.

**19. Comment (ICL 2):** If indeed this work can be done between July 1, 2013 (now February 1, 2014) and the final compliance date (i.e. in a time period of approximately 18 months), then one is forced to ask why the proposed compliance schedule is 4 years and 11 months. It seems like you could shorten this interim period with discharge by three years and five months identified about would ensure that the compliance schedule would be kept to within the life of a single permit.

**Response:** The remaining time after the final decision date to achieve compliance using the treatment and continue to discharge is 22 months. The work of obtaining funding will be done prior to the final decision date. The four year eleven month compliance schedule for Option 2 treatment and continuing of discharge is not changed.

**20. Comment (ICL 2):** We do not agree with the conclusions reached in the antideg section. For high quality waters the new permit limits need to reflect current loading, not previous permit limits, in order to ensure that water quality is not degraded. We recently submitted detailed comments on this issue with regard to the Idaho Falls WWTP NPDES permit. You might take a look at them before you go forward with the Weiser permit.

**Response:** On August 18, 2011, EPA approved the State's antidegradation implementation methods. As such, IDEQ now does the antidegradation analysis for NPDES permits. IDEQ's August 31, 2011 Antidegradation Review concluded the issuance of the Weiser NPDES permit will not result in a lowering of water quality. EPA has reviewed IDEQ's 401 Certification and concludes that the antidegradation review complies with the State's antidegradation policy.