

December 22, 2022

Jeff Hintz
City of Sidney, DPW
115 2nd Street SE
Sidney, MT 59270

RE: Sludge Management Recommendations in Original Lagoon

Dear Jeff,

The City of Sidney contracted with Environmental Techniques, Inc. in 2020 for chemical products to add the City's now decommissioned original facultative lagoon. The City applied the CBX ProOxidizer and the CBX Sniper to accelerate endogenous respiration, in hopes that these materials would accelerate mass reduction in the sludge.

Sludge judging was completed by Environmental Techniques and City personnel both in 2021 and 2022 after these chemical applications began in order to evaluate their effectiveness. These findings were compared with sludge judging and sampling results completed by Steve Harris of H&S Environmental in 2018, as a baseline value. We have reviewed the proposal from Environmental Techniques, summary results of the three sludge surveys, and an emailed response to questions posed by me from Jason Bentz of Environmental techniques on 12/16/22.

The November 3, 2022 Report from Environmental Techniques states that, "The results from the October 2022 survey are disappointing and confusing." We agree with this assessment. While it is possible that some sludge mass reduction may have happened since the chemical applications, the results are inconclusive.

There is nothing in these materials that suggests that the City would be served well by continued use of these products. After two years, and given the high cost of using these products, we recommend that the City consider discontinuing use of the products and move forward with required mechanical removal of the sludge.

The 2012 Wastewater PER identified land application as the preferred method for sludge disposal. We continue to recommend this method as the lowest cost alternative. To minimize the costs associated with the removal and disposal of the sludge, it is advantageous to dewater the sludge in-place as much as possible. We recommend that City personnel dewater the existing lagoon as soon as the weather allows. The sludge can then be left to dry until disposal in 2024. The timing of the disposal will depend on the land upon which the material is applied and must be coordinated with cropping schedules.

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We look forward working with the City on the design and construction of this Phase Four of the wastewater facilities improvement project. Please let us know if you have any questions or concerns related to the sludge or any other work.

Sincerely,

Laura Gundlach, PE

Cc by Email: Kevin Bast, City of Sidney
Jeremy Thompson, City of Sidney
Rika Lashley, PE