

Richard E. Dunn, Director

Land Protection Branch 4244 International Parkway Suite 104 Atlanta, Georgia 30354

404-362-2537

March 16, 2018

Mr. Kenny Smith, City Manager City of Griffin P.O. Box T Griffin, Georgia 30224

Subject:

Draft Site Limitations for

Spalding County - City of Griffin, Shoal Creek Road C&D LF,

Proposed Phase III C&D Expansion

Spalding County APL 12601

Dear Mr. Smith

The Solid Waste Management Program of the Environmental Protection Division (EPD) has completed its review of the following documents:

- Hydrogeologic Site Assessment/Site Suitability Study, Proposed Shoal Creek Road C&D Landfill, Phase 3 Expansion, dated February 21, 2018 and prepared by Geotechnical & Environmental Consultants, Inc.
- Topographic Drawing for Shoal Creek Construction/Demolition Landfill, dated October 11, 2017 S.L. Colwell & Associates, Inc.
- Addendum to Hydrogeologic Site Assessment/Site Suitability Study, Proposed Shoal Creek Road C&D Landfill, Phase 3 Expansion, dated January 29, 2018 and prepared by Geotechnical & Environmental Consultants, Inc.

A copy of these reports is enclosed with this letter.

Based on the data submitted, EPD has drafted "Site Limitations" which would form the basis for design of the proposed landfill in a manner that complies with *Georgia's Rules for Solid Waste Management*. A copy of these is attached.

Comments on the proposed facility's site suitability report and the draft "Site Limitations" are welcome. However, if EPD is to consider such comments prior to determining if a Site Suitability Notice is warranted for this facility, they must be received prior to April 20, 2018. Please note that issuance of a Site Suitability Notice by EPD does not constitute a permitting decision for the proposed

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facility and comments regarding siting issues may be considered up to the time a final permitting decision is made.

Please feel free to contact Christy Kehn-Lewis at 404-362-2559 if you have any questions.

Sincerely,

Jeffrey W. Cown, Chief Land Protection Branch

Enclosure

cc: Jim Guentert, Christy Kehn-Lewis, Sarah Barr, Chad Hall, William Cook, Susan Wood, GA EPD EPD Mountain District – Atlanta
J. Wesley Caputo, GMC

File: Spalding County - City of Griffin, Shoal Creek C&D Landfill Phase III Expansion [APL 12601] (PER)

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- 1. Waste shall not be placed outside the lines identified as "Phase III Limits of Waste (existing) and "Phase III Limits of Waste (horizontal expansion #1)" shown on Geotechical & Environmental Consultants, Inc. (GEC) Figure 2, Site Plan.
- 2. The bottom of waste in the horizontal expansion area #1 shall be kept a minimum of 10 feet above the groundwater elevation contours shown on GEC's Figure 10, Potentiometric Surface Map.
- 3. A minimum 500-foot buffer shall be maintained between the waste disposal boundary and any adjacent residences and/or water supply wells.
- 4. A minimum 200-foot undisturbed buffer shall be maintained between the waste disposal boundary and the permitted property boundaries.
- 5. A minimum 50-foot undisturbed buffer shall be maintained between the waste disposal boundaries and any on-site springs, intermittent or perennial streams or surface water bodies except as allowed by EPD.
- 6. All erosion control measures and/or diversion ditches shall conform to the *Erosion and Sediment Control Act* and be protective of Bolton Creek and Shoal Creek and their perennial and intermittent tributaries.
- 7. All soil borings, monitoring wells and piezometers at this site shall be plugged and abandoned in accordance with the Water Well Standards Act. Additionally, all soil borings, monitoring wells and piezometers located within the proposed waste footprint shall be abandoned by overdrilling and filling with a non shrinking cement/bentonite grout mixture via tremie pipe from the bottom to within 10 feet of the base of the landfill. The remaining borehole shall be filled with hydrated bentonite. The abandonment of all borings/piezometers/monitoring wells shall be supervised by a professional geologist (PG) or professional engineer (PE) registered to practice in the State of Georgia. A report documenting the abandonment shall be submitted to EPD prior to cell construction. This documentation shall be signed and stamped by the responsible professional geologist or engineer registered to practice in the State of Georgia.
- 8. If non-rippable rock (bedrock) is encountered at an elevation above the approved base of the waste unit, or if non-rippable rock is removed during excavation, at least five (5) feet of clean, compacted, rubble-free fill shall be placed above the non-rippable rock. Alternatively, an engineered layer (soil or a combination of soils and geosynthetics) shall be placed and compacted between the non-rippable rock and the base of the waste unit. The engineered layer shall include:
 - a. One (1) foot of soil with a hydraulic conductivity equal or lower than 1×10^{-5} cm/sec constructed over one (1) foot of structural fill, or

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b. If a geosynthetic is used, the geosynthetic will have a hydraulic conductivity equivalent to or less than one (1) of 1 x 10⁻⁵ cm/sec soil and will be placed on a minimum of two (2) feet of structural fill.

Installation of an alternative engineered layer over rock shall be documented and certified by a Professional Engineer or Professional Geologist registered in the State of Georgia, and shall be included in the CQA report for the cell being constructed.

9. This site is located in a seismic impact zone as defined in the Rules for Solid Waste Management (Chapter 391-3-4-.05 (1) (g)). The design engineer must certify that all containment structures are designed to resist the maximum horizontal ground acceleration for the site. Therefore, the registered professional engineer preparing the design and operational plan must stamp and sign each engineering drawing with the accompanying notation:

I have reviewed the information presented in this drawing, and in my professional opinion, all containment structures are designed to resist a maximum horizontal ground acceleration of 0.12g in 250 years.

- 10. Disturbance of wetlands is prohibited and solid waste shall not be disposed of within the 50 foot buffer except as permitted by the United States Army Corps of Engineers (ACOE). A statement certifying that wetlands will not be impacted as a result of construction activities at the site shall be submitted. This statement shall be signed and stamped by the professional engineer responsible for the Design and Operational Plan for the subject site. Wetland areas shall be delineated on the Design and Operational Plan.
- 11. The facility shall not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or result in a washout of solid waste or material so as to pose a hazard to human health and the environment. Any modifications to the 100-year floodplain shall not cause a rise in the 100-year floodplain of more than 0.10 feet at any point.
- 12. If during construction or excavation of the site any springs or seeps are discovered, EPD shall be notified immediately and protective designs shall be incorporated into the facility's D&O Plan, such that the spring or seep can be integrated into the facility's groundwater monitoring system.
- 13. Groundwater, surface water, and methane monitoring systems shall be installed at the site. Sampling parameters, sampling schedules, monitoring well construction and spacing shall adhere to the guidelines established in the EPD's *Rules of Solid Waste Management, Chapter 391-3-4*. The system design and monitoring requirements shall be detailed in a groundwater monitoring plan that is prepared in accordance with the Georgia Manual for Groundwater Monitoring and is approvable by EPD. The outfall of any and all underdrain systems shall be incorporated into the facility's groundwater monitoring plan.