



February 2, 2024

Eric Gartner, P.E.
New Mexico Environment Department (NMED)
Construction Programs Bureau (CPB)
121 Tijeras Ave NE, Suite 1000
Albuquerque, NM 87102
Eric.Gartner@env.nm.gov

Re: Response to Engineering Review Comments for the Jemez Springs Preliminary Engineering Report and Environmental Information Document

Dear Mr. Gartner:

Daniel B. Stephens & Associates, Inc. (DBS&A) has prepared this letter to address New Mexico Environment Department (NMED) Construction Programs Bureau (CPB) comments received on October 31, 2023 for the Wastewater System Improvements Preliminary Engineering Report (PER) and Environmental Information Document (EID) for the Village of Jemez Springs. Agency comments are reproduced in *italics*, with DBS&A's responses immediately following in regular text.

DBS&A presented the EID during the Village council's monthly public meeting on December 20, 2023. The PER, EID, and presentation were advertised locally in the newspaper and posted on the community's Facebook page, available for review and download. The 30-day comment period ended on January 19, 2024. All comments received were incorporated into the EID, which is provided as Appendix A to the enclosed PER.

Preliminary Engineering Report

1. *Title Page: Ensure that the final version is stamped by a PE.*

The PER is stamped by a registered professional engineer.

2. *Title Page: Please add a statement indicating that this PER was created according to the guidelines established in United States Department of Agriculture (USDA) Rural Utilities Services (RUS) Bulletin 1780-2.*

This statement has been added to the title page.

3. *Project Planning. 1b.i Environmental Setting: typo: Vrom.*

The typo has been corrected.

4. *Project Planning. 1b.iii Floodplains: Please add FEMA figure for reference.*

The floodplain map is provided as Figure D (previously Figure 4) of the EID (Appendix A to the PER). The most current version of the FEMA floodplain shape file was used in preparing this map. Reference to this figure has been added to this section of the PER for clarification.

5. *Project Planning. 1b.iv Floodplains: Please add a wetlands map or refer to the EID.*

Reference to the wetlands map, Figure E of the EID, has been added to the end of this section.

6. *Project Planning. 1c Population Trends. Chart 1: Please move the Cerro Pelado Fire caption. This makes it look like it happened in April, 2023.*

The caption has been revised to reflect the date of occurrence (April 2022).

7. *Project Planning. 1c Population Trends. Chart 1: Why is there no data for December, 2022?*

The WWTP was experiencing issues with their flowmeters during this time, and flow data were not recorded.

8. *Project Planning. 1c Population Trends. Chart 1: Consider adding why a 2-month moving average of 2022 was used.*

The moving average has been removed from the graph.

9. *Project Planning. 1d Community Engagement: Please add minutes and/or concerns that are brought up at the public forum.*

The Community Engagement section, Section 1d, has been updated with information on the public meetings and comments received on the PER and EID.

10. *Need for Projects. 3c Reasonable Growth: Consider adding information from <https://data.census.gov> and population trends that are included in the EID.*

Language from the EID in reference to the U.S. Census Bureau was added to this section of the PER.

11. *Alternatives Considered. 4b.ii and 4c.ii Design Criteria: Please remove references to the NMED 2006 guidelines.*

References to NMED 2006 guidelines have been removed.

12. Alternatives Considered. 4d.i Description: Consider adding a process flow diagram and indicate critical components to be renovated.

Two new figures have been added, process flow diagrams for the existing WWTP (Figure 10) and the WWTP with future improvements (Figure 11).

13. Alternatives Considered. 4d.i Description: Have operator qualifications, such as necessary certifications, expertise, or specific skills, been considered in the operation and maintenance of the new installations proposed in the alternatives?

The new belt filter press, recommended in the draft PER for solids handling, was removed from consideration due to its high cost and O&M. The improvements to the WWTP recommended in the final PER include an auger monster for trash removal, which will be installed in the new lift station, and sludge drying beds. These items will reduce the maintenance currently required to manually clean the trash rack in the influent lift station and manually pump sludge from the basins for off-site disposal. Training for that equipment will be provided by the supplier, and a service contract will be recommended for future repairs.

The added equipment will not change the level of operator certification required, as that level is based on population and type of treatment process, which remains unchanged (phosphorus and nitrogen removal, population 25 to 500, requires Small Wastewater Advanced certification).

14. Selection of an Alternative. 5a Life Cycle Cost Analysis. Table 5: Please verify these values. I don't think that the Net Present Value of Alternative 1 over 20 years is equal to the O&M value. Please also check the other values. Using the formula provided, I don't get the same results.

There was a small error in the provided formula which has now been fixed. Table 5 has been revised to reflect the present worth of the O&M cost. With the corrected formula, the NPV of Alternative 1 (No Action) is equal to the present worth of the existing O&M cost.

15. References. New Mexico Environment Department (NMED). 2006. Recommended standards for water facilities.: Please remove references to the NMED 2006 guidelines. These are no longer valid (even though this link still works).

This reference has been removed.

16. References. New Mexico Environment Department (NMED). 2023. Drinking Water Watch records: This link goes to the Questa water system.

The Drinking Water Watch reference has been deleted. The water system was not used in this report due to its different service area than the wastewater system.

17. *Village of Jemez Springs Wastewater System Improvements PER Annual O&M Costs: Are the costs for each Alternative for the entire wastewater system (Collection system and WWTP)?*

Yes, the O&M costs are for the entire wastewater system and were modified for each alternative to reflect the effect on recurring O&M costs of improving the infrastructure.

18. *Village of Jemez Springs Wastewater System Improvements PER Annual O&M Cost Alternative 1: No Action: Why would Salaries and Wages and Payroll Tax Expense be different for alternative 1 than the other 4?*

This was a mistake and the O&M cost estimates have been revised.

Environmental Information Document

1. *Purpose of and Need for Project. 1.2.2 Project Overview: How is the proposed project currently under design when the PER and EID haven't been finalized?*

The proposed project is in reference to the PER, and design will not begin until funding for the recommended project is received.

2. *Affected Environment/Environmental Consequences: From the SERP: Discuss the relationship between short-term benefits of this project and the long-term impact on preserving and enhancing the environmental resources, including commitment of any irreversible and irretrievable resources. I didn't see this information in here.*

Additional discussion has been incorporated as applicable throughout Sections 3.1 through 3.12.

3. *Affected Environment/Environmental Consequences. 3.2.4 Soils: Is it possible to add context to what undisturbed ground would have construction?*

Language has been added to expand this discussion.

4. *Affected Environment/Environmental Consequences. 3.5.2 Groundwater: "improving and upgrading the treatment plant and collector system would prevent future flooding or plant upsets". Consider changing it to "Improving and upgrading the treatment plant and collector system would help to reduce the risk of future flooding or plant upsets."*

This revision has been made.

5. *Affected Environment/Environmental Consequences. 3.8.2 Wildlife: The statement "Construction would be contained within the existing wastewater treatment plant and existing collector system" seems to contradict the statement from 3.2.4 which indicates that some, but not much of undisturbed ground would have construction. Please review.*

Language has been added to expand this discussion.

6. *Affected Environment/Environmental Consequences. 3.12 Cumulative Impacts: Please provide additional information to describe that the cumulative impacts have been considered, such as:*

Increased wastewater discharge, Increased traffic, and Increased habitat fragmentation (etc.). Are there any Irreversible and Irretrievable Commitments of Resources?

Language has been added to expand this discussion.

7. *Consultation, Coordination, and Public Involvement. 5.3 Responsiveness Summary: Add a sample consultation letter or other notice included along with a mailing list.*

The consultation letter and mailing list (updated for final) are included in Attachment 5 to the final EID.

8. *Attachment 3 Cultural Resource Report: Will need to be reviewed. Evaluate once this information is included in the final EID.*

The Class I cultural resource report is provided as Attachment 3 to the final EID.

9. *Attachment 5 Agency Correspondence: Add a contact log, preferably in a table, documenting when letters were sent, responses received, and follow-up contacts made.*

This table is included in Attachment 5 to the EID.

10. *Attachment 5 Agency Correspondence: Include a Responsiveness Summary for all public hearings.*

The agency responsiveness summary is provided in Attachment 5 of the final EID. The responsiveness summary for the public meeting is included in Attachment 6, along with meeting documentation.

11. *Plans: Consider adding a reference title for this similar to Appendix C.*

This refers to the Wilson & Co. Sewer Rehab plans. The PER references this plan set in Section 2c.

Comments Received from the Environmental Protection Agency

1. *Page 14 – discusses the rates in comparison to other similar communities. However, it does not discuss whether the current rates are able to sustain proper O&M, much less the ability to save for emergencies or rehab when necessary.*

Other communities may not have high enough rates either. In addition, other communities of similar size might not have the same type of WWTP, terrain, or problems/situations as Jemez Springs. Size by itself is only a fraction of comparisons and this may not be helpful for the community to truly understand all of the issues.

It's important for rates to be set for long-term sustainability, not necessarily based on average of other's rates.

The comparison of rates to other similar utilities is provided to show that the Village is not undercharging for wastewater service. Language was added to Section 2f to further clarify the Village's current rates and future plans. A rate evaluation was also completed and discussed in Section 6f. The rate evaluation was performed using two conservative loan/grant funding scenarios. Our conclusion based on the rate evaluation is that the Village cannot take on additional debt without unrealistic increases to their wage rates. The Village plans to see grant funding for the recommended project.

- 2. Page 17 – description of Administrative Order, Docket Number CWA-06-2023-1728 is incorrect. This AO included 2 attachments, one of which was a previous AO that was being replaced by this one. That previous AO was not mentioned in the draft PER. It appears there is confusion on these.*

Page 28 – Under 4c.viii Cost Estimates - “The estimated total project cost for Collection Alternative 2 is \$13.5 million...” --- This should be Alternative 3

The description of Administrative Order, Docket Number CWA-06-2023-1728 has been updated.

The reference to the alternative in Section 4.c.viii has been corrected.

- 3. Pages 32 and 34 show the annual O&M costs for WWTP Alternative 3 as different amounts. Is the annual O&M estimate \$318,000 (as listed on page 32) or is it \$172,000 (as shown in table 5 on page 34)?*

Estimated costs have been updated and corrected throughout the report.

- 4. Based on estimated costs of the recommendations (\$9.4M), and based on the number of customer connections, the estimated cost per customer is over \$52,000 each. This does not include the annual O&M costs.*

The Village intends to pursue grant funding for the recommended project due to their financial position.

- 5. Other: Have the alternative projects been evaluation for any type of Flood Mitigation Assistance, considering some areas of the system are in the floodplain?*

<https://www.fema.gov/grants/mitigation/flood-mitigation-assistance>

or other funding through FEMA?

<https://www.fema.gov/grants/mitigation/storm-rlf>

<https://www.fema.gov/grants/mitigation/pre-disaster>

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<https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities>

The Village is working with the New Mexico Municipal League specifically on funding related to damage to the wastewater system related to flooding of the Jemez River. We have included these links to FEMA grant funding within the PER, Section 6f.v.

Closing

Additional changes made to the PER based on Village comments, are listed below:

- The belt filter press was removed from consideration due to high cost and associated O&M. Improvements will be made to the existing sand filter pits instead, which includes converting them to sludge drying beds.
- The building that was intended to house the proposed belt filter press has been removed from the recommendations.
- We have incorporated the estimated annualized infrastructure replacement cost into the O&M costs for each alternative. This annualized amount reflects the amount of money that the Village needs to save each year for future replacements based on the anticipated remaining service life of each asset, the estimated replacement cost, and the year of replacement.

This Village of Jemez Springs will use the PER and EID that DBS&A has prepared for funding of wastewater system improvements.

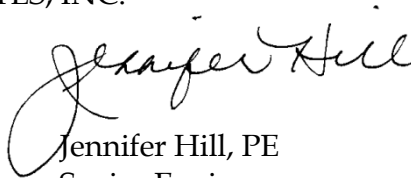
Please let us know if you have additional questions or concerns regarding the project.

Sincerely,

DANIEL B. STEPHENS & ASSOCIATES, INC.



Nate Arnold, EI
Project Engineer



Jennifer Hill, PE
Senior Engineer

NA/JH/rpf

Enclosure

cc: Rose Fenton, Village of Jemez Springs
Rachel Matthews, EPA
Julie Kutz, DBS&A