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FINAL LANGUAGE AND STATEMENT OF REASONS: REVISIONS TO THE GROUND WATER CLASSIFICATIONS OF CERTAIN AREAS OF THE STATE OF CONNECTICUT

HEARING ON THE RECLASSIFICATION OF GROUND WATER HEARING DATE: JULY 26, 2017

Overview:

Section 22a-426-7(k)(2) of the Regulations of Connecticut State Agencies (RCSA) allows the Commissioner of the Department of Energy & Environmental Protection (Commissioner) to consider an application to lower a ground water classification from Class GA to Class GB, subject to the public participation requirements of Section 22a-426 of the General Statutes. Five such proposed amendments to the classification map were submitted pursuant to Section 22a-426-7(k)(2)(B)(iii)(I) of the Regulations of Connecticut State Agencies, which would lower the ground water classification from an existing classification of GA to a classification of GB at the proposed sites. The applications were reviewed and tentative determinations to approve the requested ground water quality reclassifications were made. A public hearing was scheduled and noticed in accordance with Section 22a-426 of the General Statutes. After conducting the hearing and considering the evidence presented in the application, it is recommended that the Commissioner grant the request to lower the ground water quality classification from Class GA to Class GB at the five sites.

Criteria for lowering a water quality classification from Class GA to Class GB:

RSCA Section 22a-426-7(k)(2)(B) (Exhibit 1) sets out three criteria that all applications for lowering a water quality classification must meet in order for the Commissioner to consider a change in ground water classification. The applications were submitted for consideration under RSCA Section 22a-426-7(k)(2)(B)(iii)(I), which sets out two additional criteria. Therefore, all five criteria apply to the applications, and the criteria are as follows:

- (B) A ground water classification shall not be lowered to GB unless the applicant has satisfactorily demonstrated that:
 - (i) any person within or downgradient of the area to be reclassified and extending to an area previously classified as GB or to a surface water body to which the ground water discharges will be provided with an adequate public water supply!

¹ Criterion No. 1

- (ii) lowering of a ground water classification will not prevent attainment of adjacent surface water quality goals² or present unacceptable health risks³; and
- (iii) any of the following:
 - (I) That the ground water to be reclassified is polluted as a result of intense urban, commercial, or industrial development which occurred prior to 1981⁴, and the hydrologic conditions of the subject area are not suitable for the development of a significant public water supply⁵... (RSCA 22a-426-7(k)(2)(B), effective October 10, 2013)

Findings:

- 1) Five applicants petitioned the Commissioner to lower the ground water classification from Class GA to Class GB (each application is accompanied by detailed maps that precisely identify the areas which are the subject of these applications), as follows:
 - a) Bethel: Approximately 6.5 acres of land consisting of the property at 15 Durant Avenue, which abuts an existing GB area to the west, submitted by Mr. Jeff Allen on behalf of Eaton Aerospace Corporation (Exhibit 2 and 2a);
 - b) Cromwell: Approximately 12 acres of land in the vicinity of 79 River Road, extending from the railroad tracks on the east to the Connecticut River on the west, submitted by John Frary on behalf of Chevron Environmental Management Company Exhibit 3 and 3a);
 - c) Fairfield: Approximately 0.5 acres of land consisting of the property at 2093 Boston Post Road, which abuts an existing GB area to the east, submitted by Jesse Arroyo, on behalf of Antea Group (Exhibit 4 and 4a);
 - d) North Haven: Approximately 2 acres of land consisting of the property at 511 Washington Avenue which abuts an existing GB area to the west, submitted by John Orsini, on behalf of 511 Washington Avenue, LLC (Exhibit 5 and 5a); and
 - e) Norwalk: Approximately 12 acres of land in the vicinity of 31 North Avenue, bounded on the west by Knight Street and extending to the Norwalk River and an existing GB area to the south, submitted by Jesse Arroyo, on behalf of Antea Group (Exhibit 6 and 6a).
- 2) On June 24, 2017, in accordance with Section 22a-426 of the General Statutes, the Commissioner published notice in the *Connecticut Post, Danbury News Times, Hartford Courant, New Haven Register, and Norwalk Hour* (Exhibit 9) of a public hearing to receive

² Criterion No. 2

³ Criterion No. 3

⁴ Criterion No. 4

⁵ Criterion No. 5

oral and written testimony on the proposed amendments to the ground water classification at the sites. The public notice was published on the Department's web site and the Commissioner provided notice to the Chief Elected Official of Bethel, Cromwell, Fairfield, North Haven and Norwalk, with a copy to the Director of Health of each municipality (Exhibits 10a - 10e, respectively). It is noted that there was an error on the public notice: The public hearing was to be held on "Thursday, July 26, 2017". Although the date of the hearing was correct, it was a Wednesday, not Thursday. The correction was prominently made on the Department's web site, and notice was provided to all interested parties. No members of the public contacted the Department to inquire about the day of the hearing.

- 3) A letter from Fairfielders Protecting Land and Neighborhoods (Exhibit 14) was received by email on July 20, 2017, regarding the Fairfield site. A hard copy was subsequently received on July 28, 2017.
- 4) A public hearing was conducted on the requested reclassifications on July 26, 2017. Representatives of the applicants attended the public hearing. No members of the general public attended.
- 5) A technical Memorandum regarding Groundwater Flow and Contaminant Transport in the Shallow Overburden Groundwater in the vicinity of 15 Durant Ave, Bethel, CT prepared for Mr. Jeffrey Fort by Gail Batchelder and dated July 24, 2017, was submitted by Mr. Michael Harder at the hearing (Exhibit 15).
- 6) An objection by Eaton Corporation to Mr. Harder's involvement in connection with the Eaton Application for Groundwater classification to Class GB for 6.5-acre property at 15 Durant Avenue, Bethel, CT, dated July 25, 2017, was submitted at the hearing (Exhibit 16).
- 7) Exhibits 15 and 16 were shared with the interested parties for the Bethel site.
- 8) A request was made to hold the hearing open to allow interested parties the opportunity to review submitted materials and provide additional comment if they wished. The hearing was held open until August 11, 2017 at 4:30 to accommodate the request. No further materials were submitted, and the hearing record was subsequently closed.
- 9) The applications received for the Cromwell, North Haven and Norwalk sites (Exhibits 3, 3a, 5, 5a, 6 and 6a) provided adequate information to determine that the five criteria required by RSCA Section 22a-426-7(k)(2)(B) were met:
 - Criterion No. 1: (Potable Water) All properties within and downgradient of the three proposed reclassification areas are entirely served by public water supplies drawn from outside the areas. The applicants used utility maps, billing records and examined local health department records to confirm this and to ensure that no drinking water wells are present.

- Criterion No. 2 (adjacent surface water goals) and Criterion No. 3 (unacceptable health risks): The applications presented results of investigations to determine the level of pollution of ground water at the site. Pollutant levels at the sites do not exceed surface water protection criteria, applicable volatilization criteria nor applicable direct exposure criteria. Since the Commissioner established these criteria to protect surface water quality and public health, the reclassification should not compromise either water quality or public health.
- Criterion No. 4 (pollution of ground water as a result of historic development): The applicants provided a reasonable body of ground water monitoring information that indicates that the sites' ground water has been degraded. The pollutants present include petroleum hydrocarbons, breakdown products and metals. The applications document urban, industrial or commercial uses on these sites which predate the adoption of the first ground water quality standards in 1981. It is reasonable to associate the ground water pollution at the sites with the documented historic industrial or commercial activities.
- Criterion No. 5 (site suitability for a significant public water supply): The sites are unsuited for the development of significant public water supply wells due to the nature of the onsite earthen and bedrock materials. Borings and geologic mapping information presented in the applications indicate the overburden materials are thin and/or low permeability at the sites, and therefore not suitable for significant public water supply development.
- No written or oral comments were received for these three sites (Cromwell, North Haven and Norwalk.)
- 10) The application received for the Fairfield site (Exhibits 4, and 4a) provided adequate information to determine that the five criteria required by RSCA Section 22a-426-7(k)(2)(B) were met:
 - Criterion No. 1: (Potable Water) All properties within and downgradient of the proposed reclassification area is entirely served by public water supplies drawn from outside the areas. The applicant used utility maps, billing records and examined local health department records to confirm this and to ensure that no drinking water wells are present.
 - Criterion No. 2 (adjacent surface water goals) and Criterion No. 3 (unacceptable health risks): The application presented results of investigations (i.e. ground water monitoring and water quality sampling data) to determine the level of pollution of ground water at the site. Pollutant levels at the site exceed surface water protection criteria, and applicable volatilization criteria. However, the site is defined as an "establishment" under the Property Transfer Program (Section 22a-134 of the Connecticut General Statutes), and is subject to compliance with the Remediation Standards Regulations under that program. A change in the ground water classification to Class GB at the site will not affect the property owner's requirements to comply with the Remediation Standards Regulations through the Property Transfer Program, which are protective of adjacent surface water and public health.

Criterion No. 4 (pollution of ground water as a result of historic development): The applicant provided a reasonable body of ground water monitoring information that indicates that the ground water has been degraded at the site. The pollutants present include petroleum hydrocarbons, breakdown products, and metals. The application documents urban and commercial uses on the site which predate the adoption of the first ground water quality standards in 1981. It is reasonable to associate the ground water pollution at the sites with the documented historic commercial activities.

Criterion No. 5 (site suitability for a significant public water supply): The site is unsuited for the development of a significant public water supply well due to the nature of the on-site earthen and bedrock materials. Borings and geologic mapping information presented in the application indicate the overburden materials are thin (saturated thickness is 7 – 12 feet) and therefore not suitable for significant public water supply development.

Comments provided by the Fairfielders Protecting Land and Neighborhoods (FairPLAN) presented objections to the proposed reclassification in Fairfield. While the Department understands the concerns presented by FairPLAN, none of the information presented is applicable to the regulatory criteria upon which the reclassification decision must be based. The criteria are set out above. The Water Quality Standards are centered on use of the water resources and ensuring the quality is appropriate for the designated use. The Standards take into account Connecticut's historic urban, industrial and commercial development and make accommodations for historic contamination that accompanied that development. Laws prohibiting discharge of chemicals and wastes to the ground came in to effect in the early 1980s. This site was developed commercially in 1929 and has been an active gas station since the 1950s. Lead in the soil, along with the persistent gasoline components in the ground water indicate that there is residual contamination from historic activities at the site. Since the ground water is not in use for drinking, does not have potential for development of a significant drinking water supply, and all properties are served by public water drawn from outside this area, a GB Classification is appropriate. Please note that this does not relieve the property owner from cleaning up the source of the contamination (the leaking tanks have been removed, there is residual contamination in the soil that must be addressed), protecting the surrounding properties from direct exposure or volatilization impacts, nor from protecting surface water quality. They still have work to do to remediate the site. However, since the ground water is not used for drinking, it would be unreasonable to have drinking water as the water quality goal. The drainage issues mentioned in the letter are the purview of the CT Department of Transportation (because it is a state road), and the contact person is Kevin Carifa at (860) 594-2946, if the residents wish to pursue the drainage issues further.

11) The application received for the Bethel site (Exhibits 2 and 2a) provided adequate information to determine that the five criteria required by RSCA Section 22a-426-7(k)(2)(B) were met:

Criterion No. 1: (Potable Water) All properties within and downgradient of the proposed reclassification area is entirely served by public water supplies drawn from outside the

areas. The applicant used utility maps, billing records and examined local health department records to confirm this and to ensure that no drinking water wells are present.

Criterion No. 2 (adjacent surface water goals) and Criterion No. 3 (unacceptable health risks): The application presented results of investigations to determine the level of pollution of ground water at the site. Pollutant levels at the site exceed surface water protection criteria. The site is subject to the Property Transfer Act and is under an administrative order for remediation, and therefore must achieve compliance with the Remediation Standards Regulations under those programs. A change in the ground water classification to Class GB at the site will not affect requirements to comply with the Remediation Standards Regulations, which are protective of adjacent surface water and public health.

There are several exhibits in the record focused on the surface water protection exceedances at this site. These include the following:

- (a) Exhibit 12, which is memorandum regarding development of alternative surface water protection criteria submitted by Pete King, of Geosyntec, to Anthony Gyasi, of DEEP, and was shared with the hearing officer;
- (b) Exhibit 13, which is an email from Mr. Gyasi to Ms. Fitting stating that the analysis presented in the submittal on Alternative Surface Water Protection Criteria was consistent with the Remediation Standards Regulations.
- (c) Exhibit 15, which is a Technical Memorandum regarding Groundwater Flow and Contaminant Transport, submitted by Michael Harder, prepared by Gail Batchelder for Jeffrey Fort and the former owner of the property, William Farley, which also supports the proposed reclassification.
- (d) Exhibit 16, by Vincent Atriano, which objects to Mr. Harder's involvement in this process; and
- (e) Exhibit 17, which a statement by Mr. Harder on surface water quality goals.

None of the above exhibits (12, 13, 15, 16, or 17) were relied upon in this decision. The site is subject to the Remediation Standards Regulations, and regardless of the ground water classification, the site will need to meet criteria protective of surface water quality through remediation.

Criterion No. 4 (pollution of ground water as a result of historic development): The applicant provided a reasonable body of ground water monitoring information that indicates that the ground water has been degraded at the site. The pollutants present include solvents and breakdown products. The application documents industrial uses on the site which predate the adoption of the first ground water quality standards in 1981. It is reasonable to associate the ground water pollution at the sites with the documented historic industrial activities.

Criterion No. 5 (site suitability for a significant public water supply): The site is unsuited for the development of a significant public water supply well due to the nature of the on-site earthen and bedrock materials. Borings and geologic mapping information presented in

- the application indicate the overburden materials are thin and fine-grained, and therefore not suitable for significant public water supply development.
- 12) The area proposed for reclassification in Bethel encompasses and expands the area of a pending reclassification request submitted by Mr. William Farley (Exhibit 18).

Conclusion:

The applicants, Mr. Jeff Allen acting on behalf of Eaton Aerospace Corporation (Exhibits 2 and 2a); Mr. John Frary acting on behalf of Chevron Environmental Management Company, (Exhibits 3, and 3a); Mr. Jesse Arroyo acting on behalf of Antea Group (Exhibits 4, 4a, 6 and 6a; and Mr. John Orsini, on behalf of 511 Washington Avenue, LLC, (Exhibits 5 and 5a), have demonstrated that the areas in Bethel, Cromwell, Fairfield, North Haven and Norwalk proposed for reclassification from Class GA to Class GB meet criteria established under RSCA Section 22a-426-7(k)(2)(B). I therefore recommend that the Commissioner grant the requests for lowering the ground water quality classifications to Class GB at these five sites.

The reclassification requested by Eaton Aerospace Corporation encompasses and includes the area that is the subject of Mr. Farley's request (Exhibit 18). I therefore recommend that Mr. Farley's application be rendered moot by the approval of Eaton's application.

e Corinne R. Fitting

Hearing Officer

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 applications to lower the ground water quality classification from Class GA to Class GB and render Mr. Farley's application moot. These changes will be incorporated in the Water Quality Classification Map as new editions are prepared.

Date

Robert E. Kaliszewski Deputy Commissioner

List of Participants

Jeff Allen Eaton Aerospace LLC 1000 Eaton Blvd, Mail Code 2N Cleveland, OH 44122

Peter King, LEP Geosyntec Consultants 43 Constitution Dr, Suite 102 Bedford, NH 03110

Vincent Atriano Squire Patton Boggs (US) LLP 2000 Huntington Center 41 South High St Columbus, OH 43215

Matthew Knickerbocker First Selectman 1 School St Bethel, CT 06801

Laura Vasil Bethel Director of Health 1 School St Bethel, CT 06801-0274

William Farley 233 South Wacker Dr, Suite 2150 Chicago, IL 60606

Jeffrey Fort Dentons 233 South Wacker Dr, Suite 5900 Chicago, IL 60606

Michael Harder 61 Prentice Hill Rd Hebron, CT 06248

John Frary Chevron Environmental Management Co 4800 Fournance PL, Rm E540B Bellaire, TX 77401 Lance Kazzi, LEP Arcadis 213 Court St, Suite 700 Middletown, CT 06457

Robert A. Malinoski Chevron Environmental & Safety Law 1400 Smith St, 5th Fl Houston, TX 77002

River Road of Cromwell, LLC c/o Aaron Schames MBR 2842 Main St, #108 Glastonbury, CT 06033

Enzo Faienza Mayor Town Hall, 1st FL Cromwell, CT 06416

J. Wesley Bell Cromwell Director of Health 31 West St Cromwell, CT 06416-3424

John Orsini 1180 North Colony Rd Wallingford, CT 06492

Zoe A. Belcher BGT Environmental, LLC 14 Cedar Meadow Rd Moodus, CT 06469

Michael J. Freda First Selectman 18 Church St North Haven, CT 06473 Leslie A. Balch Director of Health Quinnipiac Valley Health Distric 1151 Hartford Tpke North Haven CT 06473

Jesse Arroyo Antea USA Inc. 400 Donald Lynch Blvd, Suite 104 Marlborough MA 01752

David Went Alliance Energy LLC 15 Northeast Industrial Rd Branford CT 06512

Harry Rilling, Mayor City of Norwalk 125 East Ave P.O. Box 5125 Norwalk, CT 06856-5125

Timothy Callahan Director of Health 137 East Ave Norwalk, CT 06851 Alliance Energy LLC 800 South St, Suite 500 P.O. Box 9290 Waltham MA 02454

Michael C. Terteau First Selectman 725 Old Post Rd Fairfield, CT 06824

Sands Cleary Director of Health 725 Old Post Rd Fairfield, CT 06824

Fairfielders Protecting Land and Neighborhoods (email only: maryhogue350@gmail.com)

List of Speakers at the Public Hearings

Peter King, Geosyntec Vincent Atriano, Squire Patton Boggs Jeffrey Fort, Dentons Michael Harder

List of Exhibits

Exhibit 1:	Water Quality Standards & Classifications, RSCA Section 22a-426-1to 22a-426-9
Exhibit 2a:	Application for Ground Water Classification Change, 15 Durant Ave, Bethel
Exhibit 2b:	Supporting Materials, 15 Durant Ave, Bethel
Exhibit 3a:	Application for Ground Water Classification Change, 79 River Rd, Cromwell
Exhibit 3b:	Supporting Materials, 79 River Rd, Cromwell
Exhibit 4a:	Application for Ground Water Classification Change, 2093 Post Rd, Fairfield
Exhibit 4b:	Supporting Materials, 2093 Post Rd. Fairfield

Exhibit 5a: Application for Ground Water Classification Change, 511 Washington Ave, North Haven Exhibit 5b: Supporting Materials, 511 Washington Ave, North Haven Application for Ground Water Classification Change, 31 North Ave, Norwalk Exhibit 6a: Supporting Materials, 31 North Ave, Norwalk Exhibit 6b: Exhibit 7: Authorization to Conduct a Public Hearing, 6/13/17 Public Notice of Hearing for Ground Water Reclassification and Tentative Exhibit 8: Determination of the Commissioner 6/13/17 Exhibit 9: Affidavit of Publication of public notice, 6/24/17 Exhibit 10a – 10e: Notification letters to chief Elected Officials of Bethel, Cromwell, Fairfield, North Haven and Norwalk, respectively, 6/20/17 Exhibit 11a- 11e: Return Receipts from Chief Elected Officials, respectively Exhibit 12: Memorandum dated 7/14/17 to Pete King from Anthony Gyasi re: 15 Durant Ave. Bethel Exhibit 13: Email dated 7/20/17 from Anthony Gyasi to Corinne Fitting re: Eaton GW Re-Class Alt SWPC Calculation Letter dated 7/20/17 from Fairfielders Protecting Land and Neighborhoods to Exhibit 14: Corinne Fitting Exhibit 15: Technical Memorandum: Groundwater Flow and Contaminant Transport. Shallow Overburden Groundwater, vicinity of 15 Durant Avenue, Bethel, CT, Dated 7/24/17 Exhibit 16: Letter dated 7/25/17 from Vincent Atriano to Corinne Fitting re: Eaton Corp's Objection to Michael J. Harder's Involvement Exhibit 17: Statement received 7/26/17 from Michael Harder Application for Groundwater Classification Change, by Mr. William Farley, 15 Exhibit 18:

Durant Avenue, Bethel, received 12/23/16

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	3.			