RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
235 Promenade Street, Providence, RI 02908-5767 401-222-4700

June 12, 2020

Steve Richtarik, P.E.
BETA, Inc.
701 George Washington Highway
Lincoln, RI 02865

Dear Mr. Richtarik:

This letter summarizes the items discussed with you at our meeting held on May 27, 2020, at the Rhode Island Department of Environmental Management (the Department). In attendance at this meeting were: from DEM – Nicholas Pisani from the Stormwater Engineering Program, Mark Dennen and Walid Ali from the Solid Waste Program, and me, Joseph Antonio, from the Office of Customer & Technical Assistance. Also, in attendance at this meeting were Nicole Iannuzzi from BETA, Inc., Laura Frazier and Aaron Rust from NuGen Capital Management, LLC, and David Byrne from Renua Energy, Inc.

The purpose of this meeting was to discuss a solar array proposal to be constructed on the closed landfill in Bristol (the site). The Solid Waste Program mentioned that the existing environmental plan shall be updated, and health and safety --as well as contingency plans-- should be established for this project.

It was mentioned that even though the site is outside of freshwater wetlands buffers, wetlands near the site have recently been flagged.

Below is a summary of items discussed during this meeting:

1. For the proposed solar panels, the Stormwater Engineering Program will need a cross-section diagram of how the landfill is capped. In addition, the Program will need to know the total area of the impervious cap --more specifically, the percentage of concrete that makes up the impervious cap of the landfill.

2. It was mentioned that the slope of the landfill runs to the east, but that the panels run in an east-to-west pattern. The slope is 3%-5%. The Department mentioned that panels rows that are aligned with the slope function best to disperse runoff flow. Panels aligned generally perpendicular to the elevation have a greater likelihood of having erosion problems develop below the drip edge line. In order to minimize this potential, include scour protection below the drip edge line and provide measures (such as level spreaders) to disperse flow off the panel drip edges into sheet flow. It is imperative that good vegetative cover be developed and maintained.

3. It was mentioned that access roads on the northwest portion of the site will be established. The Stormwater Regulations require that roadways be provided with water quality treatment practices. Typically crushed stone roadways are considered to be an impervious cover due to their propensity to compact with vehicular traffic use. The roads will be comprised of washed crushed stone and will be low-traffic roads. As such, the Department will allow the site owner to submit a technical justification to support the roads being classified as pervious pavement; otherwise the roads would be considered impervious and would require a separate water quality treatment practice. The Department emphasized the importance of keeping the access road flush with the adjacent grade.

4. The Department informed the consultants that if there is under 10% coverage of the ballasts, then no water quality volume calculations will be required for the impervious areas being comprised by the ballasts.

5. The Department mentioned, per Section 8.9F of the Stormwater Management, Design and Installation Rules that a "minimum WQv value of 0.2 watershed inches (0.2 inches over the entire disturbed area) is required, which requires the calculation of the total site disturbance. This minimum treatment volume is necessary to fully treat the runoff from pervious surfaces on sites with low impervious cover, i.e., less than 20% of the disturbed area." The applicant may present a technical justification to omit this requirement if the submittal demonstrates that there will be no fertilization will be allowed on the site, except an initial application of fertilizer the establishment of new grass cover. The consultant informed the Department that grass is already established at the site.

6. The consultant informed the Department that some re-grading of depressions is needed as part of maintenance of the site.

7. As part of the stormwater permit application for the site, the Department will want the site owner to show pre- and post-watershed conditions, as well as show that hydrologic changes are minimal. The site owner will also need to provide an Appendix A checklist, which can be addressed in narrative form.

8. In addition, an operation and maintenance (O&M) plan for the access road will need to be provided. The O & M Plan needs to include a requirement for periodic scarification of the washed crushed stone access roadway and periodic replenishment of stone as necessary. It also need to address mowing heights of the grass cover, and the fact that there will be no fertilizer applications on the site. The site owner will also need to use mandatory language throughout its application; i.e., "shall," not "should."

9. Erosion control details will need to be added, per Minimum Standard 10.

10. The final plans will need to be stamped by both an electrical PE and a civil PE.

11. Lastly, the Department mentioned that proposed amendments to stormwater rules with regards to capped sites as it pertains to regulatory relief may be developed in the future,

particularly for solar proposals on closed and capped landfills. As part of such amendments, common review comments and a deficiency pick list on guidance for solar installations may be devised.

This concludes the Department's understanding of the issues raised during the meeting. I hope that this summary is of assistance to you. Please be aware that this letter is not to be construed as a permit or an approval to undertake work or any indication that any permit for this project will ultimately be granted. This letter does not relieve the property owner from his/her obligation to obtain any local, state, or federal approvals or permits required by ordinance or law.

Sincerely,

Joseph Antonio

Joseph Antonio, Senior Environmental Scientist
RIDEM/Office of Customer & Technical Assistance

Cc: Ronald Gagnon, DEM
Nicholas Pisani, DEM
Mark Dennen, DEM
Walid Ali, DEM
Laura Frazier, NuGen Capital Management, LLC
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