Nampa WWTP Phase II/III Upgrades
Design Review Committee
Thursday, November 15, 2018
Nampa Wastewater Treatment Plant |340 W Railroad St
7:00 AM – 9:00 AM
MEETING SUMMARY

Meeting Overview

On Thursday, November 15, 2018, the Nampa Wastewater Treatment Plant Design Review Committee (DRC) convened it's third meeting. The objectives of this meeting were to review and discuss specific design features, as well as begin discussing project delivery options. The following is a summary of the topics discussed and feedback provided at the meeting. Please see meeting materials for more information.

Meeting Summary

Industrial Capactiy Review

Based on a request for more information at the previous DRC meeting, Matt Gregg, Brown and Caldwell, provided an overview of current industrial capacity allocations and use, as well as factors determining differences between allocations and actual use.

Questions and comments included:

- What events cause the spikes seen in use?
- How long does it take to move high flows through the plant?
- Some companies will pay higher use fees than they need in order to accommodate growth.
- Will Simplot sell some of their allotted capacity back to the city?
- How much capital costs can be saved if industrial capacity is reduced?

Energy Recovery/Production Opportunities and Economics

Based on a request for more information at the previous DRC meeting, Matt provided additional information on energy recovery opportunities, focusing primarily on producing pipeline-quality renewable natural gas from biogas. At the request of the DRC, the project team will conduct an economic analysis of these recovery opportunities in order for the DRC to make an informed recommendation regarding whether the City should incorporate biogas recovery into the designs.

Questions and comments included:

1. Consider landfill impact fees as well when determining recovery costs. There may be a potential ROI if the City spends money to develop a product that farmers want.
2. We should focus on reuse more. Consider wise use for future generations.
3. Are any options a better choice for reducing our environmental footprint?
4. Is it possible to determine future risks of RINs?
5. Project team should provide analysis of the three potential option for biogas use: cogeneration, renewable natural gas production, and compressed natural gas prodcution.

Capital Costs Comparison
Matt provided an overview of the process for developing a capital cost estimate, including how and why a 30% contigency fee is included.

Questions included:

- Does the City pay sales tax?
- Why is the 30% contingency used at this stage of the project, and what is our actual target?

Secondary Treatment Technology Evaluation
Matt provided a high-level explanation of a variety of options for secondary treatment processes and equipment. The project team recommends moving forward with the first alternative presented, which is expanding existing processes. This recommendation is based on the low costs associated with development. The DRC agreed with this recommendation.

Questions and comments included:

1. Are there any savings found from reducing the effluent limit from 0.1 mg/L to 0.35 mg/L?
2. How much redundancy exists in the current plant facility?
3. Is current direction based on previous plans and current infrastructure? If we started fresh, would there be different recommendations?

- The proposed approach is a common approach for many WWTPs around the country. Part of this decision is driven by the existing infrastructure. is the "tried and true" standard based on what is already in the ground.
- Please provide an update on Kuna's plant improvements at the next meeting.

Tertiary Treatment Technology Overview
Matt provided an overview on the filtration alternatives for the tertiary treatment process. Along with meeting effluent targets, the objective of each is to also produce Class A reclaimed water for irrigation and industrial reuse. The evaluation of these technologies will be presented at the fourth DRC meeting

Questions included:

- Is more energy needed for the upflow sand filters than the sand filters?
- If City successfully obtains a reuse permit from IDEQ, are there any problems with moving it forward in schedule?
- Are there any capital cost savings associated with the accelerated recycled water program?

Project Delivery and Package Options
Leofwin Clark, Brown and Caldwell, provided an initial overview of the potential project delivery and package options that the City can select for developing final designs and constructing the new plant. These different options assign ownership to various parties, as well as spreads risk in liability and costs across different entities and schedules. The project delivery option the City chooses is a critical decision, and the DRC will be asked for recommendations on approach at future meetings. Thus, this overview will be followed by more information and discussion. Any questions or concerns prior to the next meeting can be sent to Elizabeth, Nate or Matt for response at the upcoming DRC meeting.

Questions included:

- What risks are assumed by the owner under the CMAR model?

Parallel Path Approach Update

Nate Runyan, City of Nampa, provided an update on the parallel path associated with the Harriman Report. On November 1, 2018, Nampa Mayor Kling and the City Council provided a response letter stating that after extensive research, the City has determined it will not persue a legal challenge against the current EPA regulations and WOTUS designation for Indian Creek. This decision was determined based on the level of risk, time and costs associated with the legal challenge, as well as the likelihood of success. The plan is to now continue moving forward with the wastewater treatment plant upgrade design and construction. Please see attached response letter for more information.

Next Steps

The next Committee meeting will be Thursday, December 20, 2018, from 7-9 a.m. at the Nampa Public Library.

DRC Meeting #3 – November 15, 2018

Responses to Questions

Industrial Capactiy Review

1. What events cause the spikes seen in use?
    - Seasonal fluctuations from the industrial users
2. How long does it take to move high flows through the plant?
    - This depends on the influential flow, but generally takes approximately 18 – 24 hours.
3. Will Simplot sell some of their allotted capacity back to the city?
    - Simplot has offered to sell back some of its capacity but the City has not moved forward with this.
4. How much capital costs can be saved if industrial capacity is reduced?
    - Savings can be found if City delays building specific structures. However, it is important to balance the tradeoffs associated with delays. An analysis of the potential delay will be conducted and presented to the DRC at a future meeting.

Energy Recovery/Production Opportunities and Economics

5. Are any options a better choice for reducing our environmental footprint?
    - Using gas for purposes other than flaring would limit emissions.
6. Is it possible to determine future risks of RINs?
    - We can look at historical trends and market variations to develop projections.

Capital Costs Comparison

7. Does the City pay sales tax?
    - A portion of equipment will be taxed
8. Why is the 30% contingency used at this stage of the project, and what is our actual target?
    - The "30% contingency" is a placeholder for the many undefined items fo the project; refinement will occur as we further define the project.
    - Under the State Revolving Fund loan, we won't use/pay for what we don't need.

Secondary Treatment Technology Evaluation

9. Are there any savings found from reducing the effluent limit from 0.1 mg/L to 0.35 mg/L?
    - There would not be significant savings in the secondary treatment technology due to this change. The savings for this change would occur in the tertiary treatment process.
10. How much redundancy exists in the current plant facility?
    - The City has defined redundancy for the aeration basins and final clarifiers as having one offline during the summer to allow for maintenance. This approach limits needed capital investments while still meeting Idaho Department of Environmental Quality requirements.
11. Is current direction based on previous plans and current infrastructure? If we started fresh, would there be different recommendations?
    - The proposed approach is a common approach for many WWTPs around the country. Part of this decision is driven by the existing infrastructure.

Tertiary Treatment Technology Overivew

12. Is more energy needed for the upflow sand filters than the sand filters?
    - This will be included in the evaluation that will be presented at the next DRC meeting.
13. If City successfully obtains a reuse permit from IDEQ, are there any problems with moving it forward in schedule?
    - No, the preliminary design has been sequenced to allow for any changes resulting from the reuse permit negotiations to be incorporated into the design process.
14. Are there any capital cost savings associated with the accelerated recycled water program?
    - Yes, there would be an overall reduction in the costs for the Program. However, this would require the building the irrigation reuse pump station and pipeline sooner than anticipated.

Project Delivery and Package Options

15. What risks are assumed by the owner under the CMAR model?
    - Unforseen conditions (which applies to all models)
    - Performance risk of the project