

**FINAL LANGUAGE AND STATEMENT OF REASONS:
REVISIONS TO THE GROUNDWATER CLASSIFICATIONS OF CERTAIN AREAS
OF THE STATE OF CONNECTICUT**

**HEARING ON RECLASSIFICATION OF
GROUNDWATER AS PROVIDED FOR IN §22A-426-7(k)(3) OF THE REGULATIONS
OF CONNECTICUT STATE AGENCIES
HEARING DATE: JULY 14, 2021**

Introduction:

The Water Quality Standards Regulations (§ 22a-426-1 through 22a-426-8, inclusive, of the Regulations of Connecticut State Agencies (RSCA)) allow the Commissioner of the Department of Environmental Protection (Commissioner) to consider an application to lower a groundwater classification to Class GC subject to the public participation requirements of § 22a-426 of the Connecticut General Statutes (CGS). Such an application was submitted by Wheelabrator Putnam as part of a proposal to expand the existing Putnam Ash Residue Landfill. A public hearing was scheduled and noticed in accordance with CGS § 22a-426. After conducting a hearing and considering the evidence presented in the applications, it is recommended that the Commissioner grant the request to lower the groundwater quality classification at the proposed expansion area to Class GC.

Overview

Wheelabrator Putnam currently operates the Putnam Ash Residue Landfill off River Road in Putnam. Wheelabrator is seeking a 68-acre expansion of the existing ash residue landfill to the south (the proposed expansion area). Groundwater beneath the existing landfill is classified as GC. Groundwater beneath the proposed expansion area is currently Class GB. In order to obtain the necessary groundwater discharge permit for the expansion area, the groundwater beneath the expansion area must be reclassified to Class GC.

The Water Quality Standards Regulations state that the designated use for class GC groundwater is assimilation of discharges authorized by the Commissioner pursuant to § 22a-430 of the Connecticut General Statutes. Such waters are not suitable for development of public supplies of potable water, and the impact of any authorized groundwater discharges on adjacent surface waters must be considered (RCSA § 22a-426-7(h)).

Criteria for lowering a water quality classification to Class GC:

The Regulations spell out the criteria for an application to lower a groundwater classification to Class GC in RCSA § 22a-426-7(k)(3), as follows:

- (A) Such application shall be accompanied by a completed application under § 22a-430 of the CGS for a permit to discharge leachate from a solid waste land disposal facility to the subject groundwater.
- (B) A groundwater classification shall not be lowered to GC unless the applicant has satisfactorily demonstrated in its application that:
 - (i) there is an overriding social or economic justification for reclassifying the groundwater to GC and the affected municipality or municipalities have been notified of the proposed reclassification;
 - (ii) the groundwater proposed to be reclassified is not suitable for development of a significant public water supply and is suitable for waste treatment;
 - (iii) the subject area is adjacent to and hydraulically connected with a surface water body classified B or SB; and
 - (iv) the applicant has delineated the zone of influence of the groundwater proposed to be reclassified as extending from the proposed solid waste land disposal facility to the receiving surface water body, and the applicant owns the land overlying such zone of influence, or has an easement with respect to such land.

Findings:

- 1) Donald Musial, of Wheelabrator Putnam, petitioned the Commissioner to lower the groundwater classification to Class GC for the proposed 68-acre ash residue landfill expansion area. The petition was accompanied by an application for a groundwater discharge permit under § 22a-430 of the CGS (Application No. 201903452), as well as a request for a Determination of Need for Expansion of a Disposal Area for Ash Residue pursuant to § 22a-208d of the CGS, an application to modify permits SW-1160391 (Permit to Construct) and 1160430-PO (Permit to Operate a Solid Waste Facility), a Section 401 Water Quality Certification under Section 401(1)(1) of the Federal Clean Water Act (Application No. WQC020193463), and an application to modify a permit (SP0002303) to discharge into the Sanitary Sewer (Application No. 201500823).
- 2) On June 11, 2021, in accordance with § 22a-426 of the CGS, the Commissioner published notice in the Norwich Bulletin of a public hearing to receive oral and written testimony on proposed amendments to the groundwater classifications for the Wheelabrator Putnam expansion area. This notice included a Tentative Determination that the site meets the required criteria for reclassification of groundwater to Class GC. Notice was also provided by email and certified mail to the Chief Executive Officer of the Town of Putnam.
- 3) A public hearing was conducted on the requested reclassification on July 14, 2021. Kathleen Reiser, of the Department's Office of Adjudications, facilitated this non-contested case hearing. Approximately 12 people attended the virtual hearing. Two members of the public commented at the hearing, and 5 letters offering written testimony were subsequently received, including letters from those who verbally commented at the hearing. The hearing record was closed on July 21, 2021.

- 4) The application received for the Wheelabrator Putnam Expansion site provided adequate information to determine that the criteria required by RSCA § 22a-426-7(k)(3) were met:

The application to lower the groundwater classification to GC was accompanied by a completed application (Application No. 201903452) under § 22a-430 of the CGS for a modification of permit (LF0000055) to discharge leachate from a solid waste land disposal facility to the subject groundwater.

The Commissioner has made a preliminary determination of need pursuant to CGS § 22a-208d for the proposed ash residue landfill expansion because the additional capacity is necessary to meet the solid waste disposal needs of the state and will not result in substantial excess capacity of disposal areas for ash residue generated by mixed municipal solid waste resources recovery. (A final determination of need will be made upon issuance of the permit to construct and operate.) Such determination of need provides the “overriding social or economic justification” for the reclassification.

The existing groundwater classification for the proposed expansion area is Class GB. This groundwater is already impacted by the former municipal landfill to the north, and development of a public water supply in this area would not be prudent as the potential to pull in impacted groundwater from the vicinity of the former municipal landfill is high. However, the stratified drift deposits at this site are transmissive and have the ability to transport and assimilate leachate should the double liner and leachate collection system fail at this site.

The application provided groundwater monitoring, modeling data and maps to demonstrate that the site is adjacent and hydraulically connected to the Quinebaug River, which is a Class B river.

Finally, the application characterizes the groundwater flow system and through the groundwater monitoring and modeling mentioned above, have delineated the potential zone of influence. The zone of influence extends from the site to the Quinebaug River, and the applicant owns or has easements for the entire zone of influence.

Public Comment:

Five letters commenting on the proposed classification were received. The primary concerns are paraphrased below. Similar concerns were expressed in several letters, so they have been grouped together for response. The comment letter(s) expressing the concern is listed at the end of each comment:

1. **Comment:** The goal of the Connecticut Water Quality Standards is to maintain and improve or restore water quality and downgrading a groundwater classification to GC is contrary to this goal. (Exhibit 6)
Response: While the overall goal of the Water Quality Standards is to improve or restore water quality, the Water Quality Standards also recognize that we, as a society,

generate waste, and that the impacts of that waste generation must be accommodated. The Water Quality Standards explicitly define surface and groundwater classifications that have a designated use to assimilate treated wastewater discharges. Through this designation, controls are exercised to limit the area, extent and impact of those discharge to the best of our ability while accommodating the needs of our society.

2. **Comment:** Downgrading classification of water from GB to GC is required, but recognizes that the water will have poorer quality despite assurances that the liner will not leak (Exhibit 5).
Response: The classification of GC does not recognize that the groundwater will be of poorer quality, it designates the use of the groundwater for waste assimilation. This is necessary to ensure that if the liner should leak or treatment system fail, that the aquifer has some ability and capacity to filter and transport the leachate, and that the ultimate discharge point is a large, Class B river that can receive such wastewater. This is a back-up for the technology, not an allowance for untreated discharges. Monitoring systems are in place to ensure that if such a failure of the liner or treatment system occurs, they will detect and be able to repair that failure.
3. **Comment:** Concern was expressed about the potential for surface water impacts to the Quinebaug River, especially from PFAS (Exhibits 5, 6, 7, 9).
Response: These concerns are acknowledged; however, the leachate collection and treatment system are designed to control such impacts. Our understanding of and ability to monitor PFAS is rapidly evolving, and we are developing a monitoring strategy for surface water and fish tissue samples to evaluate impacts. We continue to increase our capacity to monitor for PFAS and other emerging contaminants.
4. **Comment:** Concern was expressed that people downgradient of this site will be drinking potentially contaminated water. (Exhibit 5, 8)
Response: Ensuring that no one is drinking water from a Class GC area is one of the critical criteria considered in designating a Class GC area. There are no public or private drinking water supplies that draw from the proposed Class GC area, nor from the Quinebaug River.
5. **Comment:** Several comments were made regarding the Commissioner's Determination of Need and justification of the social needs of the state. (Exhibits 5, 9)
Response: The reclassification process and justification of the social need for the Class GC area relies on the Commissioner's Preliminary Determination of Need, as established through the Materials Management and Compliance Assurance (MMCA) Bureau pursuant to CGS § 22a-208d. Numerous factors are taken into consideration in that determination, so I must defer to that process and will relay the comments to that program.
6. **Comment:** Two comment letters indicated that Putnam is an Environmental Justice community, which should be taken into account. (6,9)

Response: Environmental justice is a consideration in the permitting of the ash residue landfill expansion, although it is not part of the groundwater reclassification process directly. The groundwater reclassification is only one of several authorizations required to expand the ash residue landfill. A modification to the existing solid waste permits to construct and operate the landfill is required, pursuant to CGS § 22a-208a. This modification was subject to the provisions of Conn. Gen. Stat. § 22a-20a, the state’s environmental justice statute. An Environmental Justice Public Participation Plan was submitted, and the public participation process specified therein was completed, as required.

7. **Comment:** Two comment letters stated that the ash residue landfill expansion area extends to Quinebaug River. (Exhibits 6, 7)

Response: Please note that the ash residue landfill expansion area does not extend to the Quinebaug River. However, the area to be reclassified to Class GC must include the expansion area and all the groundwater flow paths to the final discharge point at the Quinebaug River, so the Class GC area extends to the Quinebaug River.

8. **Comment:** One letter expressed concern that contaminants from the ash residue landfill may have the potential to pollute the aquifer around Alexander Lake. (Exhibit 7)

Response: Due to the direction of groundwater flow in the valleys, distance, layering of aquifer materials and topographic (elevation) differences between the ash residue landfill and Alexander Lake, there is no concern that the proposed expansion of the ash residue landfill will affect water quality in the aquifer around Alexander Lake.

9. **Comment:** One letter expressed concern about impacts of the reclassification to the flora and fauna of the local area. (Exhibit 8)

Response: As mentioned above, the reclassification itself doesn’t impact water quality – it affects the designated use for the groundwater. The leachate collection and treatment systems are in place to protect water quality, and the monitoring systems are there to allow for corrections if a failure does occur.

Conclusions:

The applicant, Mr. Donald Musial, acting on behalf of Wheelabrator Putnam (Exhibit 4); has demonstrated that the area in Putnam proposed for reclassification to Class GC meets the criteria established under RCSA § 22a-426-7(k)(3). I therefore recommend that the Commissioner grant the request to lower the groundwater quality classifications to Class GC at this site. This reclassification should be effective upon issuance of the Final Determination of Need and the Groundwater Discharge Permit.

9/2/2021
Date

/s/ *Corinne R. Fitting*
Corinne R. Fitting

DECISION

Having reviewed the hearing officer's report and recommendation, I affirm her findings and conclusions and adopt her recommendation to GRANT the above-referenced application to lower the groundwater quality classification to Class GC. This change shall be effective upon issuance of the Final Determination of Need and the Groundwater Discharge permit. Such change will be incorporated into the Water Quality Classifications maps as new editions are prepared.

September 10, 2021

Date

Betsey Wingfield, Deputy Commissioner

List of Participants/Interested Parties

Donald Musial, P.E.
Vice President, Ash Monofills
Wheelabrator Putnam
200 Technology Park Dr
Putnam, CT 06260
dmusial@win-waste.com

Barney Seney
Mayor, Town of Putnam
126 Church St.
Putnam, CT 06260
Barney.seney@putnamct.us

Elaine Sistare
Town Administrator
126 Church St
Putnam, CT 06260
Elaine.sistare@putnamct.us

Adelheid Koepfer
35 Whiffle Tree Road
Wallingford, CT 06492
Koepfer@gmx.net

Ann Gadwah
Advocacy and Outreach Organizer
Sierra Club, CT Chapter
PO Box 270595
West Hartford, CT 06127
Ann.gadwah@sierraclub.org

Susan Eastwood
Chapter Chair
Sierra Club, CT Chapter
Sce4321@gmail.com

David McKeegan
DEEP
MMCA
Waste Engineering & Enforcement Division
David.mckeegan@ct.gov

Camille Fontanella
DEEP
Concierge Office
Camille.fontanella@ct.gov

Corinne Fitting
DEEP
WPLR
Water Planning & Standards Division
Corinne.fitting@ct.gov

Edmund McWilliams
mcwillimansedmund@gmail.com

Hope O'Shaughnessy
Oshaughnessy2018@gmail.com

List of Speakers at the Public Hearing

Susan Eastwood, Sierra Club CT
Hope O'Shaughnessy

List of Exhibits

Exhibit 1: *Water Quality Standards*, Effective April 12, 1996
Exhibit 2: Authorization to Hold a Public Hearing
Exhibit 3: Public Notice of the Hearing, published in Connecticut Law Journal on 8/3/04
Exhibit 4: Application and Supporting Documents, Wheelabrator Putnam

Exhibit 5: Comment letter from Susan Eastwood on behalf of Sierra Club CT, submitted via email 7/21/2021

Exhibit 6: Comment letter from Adelheid Koepfer, submitted via email 7/14/2021

Exhibit 7: Comment letter from Edmund McWilliams, submitted via email 6/12/2021

Exhibit 8: Comment letter from Hope O'Shaughnessy, submitted via email 7/21/2021

Exhibit 9: Comment letter from Ann Gadwah on behalf of Sierra Club, submitted via email 7/21/2021