

UTAH DIVISION OF WATER QUALITY

<b>IN THE MATTER OF Provo City 1377 S. 350 E. Provo, UT 84606</b>	<b>PERMIT VARIANCE FOR TECHNOLOGY-BASED PHOSPHORUS EFFLUENT LIMITS</b>
<b>UPDES PERMIT NO. UT0021717</b>	

**BACKGROUND**

1. Provo City's ("Provo") wastewater treatment plant in Provo, Utah (the "Facility") provides wastewater services within Utah County.
2. Provo's operations at the Facility are undertaken subject to UPDES Discharge Permit No. UT0021717 ("Permit").
3. The Facility is required to achieve technology-based phosphorus effluent limits ("TBPEL") on or before January 1, 2020, unless a variance is granted. *See* UAC R317-1-3.3.
4. Provo submitted a variance request, dated December 20, 2017 to the Utah Division of Water Quality ("DWQ"), seeking an extension of the TBPEL implementation date (the "Variance Request."). The Variance Request is based on the fact that Provo is in the process of designing and constructing improvements to the Facility to meet TBPEL requirements, however such improvements cannot be completed prior to January 1, 2020, despite Provo's diligence.
5. Utah law provides that DWQ may grant a variance as to the implementation date for compliance with the TBPEL in the event that the operator demonstrates due diligence toward construction of a treatment facility designed to meet TBPEL, provided that such compliance date shall not be later than January 1, 2025. *See* UAC R317-1-3.3.C.e.
6. The Director of DWQ has determined that Provo has met its burden to show diligence within the meaning of the UAC R317-1-3.3 and that a variance is appropriate, subject to the limitations and conditions provided herein.

### AUTHORITY

7. The Director of DWQ has authority to grant a variance as to the implementation deadline for TBPEL pursuant to UAC R317-1-3.3 and the corresponding provisions of the Utah Water Quality Act.
8. The State of Utah administers the Utah Pollution Discharge Elimination System (UPDES) permit program under the Utah Water Quality Act.

### DUE DILIGENCE - FINDINGS

9. The Variance Request included the following submissions, among others:
  - a. Draft - Provo Water Reclamation Facility Master Plan, Waterworks Engineers and Arcadis (December, 2017).
  - b. Provo Water Reclamation Facility Plant Relocation Evaluation, Waterworks Engineers (December, 2017).
  - c. Provo Water Reclamation Facility Project Phasing Plan, Waterworks Engineers (December, 2017).
  - d. Draft - Provo Water Reclamation Facility Project Funding Plan, Waterworks Engineers (December, 2017).
  - e. A Resolution Requesting Approval from the Utah Division of Water Quality of a Variance Concerning the Technology-Based Phosphorous Effluent Limits Under R317-1-3.3.C.d. and R317-1-3.3.C.e. for the Provo City Wastewater Reclamation Facility, Provo Municipal Council Resolution IssueFile # 17-128 (Approved November 14, 2017)
10. Based on the foregoing submissions, the Director has determined that Provo has established due diligence toward construction of Biological Phosphorus Removal treatment facility upgrade or facility replacement designed to meet TBPEL, within the meaning of UAC R317-1-3.3.C.e.

### VARIANCE

11. The Director hereby grants Provo a variance as to the compliance date to achieve TBPEL, until the time that its facility improvements described in the Variance Request are operational; subject to the following conditions:
  - a. This variance does not extend beyond January 1, 2025. Provo must comply with all TBPEL requirements by that date.

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- b. Pursuant to UAC R317-1-3.3.C.2, this variance is subject to re-evaluation in the event that there is any substantive change in the facility design or construction plans provided in the Variance Request. Provo must provide timely notice to DWQ of any such substantive changes.
  - c. By no later than June 1, 2018, Provo shall submit to DWQ a resolution instructing Provo staff to pursue one of the proposed alternatives: 1. Upgrade Existing Facility, 2. New Facility – Phased Implementation, or 3. New Facility – Full Capacity. The resolution shall include the approximate budget for the facility upgrade.
  - d. By no later than May 1, 2019, Provo shall submit to DWQ a resolution instructing Provo staff to pursue the facility upgrade to the selected biological phosphorus removal technology. The resolution shall include the approximate budget for the facility upgrade.
  - e. By no later than December 1, 2019, Provo shall submit to DWQ a complete Capital Facilities Plan with the selected biological phosphorus removal technology.
  - f. By no later than January 1, 2022, Provo shall submit to DWQ an approvable complete construction permit application per UAC R317-3 for new facilities that will biologically remove phosphorus to 1.0 mg/L or less.
  - g. Beginning no later than July 1, 2019, and for every year thereafter while this variance is in effect, Provo agrees to submit to DWQ an annual report relating to its phosphorus discharges (the “Annual Report”). The scope of the Annual Report shall include descriptions of all projects and work necessary, in reasonable detail, to achieve compliance with the TBPEL rule. The Annual Report will provide a summary of progress and milestones achieved in all construction, study, funding, planning, and design projects during the previous reporting period, projected progress and milestones scheduled to be completed during the following reporting period, and if the project(s) are on schedule. The Annual Report will also provide information on effluent phosphorus concentrations to determine Provo’s compliance with Parts 11.e. and 11.f. of this variance, noted below.
  - i. The Annual Report must specifically state the **economic benefit per year** Provo will receive from January 1 to December 31 of the coming year from this due diligence variance for not treating total phosphorus to 1.0 mg/L.
  - h. If it is found that Provo has failed to comply with the requirements of this variance toward the construction of Biological Phosphorus Removal treatment facility upgrade the Division of Water Quality may terminate this variance.

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- i. If this variance is terminated by the Division of Water Quality, Provo will be immediately expected to comply with the requirements UAC R317-1-3.3.
  - i. No total phosphorus effluent limitation will be added to the Permit before January 1, 2020.
  - j. Effective January 1, 2020, DWQ will impose the following interim effluent limitation under the Permit: total phosphorus annual average effluent limitation of 3.5 mg/L.

Date: \_\_\_\_\_

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Erica Brown Gaddis, PhD  
Director  
Utah Division of Water Quality  
DWQ-2018-002306

DRAFT

## March 20, 2018 Provo City Council Meeting

Questions to be addressed:

1. Explain the state revolving loan program.
  - a. How are interest rates determined and are there strategies for getting a better rate?
  - b. What is MAGI and how does it affect applications for funding?
  - c. What is a typical loan amount and duration?
  - d. Where does the money come from? (State vs. Federal)
  - e. What strings are attached? (ie. Buy American, Davis-Bacon Wages)
  - f. Are there deadlines for getting approval from the Water Quality Board?
    - i. What is the time table for the loan? (Gary Winterton, Dave Harding)
    - ii. Will there be additional funding available in future years/phases of water reclamation plant construction? (Gary Winterton, Dave Harding)
  - g. What other criteria are taken into consideration?
    - i. Asset management program
    - ii. Green projects
    - iii. Hardship
    - iv. 20 year Capital Facilities Plan
2. What is the status of Provo's variance application?
  - a. Milestones and deadlines.
  - b. Public comment period and response process.
3. What is on the horizon for future regulations?
  - a. Contaminants of emerging concern- pharmaceuticals, heavy metals, microbeads, personal care products
  - b. Nutrients- Phosphorus and Nitrogen
  - c. While there is some uncertainty concerning the timeline of when the state's new effluent standards will be finalized and what the final standards will be, what effluent standards does the state recommend that Provo design to in planning for a new or upgraded water reclamation plant? (Dave Sewell)
4. What new technologies/strategies are on the horizon that the state would consider permitting?
  - a. Public-Private partnerships
  - b. Resource recovery options (CLEARAS, Biogas, Water Reuse)
5. What treatment options would the state not permit?
6. What thoughts or recommendations does the state have relative to reclamation plant location, cost, and relative benefits of the options available to Provo? (George Handley)