

February 20, 2026

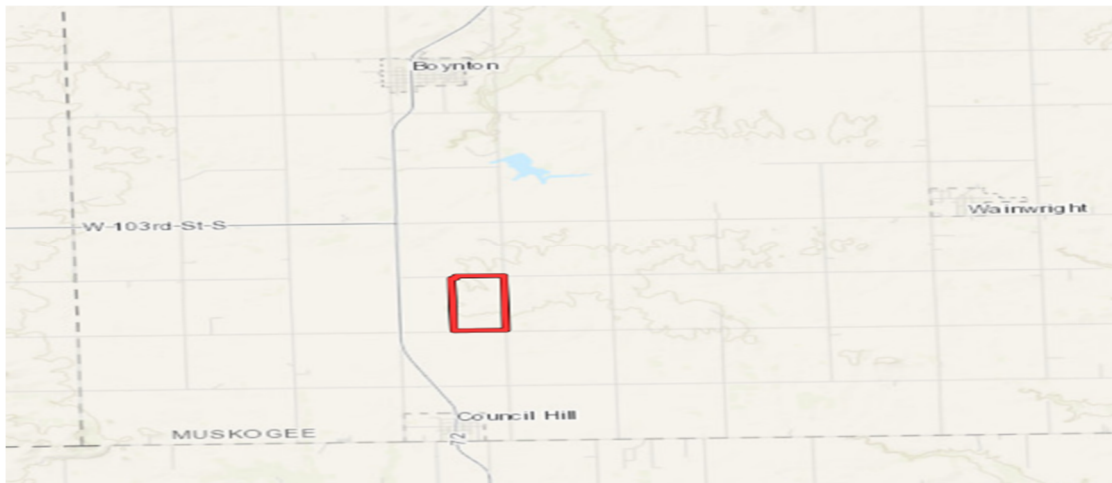
Joe A. Long
Environmental Programs Manager
Oklahoma Department of Environmental Quality
Watershed Planning Section
Water Quality Division
P.O. Box 1677
Oklahoma City, OK 73101-1677

Dear Mr. Long:

A project designated as Springboard has retained HDR Engineering, Inc. to, pursuant to Oklahoma's Continuing Planning Process and Water Quality Management Plan, develop and submit this Request to Discharge letter to initiate Oklahoma Department of Environmental Quality (ODEQ) process to apply for a waste load allocation for a proposed discharge from a proposed light industrial facility located in Muskogee County. This letter will be followed with appropriate analyses submitted to ODEQ with findings underscoring the request to discharge into the surface waters of the state.

Facility Description and Location

The project site is located approximately 2.5 mi north of Council Hill, OK within 319 acres, bounded by S. 113th Street on the north, County Road N 4140 to the east and County Road E 0990 to the south. The site will be configured as a campus comprising several buildings. Approximately 728 to 937 people are expected to be employed full-time onsite, with a total daily population of 1008 present on site across multiple work shifts. That campus population is expected to remain the same for the next 20 years.



Treatment Type

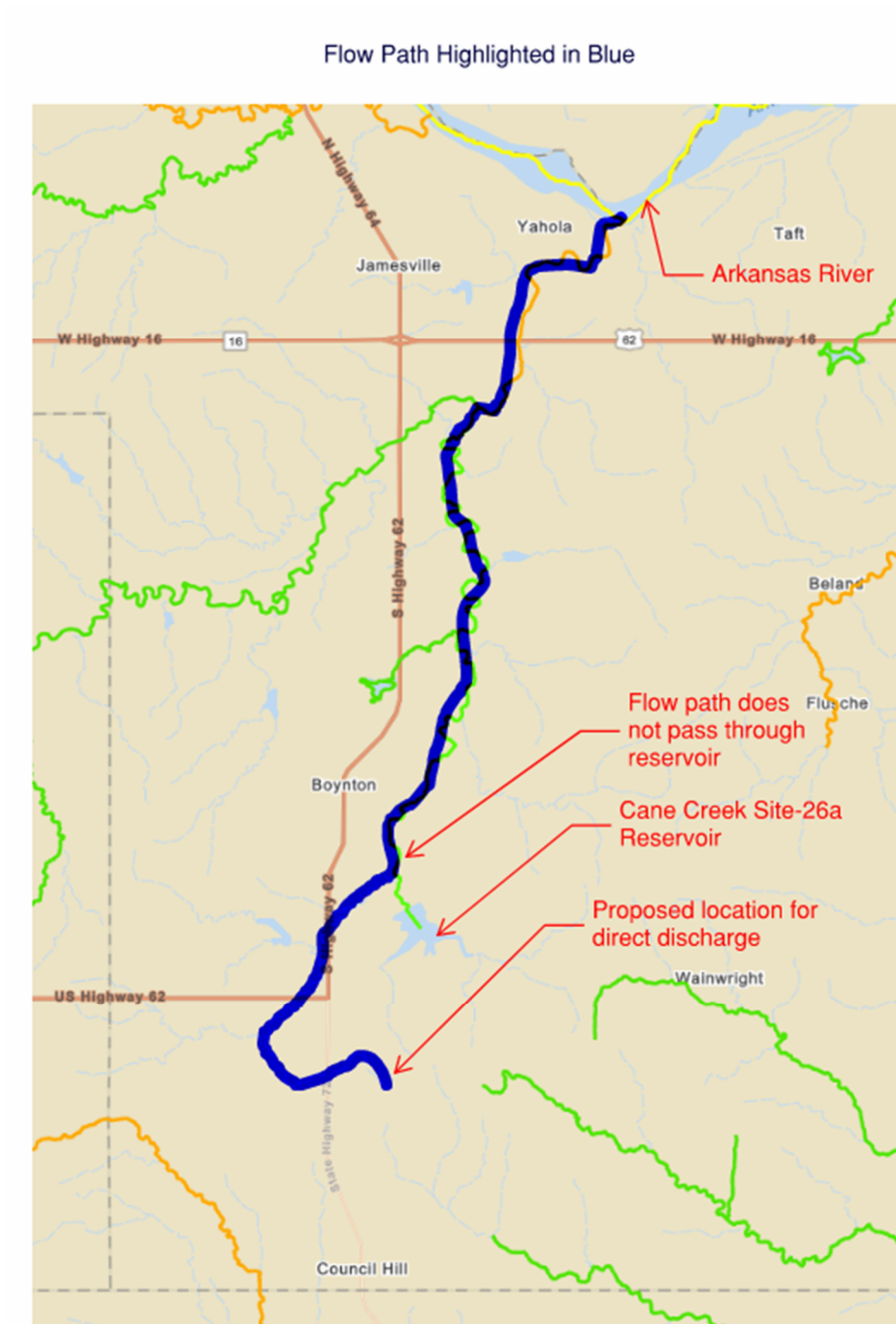
Process operation is planned to consist of air-cooled processes with a closed-loop process water cooling system. Wastewater discharges will comprise domestic waste from the onsite population. No process water will be discharged to surface waters. Based on the relative distance of the campus to most nearby communities, and the limited capacity of any Publicly Owned Treatment Works (POTW) of the closest communities, direct wastewater service is not readily available. The town of Boynton, which is the nearest town, has primary ponds that appear to be less than 2.5 acres total. The site is expected to contain a kitchen to serve the approximately 1,000 employees and the higher end of typical domestic loading is expected. A discharge of 28,700 gallons per day is anticipated to accommodate the total build-out population of the campus. Therefore, 400 mg/l BOD as the basis of design concentration at 28,700 gpd flow was used. With only the BOD loading from the proposed facility assuming no prior treatment (about 96 ppd BOD), the loading rate would exceed the allowable loading rate of 35 pounds of BOD per acre of surface area. This does not account for the additional loading that the town of Boynton is currently contributing. Thus the design capacity of the Boynton primary lagoons would be exceeded and the Boynton treatment system appears to be undersized for treating the discharge from this site.

The property will be occupied almost entirely by light industrial buildings serving the function of the campus, roads and storm detention ponds. No crops are grown on the property and therefore land application is not a suitable disposal method. There is not enough space available for expanding the evaporation ponds to a size that would allow for total retention of the Day N flows. Although it may be possible to acquire additional land, the 15 acres of currently proposed evaporation ponds has an opinion of probably cost of the liner installation is over \$3,000,000. An additional 20 acre pond would be required for total retention and add significant cost to the project in addition to land acquisition, grading and coordination time and cost.

Domestic wastewater will be generated from the campus and require onsite treatment via a package treatment plant. Packaged treatment systems are flexible in terms of being custom designed and prefabricated, where constructability is limited to transportation to the site.

Domestic waste will be collected and conveyed by grinder pump lift stations to the facility, where influent will be subject to hydraulic flow equalization into an activated sludge treatment plant. Treatment, involving suspended biological growth, will include aeration, clarification, tertiary filtration, followed by disinfection by ultraviolet light. An effluent lift station will pump the treated effluent to cascade aeration before discharge to a stream. Operations will be governed by limits established by the ODEQ, consistent with regulations pertaining to secondary treatment of wastewater. The flow path of the

stream to which the treatment system discharges does not pass through any lakes and ultimately discharges to the Arkansas River.



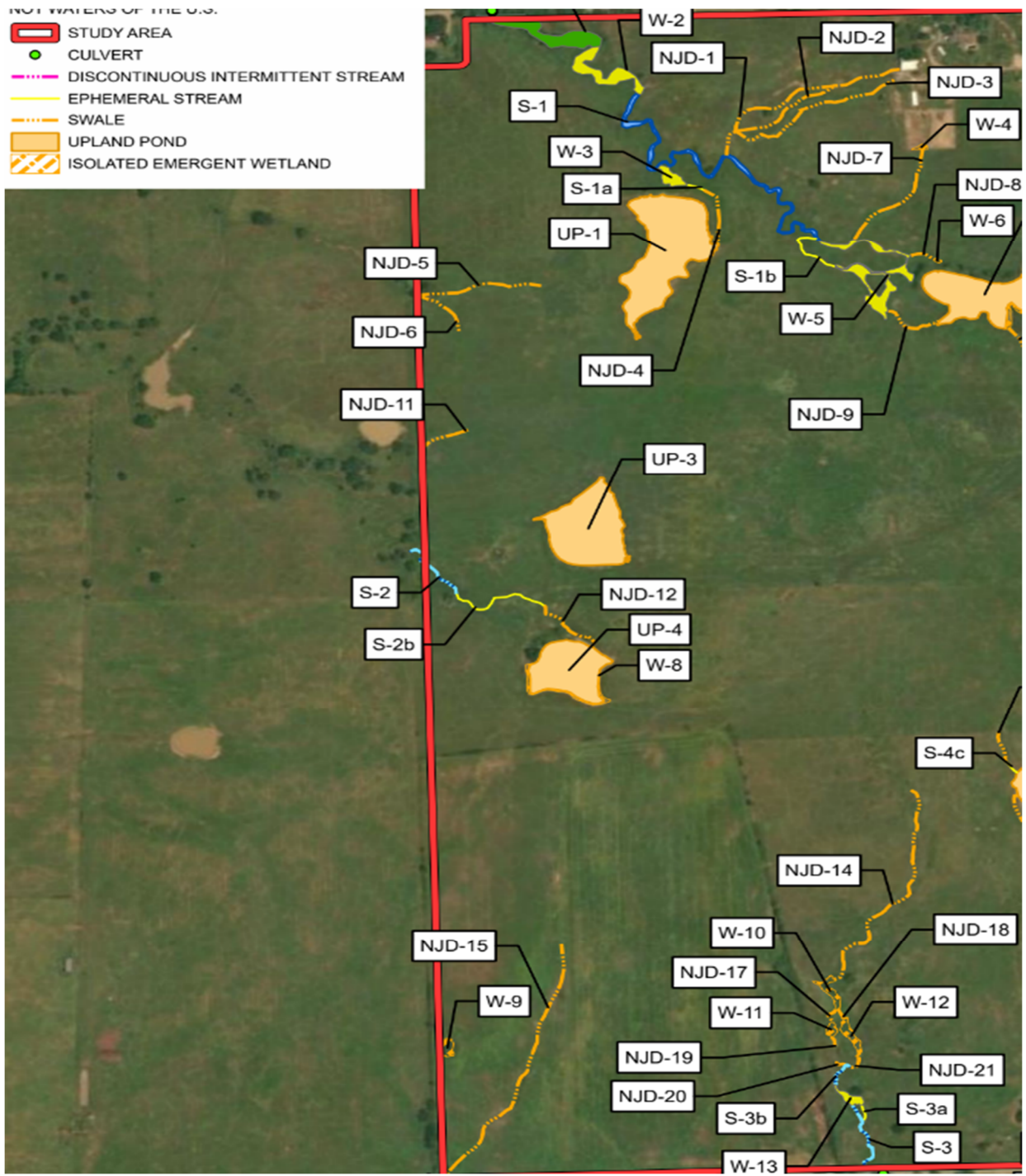
Discharge of the process water to the domestic wastewater system will be inhibitory to the biological treatment system. Therefore, process water will be collected in a separate sewer system and stored in underground manholes. The process water would be removed by a third party where a vacuum truck would pump out the manhole for offsite disposal.

Potential Discharge Locations

Three streams were identified as potential receiving waters for the outfall of the on-site wastewater treatment plant. All three are intermittent, first order streams that are prone to pooling. They have a gentle gradient and are all designated as Relatively Permanent Waters pursuant to jurisdictional determinations for Waters of the U.S.

Stream	Latitude	Longitude	Drainage Area	OHWL Width	Stream Length	Stream Area
S1	35.59336	-95.64743	0.22 sq.mi	8 feet	1733 feet	0.32 acres
S2	35.58889	-95.65146	0.06 sq.mi	3 feet	303 feet	0.02 acres
S3	35.58075	-95.64551	0.13 sq.mi	3 feet	398 feet	0.03 acres

Stream S-1 flows northwest from the site and enters Cloud Creek, which in turn enters the Arkansas River. S-2 flows west from the site and enters Cloud Creek. Stream S-3 flows south from the site and enters a tributary to Elk Creek which flows into Dirty Creek, which in turn discharges to the Arkansas River.



Because stream S-1 has more favorable channel geometry and potential receiving volume than the other two streams, it is the preferred option to receive discharged wastewater from the site.

Alternatives to Discharge Evaluation

1. Collection and discharge of wastewater into an existing sewer system.

The domestic wastewater from the campus will total 0.03 MGD. It would require a pipeline to convey wastewater 10 miles to the Checotah Utility Authority, southeast from the site. According to Oklahoma bacteria TMDL for the Arkansas and Verdigris River, that utility had 141 Sanitary Sewer Overflows over the period of analysis for that TMDL. Given that need for asset management in the collection system, it seems unlikely that the utility will take on another extended service line from the site. Additionally, the opinion of cost of such a pipeline is approximately \$6,000,000. This cost does not include the losses due to project delays that would result from acquiring all the necessary easements for the pipeline. No other existing municipal systems exist in the vicinity of the site could supply the needed treatment capacity, particularly in Cloud Creek, which is the preferred receiving water for the site's wastewater.

2. Construction of a multicell wastewater lagoon (discharging or non-discharging)

There is not sufficient space to build an on-site evaporation pond to serve the full flow of the campus. There is only space to serve a portion of the flow from the first phase of construction of the site.

3. Land application of effluent to irrigate undeveloped or agricultural ground

No crops are grown on the property and therefore land application is not a suitable disposal method.

Consideration of Existing Total Maximum Daily Loads (TMDLs)

Enterococci and TSS TMDLs were developed for lower Cloud Creek (OK120410010100_00). This discharge point is located on an unnamed tributary to upper Cloud Creek (OK120410020010_00). Cloud Creek consists of two segments—OK120410020010_00 and OK120410010100_00—and the TMDLs apply only to the downstream segment (OK120410010100_00).

Assessment of Impact of Proposed Discharge on Dissolved Oxygen

Assessment of the proposed discharge on receiving water dissolved oxygen was made using the template Streeter-Phelps spreadsheet developed and utilized by OKDEQ. To maintain 2.0 mg/l DO with 20% margin of safety in the modified Streeter Phelps model during the summer, a CBOD of 12.0 mg/l and an ammonia of 2.0 mg/l was used. With the tertiary dual media filter following the activated sludge treatment, this limit is attainable based on Table A-2 of Wastewater Filtration Design Considerations from the EPA Technology Transfer Seminar Publication July 1977. The discharge was set at 0.03

MGD and CBOD of 12 mg/l, which is more stringent than the monthly average BOD limit of 20 mg/l established for mechanical treatment plant secondary technology. In a call with OKDEQ staff, the expected effluent DO of minimum was said to be 2 mg/l and the ammonia limit would be 6 mg/l except during the summer when the ammonia limit would need to be 2.0 mg/l based on the desktop model. Dissolved oxygen criteria were 5 mg/l for summer and winter seasons and 6 mg/l for spring. Based on previous jurisdictional determination measurements, the stream length of the intended receiving water is 0.33 miles within the study area. However, the model was run using the stream going to the Arkansas River, which is about 17 miles. The presumed 7Q2 for permitting purposes is 1 cfs.

Results from the spreadsheet analysis indicate that the minimum dissolved oxygen levels seen at the terminus of the stream segment were 6.01 mg/l, 6.79 mg/l, and 7.76 mg/l for respective summer, spring and winter seasons. All three results are above state criteria for dissolved oxygen at an assumed 1 CFS flow. At 0 CFS, all three seasons maintained DO at 2 mg/l or higher.

As such, there are no plans for a monitoring plan to collect actual ambient data that would further corroborate the results from the spreadsheet analysis, using ODEQ assumed parameter values.

Based on the evaluation of alternatives to a new discharge to a tributary to Cloud Creek, the compatibility of the resulting wasteloads introduced by the new discharge, relative to the existing TMDL addressing bacterial and turbidity impairments on Cloud Creek, the allowable impact on dissolved oxygen in the receiving tributary and the favorable conditions expected downstream as treated wastewater offsets the impact of non-point source loading of pollutants in the drainage area, we request ODEQ act favorably on this request for permitting a new facility in Muskogee County.

Sincerely,

Ian Corbin, P.E.

Project Manager

HDR, Inc.