Connecticut Valley
Environmental Services, Inc.

Mr. Frank J. DelGiudice
U.S. Army Corps of Engineers
New England District
696 Virigina Road
Concord, MA 01742

vía email: frank.j.delgiudice@usace.army.mil

May 8, 2024

re: Comment on USACE Wetland Application, NAE-2021-02240;
Granite State Landfill LLC (GSL), Dalton, New Hampshire

Dear Mr. DelGiudice,

I write as a resident of the Connecticut River Valley, a wetland consultant to the Town of Dalton, and a Commissioner on the Connecticut River Joint Commissions, who has expressed an interest in commenting on this project[1].

As you know, this may be the most complex permitting project in New Hampshire's history, the full scope of the which appears to evolve on a daily basis. This project will disturb approximately 148 acres of land, add 25.5 acres of impervious surfaces, destroy 11.5 acres of wetlands and 3,256 linear feet of streams, and adversely affect the Ammonoosuc River and other known and unknown public interest factors.

It is my opinion that, as of this letter's date, the GSL's federal wetland application should be rejected because: 1) landfill design standards are outdated; 2) cumulative aquatic resource impacts are not addressed; 3) existing unauthorized wetland impacts should not be permitted with the landfill; 4) necessary natural resource and design information is conflicting or missing; and, 5) evaluation of the project on the public interest has not been conducted.

1. Landfill Design Standards are Outdated

New Hampshire's Solid Waste Management Rules (Env-Sw 800, Landfill Requirements) are in the process of being revised, and siting and design criteria within them are destined to be more restrictive (e.g., increased setback distances of landfill cells to water bodies and, updated stormwater management design standards in order to control increased stormwater flows that are

[1] The opinions in this letter are my own and may not reflect those of any other person or organization. Connecticut River Joint Commissions has a statutory duty, as a public entity, to comment on actions that affect the Connecticut River watershed and advise public agencies in their decisions regarding the river.

predicted by a preponderance of climate change models[2]). The significance of this is that current landfill design standards are not sufficient to control increased stormwater discharges from the developed landfill nor maintain water quality at pre-development levels. If the project is built to existing landfill design criteria, this will result in adverse effects on downgradient waterways and wetlands including the Ammonoosuc River, highest ranked habitats in New Hampshire, and cold-water fisheries[3]. These impacts have not been adequately addressed nor quantified in the pending wetland permit application.

2. Cumulative Aquatic Resource Impacts are not Addressed

Wetland impacts trigger a number of federal jurisdictional authorities, notably including the National Environmental Policy Act (NEPA). This Act ensures that all impacts (effects) on public interest factors are considered in a determination of "effects" before a permit decision is rendered. And recently, on April 20, 2022, the definition of "effects" was revised "to include direct, indirect, and cumulative effects[4]."

Consequently, it is my opinion that aquatic resource impacts enumerated in the wetland permit application are drastically underestimated. Wetland impact calculations in the application ignore probable indirect impacts on aquatic resources from inadequate stormwater control measures (mentioned above), other existing and proposed projects within the same watershed, and the likely future expansion of the landfill. A decision to issue a permit must be "based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity…." 33 C.F.R § 320.4(a)(1).

The construction of numerous ponds (13 infiltration basins, six rain gardens, three deep-sump catch basins, and two stormwater ponds) will increase surface water temperatures to levels that will likely have additional adverse effects on downstream wetlands and cold-water fisheries. Furthermore, the landowner has reserved portions of the subject property for its own use. The asphalt plant, proposed development of a drag strip and business park, and likely expansion of the existing rock quarry and gravel pits[5] will probably have adverse effects on the quantity and quality of storm water and downgradient aquatic resources, but these impacts are not addressed in the application. The impact of all of these projects must be taken into consideration in an evaluation of cumulative impacts.

The proposed project will disturb approximately 148 acres of land in order to provide 18 years of disposal capacity. These are the areal and temporal extents upon which the aquatic impacts are calculated. However, this represents only a fraction of the total scope of an earlier version of the

[2] Precipitation in the Northeast has increased in all seasons, and extreme precipitation events (defined as events with the top 1% of daily precipitation accumulations) have increased by about 60% in the region–the largest increase in the US. USGCRP, 2023: Fifth National Climate Assessment. Crimmins, A.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, B.C. Stewart, and T.K. Maycock, Eds. U.S. Global Change Research Program, Washington, DC, USA. https://doi.org/10.7930/NCA5.2023. November 2023.

[3] Reaches of Alder Brook are the "receiving waters" and are identified as native cold water trout habitat. Probable indirect impacts to this brook include increase in temperature, changes in water chemistry, and alteration of flow.

[4] https://www.ecfr.gov/current/title-40/chapter-V/subchapter-A/part-1508/section-1508.1.

[5] Since material from the quarry pits will be used to construct the landfill, expansion of these pits is likely.

project, which was withdrawn under significant public pressure. Moreover, GSL has acknowledged an intent to expand the landfill project in the future. If the applicant denies an intent to expand the landfill in the future, then to avoid future incremental increases in impervious surfaces and loss of aquatic resources, future development within the project's watershed should be explicitly prohibited by conditions in the federal wetland permit.

All potential phases of the landfill and all other "past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions"[6] within the vicinity of the proposed project need to be assessed.

3. Existing Unauthorized Wetland Impacts should not be Permitted with the Landfill

Existing roadways are estimated to have impacted 0.9 acres of wetlands and a perennial stream (see *ECP-1, Existing Conditions Plan* located at section-14.1-part-1-of-3.pdf). These are unpermitted impacts that occurred prior to GSL's involvement with the site and are proposed to be permitted after-the-fact as part of the landfill project. They extend west of the landfill cells and beyond 'the landfill proposed property line and facility compliance boundary' and 'the wetland field delineation limit' depicted on the *Existing Conditions Plan*. The 'Main Access Road' (shown on Sheet 2-1 of the Wetland Impact Plans (see 36-I-Y)) leads from the terminus of Douglas Drive and ultimately branches toward the gravel pits. Portions of these roads have unauthorized wetland and stream impacts.

It is my opinion that these road impacts should not be included in the landfill permit application as the purpose, need, and alternative analyses for them are distinct from those for the construction and operation of the landfill. These roads were illegally constructed to access other activities on the site and USACE should not allow these impacts to be treated as part of the landfill project. To do so, unfairly rewards the landowner for its illegal actions by circumventing the normal permitting process.

The USACE should require restoration of the wetland impacts and, if there is a need to retain the roads, a separate wetland application should be submitted that evaluates alternative alignments in order to minimize wetland impact.

4. Necessary Natural Resource and Design Information is Conflicting or Missing

- The *New Hampshire Alteration of Terrain* (AoT) application provides details on infiltration basins and rain gardens but notes that the mandatory analysis of the feasibility of infiltration is not complete as additional onsite tests are proposed in 2024[7]
- There are conflicting interpretations on the definition of estimated seasonal high-water table between the *Site-Specific Soil Survey Report* and the *NHDES Solid Waste Landfill Application.*

[6] https://www.ecfr.gov/current/title-40/chapter-V/subchapter-A/part-1508/section-1508.1.

[7] "We note that there are five pond locations that do not currently have infiltration test data due to reconfiguring some of the ponds since the tests were completed. The remaining infiltration tests will be completed in 2024." (AoT, Part 1, p. 20).

- A plant species inventory with information on rare, threatened and endangered (RTE) species and exemplary natural communities is not included in the wetland application. The New Hampshire Natural Heritage Bureau (NHNHB), on December 12, 2023, requested field surveys be conducted to determine what species and natural communities occur on the GSL site, and that a comprehensive list of plant species, native and invasive, that occur on the site be provided (*New Hampshire Wetland Application*, Section 10.1, pages 1-4). To date, responses to NHNHB's request, are not included with the wetland application materials.
- Information on RTE and invasive species within wetland areas is important to assess wetland functions and values, and would dramatically improve the AoT application which only provides boiler-plate information on invasive species control and makes no effort to make their management site specific (see *AoT Application Part 2, Appendix N-O*, p. 3-7).
- GSL's wetland function-value evaluation concludes that one of the principal functions the onsite wetlands provide is flood flow alteration. However, the AoT application claims the wetlands are <u>not</u> supported by surface (sheet) flow; their hydrology is derived from ground water.[8] These interpretations are conflicting. If the latter interpretation is accurate then the wetlands are unlikely to function in flood flow alteration.
- The need to dispose of solid waste in landfills would be less if the waste stream is reduced. The New Hampshire 2003 Solid Waste Plan (the "2003 Plan") places landfilling as the least desirable alternative and recommends consideration of waste reduction and incineration as practicable alternatives. GSL has not demonstrated consistency with the 2003 Plan, it should address the comparative economic and environmental costs of incinerating versus landfilling solid waste in Dalton.
- The validity of the onsite alternative analysis to locate project components is dubious as it appears GSL may have been unnecessarily steered away from using certain upland areas (e.g., the purported location of a future business park) that the land owner is reserving for its own use.
- The offsite alternative analysis would have been more robust if it would have given more weight to the fact that the Ammonoosic River designated river corridor, highest ranked habitats in New Hampshire, acres of wetlands, vernal pools, perennial and intermittent streams, and cold-water fisheries are downgradient and will be adversely affected by the project. It is likely that there are suitable sites in New England for a landfill that will not put this many valuable aquatic resources at risk.
- The alternative analyses are complex and their review is probably beyond the technical expertise of the USACE. Since this is arguably the most important task in determining the best place to locate the landfill, GSL should be required to retain a qualified independent third party to verify the accuracy of their alternative analyses.

[8] "Note the wetlands are primarily recharged by groundwater flow. There is no surface water flow in or emanating from these wetlands." (AoT, Part 1, p. 8).

5. Evaluation of the Project on the Public Interest has not been Conducted

USACE has an obligation to comply with requirements of both the National Environmental Policy Act and the Clean Water Act and must make a variety of determinations before issuing a requested permit. See 33 C.F.R. Part 320; 40 C.F.R. Part 230. These relevant determinations include that the project serves the public interest.

They provide that the "decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the **public interest**." 33 CFR 320.4(a)(1) (emphasis added). They further provide that the district engineer should consider these criteria before a permit is granted.

Clearly, potential discharges of leachate or other toxic substances from the landfill should be part of the public interest review. At a minimum, it is "projected that the GSL will generate leachate contamination for the better part of 100 years"[9]. The project's impact on public interests, including wetlands, has been identified by conservation commissions, town and county officials, and state legislators. In their letters, these officials express concern over the impact on the environment, public health and safety, property values, quality of life, and the rural character of the area.

USACE has, to date, not determined that the landfill is in the public interest. In *Friends of Mahoning*, the appeal court concluded the issuance of a USACE permit could not be affirmed because of USACE's failure to demonstrate the project's contribution to the public interest[10].

In this instance, where there is meaningful substantial impact, conflicting evidence and overwhelming public opposition, the issuance of a USACE wetland permit should be predicated upon a robust assessment of the project on all public interest factors. And, in my opinion, this assessment should give deference (significant weight) to the fact that toxic substances generated by the landfill will persist in the environment long after the landfill is closed.

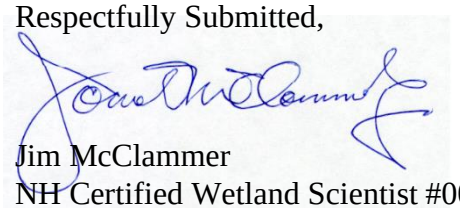
[9] Carex Environmental Consulting, February 12, 2014-letter, p. 1.

[10] See Friends of the Mahoning River v. U.S. Army Corps of Engineers, 4:19CV2771 (N.D. Ohio Sep. 9, 2021).

6. Conclusion

It is my opinion that the wetland permit application should be rejected because: 1) landfill design standards are outdated; 2) cumulative aquatic resource impacts are not addressed; 3) existing unauthorized wetland impacts should not be permitted with the landfill; 4) necessary natural resource and design information is conflicting or missing; and, 5) evaluation of the project on the public interest has not been conducted.

Respectfully Submitted,



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