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UTAH DIVISION OF WATER QUALITY

<b>IN THE MATTER OF City of Orem Department of Public Works 1450 West 550 North Orem, Utah 84057</b>	<b>PERMIT VARIANCE FOR TECHNOLOGY-BASED PHOSPHORUS EFFLUENT LIMITS</b>
<b>UPDES PERMIT NO. UT0020915</b>	

**BACKGROUND**

1. City of Orem’s (Orem) Orem Water Reclamation Facility (OWRF) in Orem, Utah provides wastewater services within Utah County.
2. Orem’s operations at the OWRF are undertaken subject to UPDES Discharge Permit No. UT0020915 (“Permit”).
3. The OWRF 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. Orem submitted a variance request, dated December 29, 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 Orem is in the process of designing and constructing improvements to the OWRF to meet TBPEL requirements, however such improvements cannot be completed prior to January 1, 2020, despite the Orem’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 Orem 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.

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## **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. TBPEL Requirements Extension (December 29, 2017).
  - b. Update for Variance from Technology Based Phosphorus Effluent Limits under R317-1-3.3.C.d. and R317-1-3.3.C.e. for the Orem Water Reclamation Facility (July 12, 2019)
  - c. Orem Water Reclamation Facility Tertiary Reuse Project Plan. WaterWorks Engineers (May 2019)
  - d. Orem Water Reclamation Facility Tertiary Reuse Preliminary Design Report. WaterWorks Engineers (May 2019)
  - e. Thermophilic Digester Improvements – Technical Memorandum No. 1 Carbon Management Workshop. Carollo (July 2016)
  - f. Thermophilic Digester Improvements – Technical Memorandum No. 2 Digester Improvements Workshop. Carollo (July 2016)
10. Based on the foregoing submissions, the Director has determined that Orem has established due diligence toward the undertaking of a reuse project to meet the TBPEL, within the meaning of UAC R317-1-3.3.C.e.

## **VARIANCE**

11. The Director hereby grants Orem 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, 2023. OWRF must comply with all TBPEL requirements by that date.
  - 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. OWRF must provide timely notice to DWQ of any such substantive changes.

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- c. By no later than December 1, 2020, OWRF shall submit to DWQ an approvable complete construction permit application per UAC R317-3 for new facilities to achieve a commensurate phosphorus reduction.
- d. No later than July 1, 2020, Orem 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 OWRF's compliance with Part 11.f. of this variance, noted below.
- i. The Annual Report must specifically state the **economic benefit per year** Orem 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.
- e. If it is found that Orem has failed to comply with the requirements of this variance toward the implementation of a reuse project to achieve a commensurate reduction of phosphorus the Division of Water Quality may terminate this variance.
- i. If this variance is terminated by the Division of Water Quality, OWRF will be immediately expected to comply with the requirements UAC R317-1-3.3.
- f. No total phosphorus effluent limitation will be added to the Permit before January 1, 2020.
- g. Effective January 1, 2020, DWQ will impose the following interim effluent limitation under the Permit: total phosphorus annual average effluent limitation of 2.5 mg/L.
- h. At the time that TBPEL becomes applicable under the Permit, treated wastewater shall be no greater than an annual average of 1.0 mg/L total phosphorus.

  
Erica Brown Gaddis, Ph.D.  
Director  
Utah Division of Water Quality

Date: 12/30/19