



April 17, 2023

Bruce Thelen
Jellystone Park at Larkspur
27777 Franklin Rd, Suite 200
Southfield, MI 80118

Subject: Increase in Design Capacity for an Existing Site Location Approval
Regulation 22 Site Location Approval No: ES.19.SA.04891
Jellystone Park at Larkspur, WWTP Expansion
Colorado Discharge Permit System (CDPS) No. COX631080
Douglas County
ES Project No. ES.23.SA.08073

Dear Bruce Thelen:

The Water Quality Control Division (Division) has received and reviewed the site location application for the Jellystone Park at Larkspur's WWTP Expansion. The current hydraulic and organic capacity ratings for the treatment plant are hydraulic, 0.044 million gallons per day (MGD) and organic 130 lbs. BOD₅/day. Site location approval number ES.19.SA.04891 was issued for the existing site location April 14, 2020. The treatment plant is located as follows: NW 1/4 of the NE 1/4 of Section 21, Township 9 South, Range 67 West, Douglas County. The treatment plant will continue to discharge to groundwater.

The site location application has been found to be in conformance with the Water Quality Control Commission's *Site Location and Design Regulations for Domestic Wastewater Treatment Works, 5 CCR 1002-22* (Regulation 22) and is approved. This site location approval addresses the following summary of the proposed design and the associated conditions:

1. Based upon application information, the treatment works will be designed to receive the following:

Hydraulic Design Capacity (Maximum Month Average) - 0.044 MGD (unchanged with this amended approval).

Organic Design Capacity (Maximum Month Average) - 177 lbs. BOD₅/day.

This approval also addresses the following treatment plant modifications/improvements:

- One 2 mm opening automatic drum screen with solids washer / compactor.
 - One additional anoxic and one aerobic process tank, convert existing Modified Ludzack-Ettinger (MLE) process to 4-Stage Bardenpho.
 - Replace ceramic MBR media.
 - Two additional process blowers - additional aeration zone.
 - Alum, sodium hydroxide, and Micro-C carbon source chemical storage and metering, with automatic controls.
2. As a result of the project, the following processes will be utilized at the proposed treatment plant:
 - Liquid Process: Lift station and force main, including emergency storage, fine screening, influent flow equalization, secondary treatment with a membrane biological reactor (including biological nutrient removal), alkalinity/pH adjustment, carbon addition, UV disinfection, TDS treatment including a raw water well connection for blending and disposal via a groundwater discharge pond with land application return rate of 1.0.
 - Solids Process: The solids handling process includes aerated sludge holding basin. Sludge is hauled offsite for further treatment and disposal.
 3. All conditions of the original site location application No. ES.19.SA.04891 apply except as modified in this approval, including:



- a. The facility will be located within the Chatfield Reservoir basin and is subject to the Chatfield Reservoir Control Regulation, Regulation 73. Therefore, the system is required to obtain a phosphorus allocation to allow discharge of phosphorus containing wastewater effluent. The Chatfield Watershed Authority (CWA) issued a letter dated November 14, 2019 that includes a recommendation that the Division consider approving the proposed phosphorus allocation along with several conditions. The CWA site location conditions were re-evaluated and included with this expansion. This site approval is conditional based on Jellystone Park at Larkspur satisfying the conditions within the CWA approval, maintaining their phosphorus trade allocation and completing the process for adopting the phosphorus trade allocation into Regulation 73 during an appropriate Regulation 73 triennial process.
- b. The wastewater treatment works, including lift station and treatment plant meet the setback requirements defined in the Water Pollution Control Program Policy WPC-SA-1 effective 8/31/2010. In the event that the facility receives complaints of odors associated with the wastewater treatment works, Jellystone Park at Larkspur must implement odor control measures to address the source of the odor concerns.

This site location approval does not constitute design approval for construction. In accordance with Regulation 22, Section 22.13(1), in addition to approval of the site location application the applicant must obtain approval of the design of the treatment works from the Division prior to beginning construction.

This site location approval will expire on October 17, 2025. If construction has not commenced by this date, the approval will expire and a new application for site location approval may be required. Construction is defined as entering into a contract for, or for in-house work forces, initiation of any action towards the erection or physical placement of materials, equipment, piping, earthwork or buildings which are to be a part of a domestic wastewater treatment works.

In accordance with Regulation 22, Section 22.4(12), this site location approval is subject to appeal pursuant to the State Administrative Procedures Act.

This approval does not relieve the owner from compliance with all local, state, and federal regulations prior to construction nor from responsibility for proper engineering, construction and operation of the treatment plant.

The following performance requirements must be completed before proceeding to construction and subsequent operation of the treatment plant:

1. The treatment plant design must be based upon the COX631080 permit certification effective May 14, 2020. Changes to the design as a result of a new/renewed permit, permit certification or a WQPT may require submittal of a request to update this approval or submittal of a revised site location application.
2. Any discharge from the treatment plant must be covered by a CDPS individual discharge permit or general permit certification which includes the final conditions and discharge limitations that are specific to the treatment plant. A complete application for a new or modified individual discharge permit or general permit certification must be made as soon as possible but at least 180 days prior to the planned date that discharge will commence. Please refer to the Division's Permit Section web page for specific information about the permitting application process. This condition does not prevent installing/constructing the process improvements once design approval is obtained from the Division.
3. The applicant/owner must be aware that added chemicals included in the treatment process will need to be considered under Regulation 61 and the individual discharge permit or general permit certification. Added treatment chemicals that could significantly change the nature or increase the quantity of pollutants discharged will be evaluated by the Permits Section and may result in additional or modified effluent limitations in the next permitting action. The chemical evaluation process is part of the permit application/routine review and is separate from the site location application and design review, and does not prevent installation/construction of the treatment process once design approval is obtained from the Division. The permittee is encouraged to begin the evaluation and coordinate with the Permits Section as soon as the treatment plan and chemicals are known. Please refer to the Division's Permit Section web page for specific information about the permitting application and

chemical evaluation processes. If the chemical evaluation results in the addition of effluent limitations and subsequent modification to the treatment process, then an amended site location application may be needed.

The Engineering Section is interested in gaining feedback about your experience during the engineering review process. We would appreciate your time to complete a Quality-of-Service Survey regarding your experience during the engineering review process leading up to issuance of this decision letter. The Engineering Section will use your responses and comments to identify strengths, target areas for improvement, and evaluate process improvements to better serve your needs. Please take a moment to fill out our survey [here](#).

If you should have any questions, please contact Anthony Kerr by phone at 720-383-7291 or by email at anthony.kerr@state.co.us.

Sincerely,

Tyson Ingels, P.E.
Engineering Section Manager
Water Quality Control Division
Colorado Department of Public Health and Environment

cc: Jeff Snyder, Integrated Water Services, Inc.
Karla Kinser, Kinser Membrane Solutions, LLC.
Alan Leak, RESPEC (on behalf of Chatfield Watershed Authority)
Caitlin Gappa, Douglas County Health Department
Mandy Mercer, WQCD Clean Water Enforcement Unit
Mark Pollock, WQCD Permits Section
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