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Jan. 27, 2023

Rebecca Tepper, Secretary of Energy and Environmental Affairs
Executive Office of Energy and Environmental Affairs (EEA)
Attn: MEPA Office
Alexander Strysky EEA #16643
100 Cambridge Street, Suite 900
Boston, MA 02114

Subject: EEA #16643 — ENF Comment / Gardner Sludge Landfill Expansion
Via email: alexander.strysky@mass.gov

Dear Secretary Tepper,

These comments on the ENF for the proposed Gardner Sludge Landfill Expansion, EEA #16643, are being submitted by the Millers River Watershed Council, Inc. (MRWC) **on behalf of the Coalition for a Sustainable Alternative to the Gardner Sludge Landfill Expansion (Coalition)**. MRWC is a non-profit organization formed in 1970 with the mission to protect and enhance the health of the Millers River and its watershed for the long-term benefit of its human and non-human residents. The proposed Project is within the Millers River Watershed, and within a half-mile of the Otter River, the largest tributary to the Millers River.

In response to the Project, the Coalition was formed in 2021 and consists of the following local, regional and statewide organizations: Athol Bird and Nature Club, Clean Water Action, Connecticut River Conservancy, Gardner Clean Air, MassPIRG, Mass Rivers Alliance, MRWC, Mount Grace Land Conservation Trust and North County Land Trust; The Sierra Club of Massachusetts provides the Coalition with technical support.

The ENF submission is deficient in many important respects. Here are the main problems with the ENF and the project and the reasons an EIR should be required:

1. **The ENF Project Description does not acknowledge recreational resources:** The Project Description omits mention of the recreational use of the Wildwood Cemetery Forest at the project site by the local community; that property abuts and connects with a network of trails on the Cummings Otter River Conservation Area.—**See attached 1-mile Radius Site Map.** Page 6 of the ENF is therefore wrong to say it is consistent with open space impacts because the area is not targeted for recreation.

2. **Site geology is completely unsuitable for proposed expansion**: The Hydrogeological Evaluation Report, Appendix F of the January, 2022 Engineering Report prepared by Woodard & Curran, describes the geology at the site of the project as glacial outwash atop fractured and weathered bedrock. That material does not provide any natural containment for leachate leakage to groundwater. No modeling or discussion of the release of contaminants to groundwater from the sludge landfill is mentioned in the ENF.—**See attached comments by Mike Wilczynski**, Certified Professional Geologist.

3. **Potential leakage, migration and groundwater contamination at existing sludge landfill should be discussed in the ENF and in an EIR**: Analysis of data from the sludge landfill's Annual Operations Reports and the former Gardner solid waste landfill's Annual Environmental Monitoring Reports suggest that deicing salt may have contaminated groundwater down gradient of the landfill.—**See attached comment #4 by Denise Trabbic-Pointer**, Certified Hazardous Material Manager Emeritus. Additional analysis indicates that portions of the sludge landfill were installed at a depth below the assessed four feet above seasonal high groundwater table levels, which may be contributing to contaminant migration.—**See attached comment #7 by D. Trabbic-Pointer**. These two analyses suggest that the Project could result in the migration of contaminants into groundwater that are not limited to salt.

4. **The Project will threaten nearby water bodies and wetlands**: As noted in the Engineering Report's Hydrogeological Evaluation Report, groundwater flow at the proposed landfill expansion site moves to the south and southeast. The area to the south and southeast of the proposed expansion has many interconnected wetlands, spring-fed ponds, and streams that flow through City-owned (Cummings) and privately owned (Ebenezer Keyes) Conservation Areas on their way to the Otter River, which joins the Millers River as it flows west to meet the Connecticut River. Any sludge landfill contamination of surface or ground water will likely impact these vital water bodies. Such impacts are not addressed in the ENF.

5. **The Project will threaten drinking water wells:** 71 private drinking water wells in Gardner and Templeton, as well as Templeton's Otter River and Sawyer Street municipal wells, are within a mile of the site and—based on the reported groundwater flows—likely rely on the groundwater under the Project site. No plans exist for mitigation of future well contamination; indeed such mitigation is notoriously difficult and expensive.

6. **Inadequate alternatives analysis**: The alternatives analysis dismisses sludge disposal alternatives without completing a single feasibility study of any such alternatives. The alternatives analysis fails to consider partnering with any neighboring communities or pursuing a private sector partnership for a viable alternative to the project. Feasible sludge management alternatives exist: The nearby city of Fitchburg is currently working to develop a biosolids processing plant using proven anaerobic digestion (AD) technology that would be able to accept sludge waste from surrounding towns, like Gardner. Several other AD facilities are operational in other communities in Massachusetts. The City of Gardner has itself recently contracted with SoMax for a feasibility assessment of its hydrothermal carbonization (HTC) technology, which SoMax is piloting in Pennsylvania in a town of similar size to Gardner. There is no mention of these Project alternatives in the ENF.—**See attached comments on Project Alternatives.**

7. **No phased construction**: The City has rejected pursuit of a phased construction of the project which will, in effect, commit the City to the 17-year landfill expansion. This effectively prevents the City from migrating to an environmentally and economically better alternative within 17 years. With this Project, Gardner will not be able to take advantage of innovation in the other alternatives or partner with other communities in pursuit of an environmentally sustainable solution prior to 2042.

8. **Potential stormwater management/erosion issues:** The Project site is adjacent to the western edge of the existing landfill, where documented wash-out incidents in 2020 and 2022 resulted in landfill material exiting an outfall pipe near "Wetland D." These direct discharges in the Buffer Zone to the Bordering Vegetated Wetland (BVW) have gone unabated and introduced silt into the BVW. The source of the erosion has not been identified, and temporary mitigation measures have been ineffective. Given that the Project is in close proximity to two Zone II recharge areas and the Otter River, it is likely that the wetland resource areas on the site help protect the public water supply for Templeton's water district. The existing *and potential* erosion issues are not mentioned or addressed in the ENF.

9. **Irreversible Environmental Damage - Inconsistency with Gardner's stated goals:** The proposed sludge landfill expansion will destroy six acres of Gardner's natural resources, including a hardwood forest, wildlife habitat, and a geologically important esker in the Wildwood Cemetery Forest. This expansion is inconsistent with the City's own Forest Management Plan (2012) that has the following stated goals: "*The City of Gardner would like to improve and protect the forest resources on the Wildwood Cemetery property for the benefit of the residents of Gardner. Protecting water quality is a high priority. Maintaining and improving aesthetics near the Cemetery is extremely important as well."* Item II.C of the ENF's Land Section on page 6 should have been checked Yes.

10. **Poor air quality:** The Project will perpetuate and increase the existing odor problem. Persistent odors emanating from the existing sludge landfill were documented in the sludge landfill Annual Operations Reports for 2020 and 2021. These results indicate that odor was present at **100 percent** of the twelve inspections. The odors negatively affect visitors to the abutting cemeteries and the recreational use of the nearby Conservation Areas. These odors impact Gardner residents, including the City's large Environmental Justice (EJ) community.

11. **ENF's climate change modeling is faulty - underestimates impacts**: Section 8 and Appendix M of Woodard & Curran's Engineering Report appear to dismiss the impact of gas emissions as *not measurable*. An analysis of these documents indicates possible flaws in the methods and data used by Woodward & Curran. Specifically, the LandGEM (Landfill Gas Emissions Model) Version 302 does not factor in all potential point sources of GHG emissions, leading to a significant underestimate. To effectively assess the impact of a project, maximum possible emissions should be assessed. An analysis of the Gardner sludge landfill's GHG emissions using the Biosolids Emissions Assessment Model (BEAM) Version 1.1 resulted in a figure of 7,257 CO2 eq (Mg/year).— All GHG emissions should be considered significant, and their mitigation should be addressed.—**See attached comment #10 by D. Trabbic-Pointer**.

12. **Article 97 checkbox should be marked Yes**: Item II.D of the ENF's Land Section asks: "Does any part of the project involve conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97?" This box should have been checked Yes: This project involves conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth.—**See attached "Plan of Taking by the Town of Gardner for Cemetery and Park Purposes"** dated July 14, 1919.

13. **ENF's Public Involvement Activities (p. 25, EJ Section - III.A.2) include several inaccurate or misleading statements**: 1). The City has held NO public meetings regarding the *overall* expansion proposal since 2016; those public meetings covered a project design and alternatives analysis that is now over six years old. 2). The Gardner Conservation Commission's public meet-

ings held in 2022 were limited to discussion of the project's 'Notice of Intent', and therefore narrowly focused on subject matter relative only to the MA Wetlands Protect Act and the Gardner Wetland Protection Ordinance—not the project in general. 3). The ENF does not include a description of "any issues of concern that were raised at such meetings, and any steps taken (including modifications to the project design) to address such concerns." 4). While the Gardner City Council approved expenditures totaling $440k for engineering work at two meetings in 2018 & 2019, no additional funds have been appropriated for construction—though the ENF response suggests otherwise. 5) Flyers posted on the City website are lacking any information specific to environmental impacts, project costs or alternatives to expansion. 6) According to the ENF, the City made no mailings to any members of the Gardner community, including the EJ population.

Other:
EIR triggered - EJ Threshold: In addition to the above deficiencies, the presence of an Environmental Justice community within one mile of the project site triggers the threshold for requiring an EIR. The ENF statement that there are no environmental justice (EJ) populations within I mile of the project site is incorrect.—**See attached EJ vicinity map and attached Environmental Justice Concerns**

According to Section 7 of the Gardner Sludge Landfill Expansion Engineering Report (Jan. 2022): "Closure of the sludge landfill expansion is proposed to occur as a single event together with the original landfill closure, after filling has been completed in all landfill cells." Therefore, the original Sludge Landfill will remain part of the expansion project until the predicted date of closure in 2041. The project site boundary is 0.934 miles from an EJ population, and the fence line of the original landfill is 0.999 miles from an EJ population.

Thank you for your consideration of these comments. The Coalition's member organizations, listed below, agree that the ENF is adequate and a a viable alternative to landfill expansion exists that will have substantially less impact on the surrounding environment. Given the EJ threshold trigger and the significant deficiencies identified with the ENF and the proposed expansion, we ask that the Secretary not issue a Certificate for the ENF and require submission of an EIR.

Respectfully,

Ivan Ussach,
Director, MRWC

Alan Rousseau,
Co-chair, Gardner Clean Air

David Small,
President, Athol Bird & Nature Club

Elizabeth Saunders,
Mass State Director, Clean Water Action

Ron Rhodes
Acting Executive Director,
Connecticut River Conservancy

Janet Domenitz,
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Julia Blatt,
Executive Director, Mass Rivers Alliance

Emma Ellsworth,
Executive Director,
Mount Grace Land Conservation Trust

Anna Wilkins,
Executive Director, North County Land Trust

Coalition for a Sustainable Alternative to Gardner's Planned Sludge Landfill Expansion

Millers River Watershed Council

Gardner Clean Air

MASSPIRG