

COMMITMENT & INTEGRITY
DRIVE RESULTS

P.O. Box 1017
Greenville, New Hampshire 03048
cmary@woodardcurran.com
www.woodardcurran.com

T 603.878-1338
T 603.878.2800
F 603.878.3638



October 28, 2009

United States Environmental Protection Agency, Region 1
PWTF GP Processing
Municipal Assistance Unit (CMU)
1 Congress Street, Suite 1100
Boston, MA 02114-2023

**RE: Greenville Water Treatment Plant (NPDES NHG640009) Discharge Permit
Application (NOI)**

To whom it may concern:

Enclosed please find the Discharge Permit application (NOI) for the Greenville WTP, located in Temple, NH.

Feel free to contact me with any questions you may have @ 601-801-1743.

Sincerely,


Carla Mary
Greenville Project Manager
Woodard & Curran

NOV - 3 2009

CC: Dan Dudley
NHDES
P.O. Box 95, 29 Hazen Dr.
Concord, NH 03302

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND - REGION I
ONE CONGRESS STREET, SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023

Request for General Permit Authorization to Discharge Wastewater
(Notice of Intent to be covered by the General Permit (NOI))

Potable Water Treatment Facility (PWTF)
NPDES General Permit No. MAG640000 and NHG640000

NOV - 3 2009

A. Facility Information

1. Facility Owner:

Name Town of Greenville e-mail administrator@greenvillenh.org
Street/PO Box Main Steet City Greenville
State NH Zip Code 03048
Contact Person Sott Blease Telephone Number 603-878-2084

2. Facility Operator (if different from above):

Name Woodard & Curran e-mail (optional) cmayr@woodardcurran.com
Street/PO Box 41 Hutchins dr. City Portland
State ME Zip Code 04102
Contact Person Carla Mary Telephone Number 603-801-1743

3. Facility Data (attach topographic map or other map showing facility/discharge location):

Name Greenville WTP e-mail (optional) _____
Street/PO Box 1017 City Temple
State NH Zip Code 03084
Contact Person Carla Mary Telephone Number 603-878-1338
Latitude 42.794251235088026 Longitude -71.83196067810058

4. Standard Industrial Classification (SIC Codes) and Descriptions of Processes:

SIC Code(s) 4941
Description(s) water supply

5. Current Permitting Status (please check yes or no):

1. Has a prior NPDES permit been granted for the discharge? Yes ☒ (Permit Number: nhg640009)
No ☐
2. Is the discharge a "new discharge" as defined by 40 CFR Section 122.22? Yes ☐ No ☒
3. Is the facility covered by an individual NPDES permit? Yes ☐ (Permit Number) No ☒
4. Is there a pending application on file with EPA for this discharge? Yes ☐ (Date of submittal:) No ☒

B. Discharge Information

1. Name of Receiving Waterbody Tobey reservoir
2. Type of Receiving Waterbody (e.g. stream, lake, reservoir, estuary etc) reservoir
3. State Water Quality Classification: class B Freshwater: ☒ Marine Water: ☐
4. Describe the discharge activities for which the owner/applicant is seeking coverage, including process discharges not specifically authorized in the PWTF GP which need to be authorized for discharge (and which attain the

effluent limits and other conditions of the general permit). This description should include all treatment methods used on the wastewater prior to discharge including lagoons, baffles, filter presses etc. If lagoons are used at the facility, please include the number and size of lagoons; the size and elevation of the entry pipe; the time of travel from the entry point of the discharge into the lagoon to the entry point to the receiving water; and the length of backwash cycle for any combination of number of filters. (attach extra sheets if necessary):

SEE ATTACHED

5. Please provide a diagram depicting the treatment methods, outfalls, and receiving water.

6. Number of outfalls: 1

For each outfall:

7. What is the proposed sampling location(s) and proposed consistent times of the month for collecting samples:

Out of the drainage pipe where it starts to flow over the ground

C. Effluent Characteristics

1. List here and attach information on any water additives used at the facility (Including chemicals for pH adjustment, dechlorination, control of biological growth, and control of corrosion and scale in water pipes): SEE ATTACHED

2. Please report here any known remediation activities or water-quality issues in the vicinity of the discharge.

No known

3. Are aluminum-containing coagulants used at this facility? Yes ☒ No ☐

4. Does the discharge contain residual chlorine? Yes ☐ No ☒

5. Does the facility provide treatment to remove arsenic from the raw water source? Yes ☐ No ☒

6. Are phosphorus-containing chemicals added to the treated water at this facility? Yes ☐ No ☒

7. All applicants must attach a separate sheet listing all laboratory results (minimum of five) for total recoverable aluminum (in micrograms per liter) taken within the last six months. Do not include dilution when recording your results. See Section 4.4.5 of General Permit for more information.

8. Please include the following effluent data for each outfall:

<u>Characteristic (report if measured)</u>	<u>Average Monthly</u>	<u>Maximum Daily</u>
Discharge Flow (gpd)	<u>250,000</u>	<u>20,000</u>
TSS (mg/l)	<u>0.0</u>	<u>0.0</u>
pH (s.u.)	<u>(min) 6.0</u>	<u>(max) 6.4</u>
Total Recoverable Aluminum (ug/l)	<u>0.0</u>	<u>0.0</u>
Total Residual Chlorine (ug/l)	<u>0.0</u>	<u>0.0</u>

(continued on next page)

8. Continued

Characteristic (report if measured)

Whole Effluent Toxicity (%) LC50 NA and/or C-NOEC NA

9. If the discharge contains aluminum and/or residual chlorine, please provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water, the dilution factor, and attach any calculations used to support stream flow and dilution calculations (See Appendix VII for dilution calculations and additional information):

7Q10 NA cfs Dilution Factor NA cfs

D. Endangered Species Act Eligibility

1. Using the instructions in Appendix I of the PWTF GP, under which criterion listed in Part II are you eligible for coverage under this general permit?

A ☒ B ☐ C ☐ D ☐ E ☐ F ☐

2. If you selected criteria D or F, has consultation with the federal services been completed? Yes ☐ No ☐

3. If consultation with U.S. Fish and Wildlife Service and/or NOAA Fisheries Service was completed, was a written concurrence finding that the discharge is "not likely to adversely affect" listed species or critical habitat received? Yes ☐ No ☒

4. Attach documentation of ESA eligibility as described below and required at Part 3.4.I and Appendix I, Part III, Step 4, of the General Permit.

Criterion A - No federally-listed threatened or endangered species or federally-designated critical habitat are present: A copy of the most current county species list pages for the county(ies) where your site or facility and discharges are located. You must also include a statement on how you determined that no listed species or critical habitat are in proximity to your site or facility or discharge locations.

Criterion B - Section 7 consultation completed with the Service(s) on a prior project: A copy of the USFWS's and/or NMFS's, as appropriate, biological opinion or concurrence on a finding of "unlikely to adversely effect" regarding the ESA Section 7 consultation.

Criterion C - Activities are covered by a Section 10 Permit: A copy of the USFWS's and/or the NMFS's, as appropriate, letter transmitting the ESA Section 10 authorization.

Criterion D - Concurrence from the Service(s) that the discharge is "not likely to adversely affect" federally-listed species or federally-designated critical habitat (not including the four species of concern identified in Section I of Appendix I): A copy of the USFWS's and/or the NMFS's, as appropriate, letter or memorandum concluding that the discharge is consistent with the general permit's "not likely to adversely affect" determination.

Criterion E - Activities are covered by certification of eligibility: A copy of the documents originally used by the other operator of your site or facility (or area including your site) to satisfy the documentation requirement of Criteria A, B, C or D.

Criterion F - Concurrence from the Service(s) that the discharge is "not likely to adversely affect" species of concern, as identified in Section I of Appendix I: A copy of the USFWS and/or the NMFS, as appropriate, concurrence with the applicant's determination that the discharge is "not likely to adversely affect" listed species.

E. National Historic Properties Act Eligibility

1. Using the instructions in Appendix III of the PWTF GP, under which criterion listed in Part III are you eligible for coverage under this general permit?

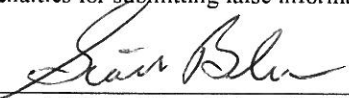
1 ☒ 2 ☐ 3 ☐

2. Have any State or Tribal historic preservation officers been consulted in this determination? Yes ☐ No ☒
If yes, attach the results of the consultation(s).

F. Certification

I certify that the discharge for which I am seeking coverage under the general permit consists solely of a surface water discharge from a potable water treatment facility. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature



Date

10/21/09

Printed Name and Title Scott Blease, Chairman of the BOS

Federal regulations require this application to be signed as follows:

1. For a corporation, by a principal executive officer of at least the level of vice president;
2. For partnership or sole proprietorship, by a general partner or the proprietor, respectively, or,
3. For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.

Note: Permits No. MAG640000 and NHG640000 may be found at www.epa.gov/region1/npdes/pwtfgp.html

Attachment B, 4:

The existing water treatment was designed and built in August 1999, with a plant capacity to 425,000 gpd maximum daily flow. The plant uses conventional treatment, which includes coagulation, flocculation, sedimentation, filtration and disinfection. The filter backwash water and solids removed in the sedimentation basins discharge into two unlined lagoons. Projected design flows to the lagoons are 2,000 gpd of settled sludge from the sedimentation basin cleaning operations, 9,000 gpd filter backwash and 3,000 gpd filtrate to waste. These operations do not take place on a daily bases, it is estimated that 6,000-9,000 gpd enter into the lagoon system. The discharge will have low levels of TSS, chlorine and aluminum residuals. Over the past years, these residuals have been below detection limits.

The two 140,000 gallon lagoons (total storage volume 280,000 gallons) are unlined and are constructed of pervious sand material, which allows water to percolate into the ground and the sludge solids to remain in the lagoons. The water percolates through the sand and is collected in a 6" vitrified clay perforated pipe under drain, located 1.5' below the toe of the embankment. The perforated pipe drains into a manhole and then discharges through a 6" vitrified clay pipe to the ground surface. The Tobey reservoir is approximately 300' away from the discharge point.

Attachment C, 1:

The following chemicals are added to the water for treatment purposes. Sodium hypochlorite- 3 gpd, sodium hydroxide-.5 gpd, aluminum sulfate-5 gpd and sodium aluminate-2 gpd.



New Hampshire Natural Heritage Bureau

To: Carla Mary
Greenville water treatment plant
P.O. Box 1017
Greenville, NH 03048

Date: 10/19/2009

From: NH Natural Heritage Bureau

Re: Review by NH Natural Heritage Bureau of request dated 10/19/2009

VALID ONLY FOR NOTIFICATION OR MINIMUM EXPEDITED
APPLICATIONS SUBMITTED TO THE NHDES WETLANDS BUREAU

NHB File ID: NHB09-2260

Applicant: Carla Mary

Address: Rt. 45
Temple

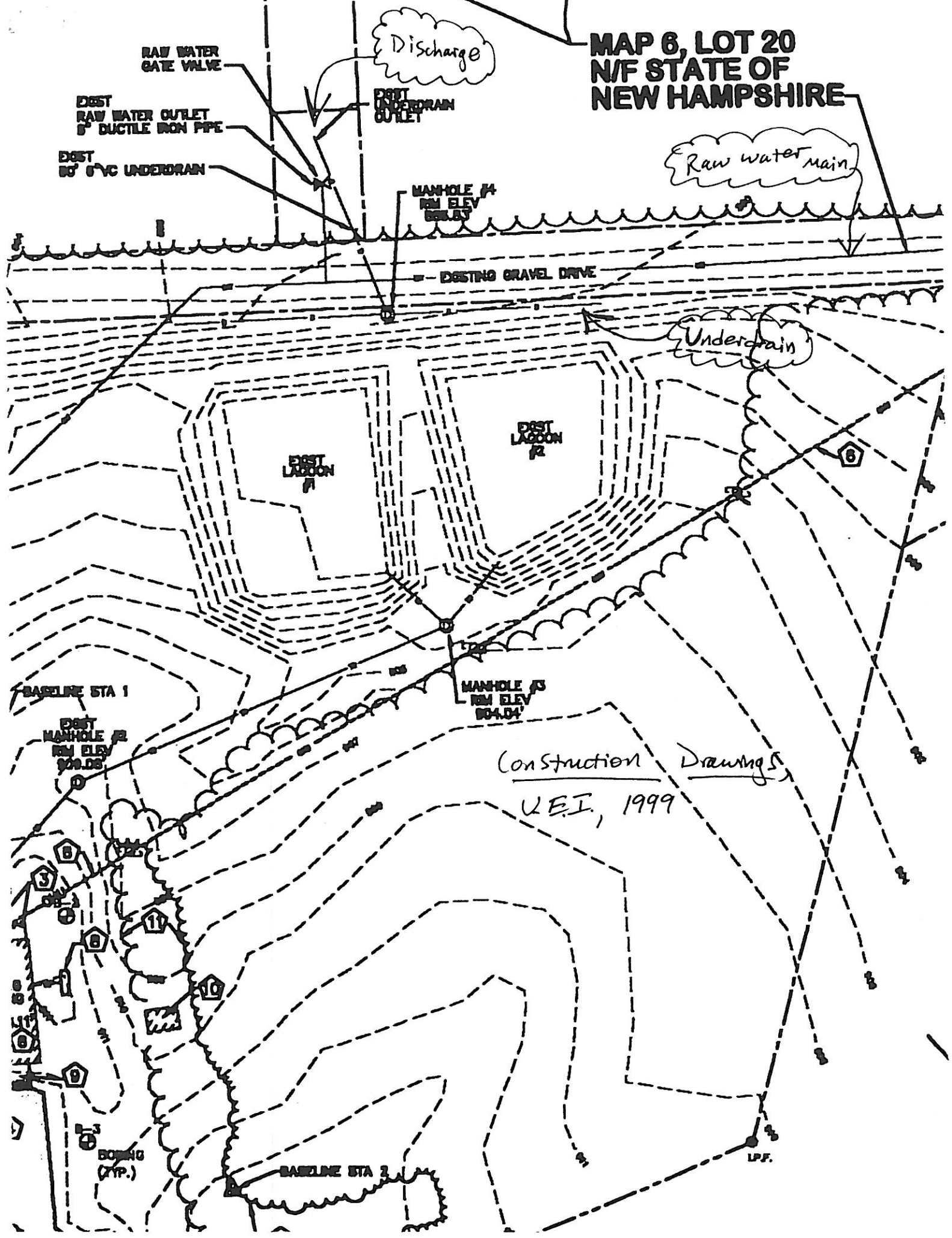
Project Categories:
Water/Wastewater: Water supply system

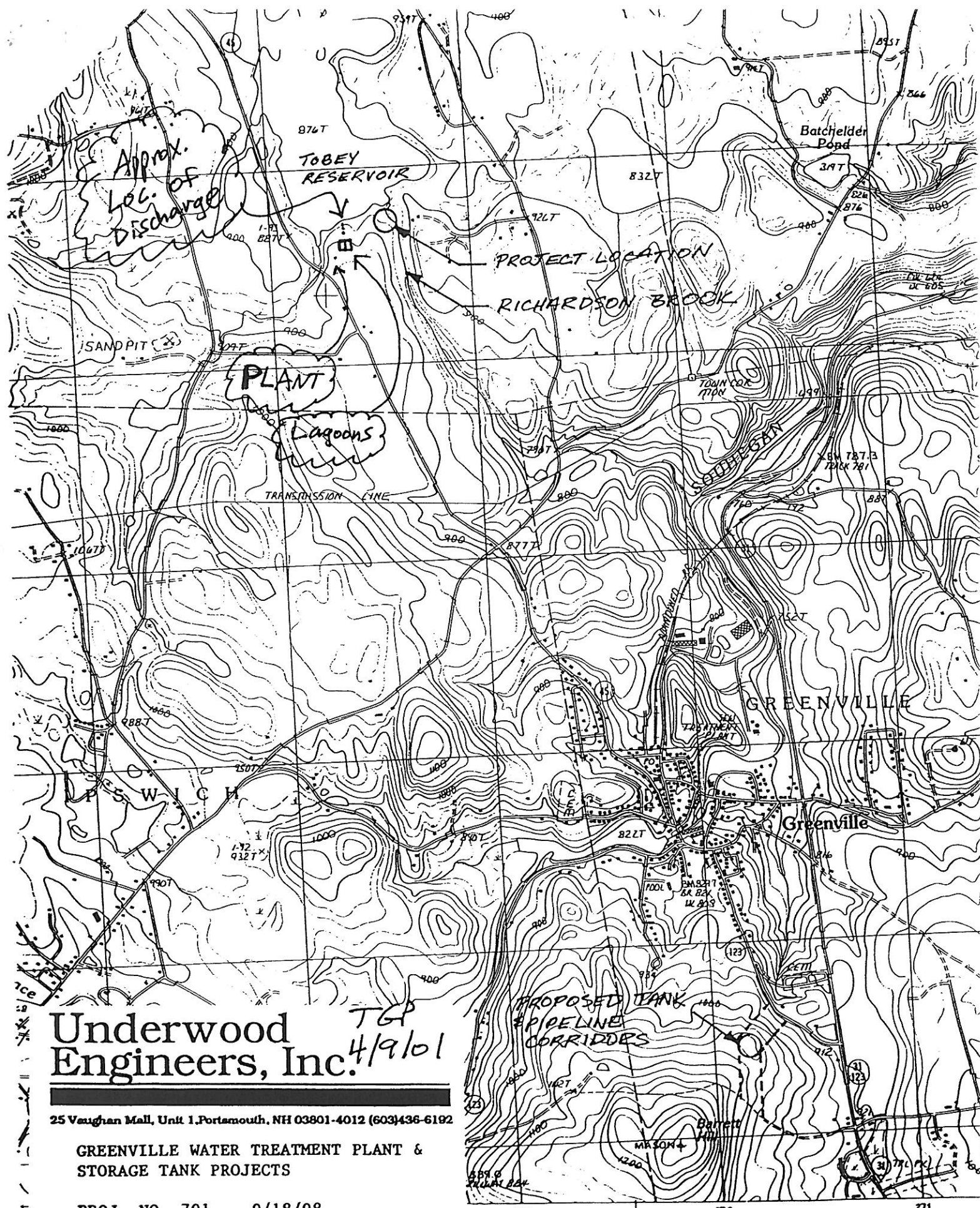
The NH Natural Heritage database has been checked for records of rare species and exemplary natural communities near the area mapped below. The species considered include those listed as Threatened or Endangered by either the state of New Hampshire or the federal government. We currently have no recorded occurrences for sensitive species near this project area.

A negative result (no record in our database) does not mean that a sensitive species is not present. Our data can only tell you of known occurrences, based on information gathered by qualified biologists and reported to our office. However, many areas have never been surveyed, or have only been surveyed for certain species. An on-site survey would provide better information on what species and communities are indeed present

This review is valid through 10/19/2010.

MAP 6, LOT 20
N/F STATE OF
NEW HAMPSHIRE





Underwood Engineers, Inc.

TGP
4/9/01

25 Vaughan Mall, Unit 1, Portsmouth, NH 03801-4012 (603) 436-6192

GREENVILLE WATER TREATMENT PLANT &
STORAGE TANK PROJECTS

PROJ. NO. 791 9/18/98
SOURCE: USGS GREENVILLE QUAD.
SCALE: 1" = 2,000'

SCALE 1:24 000

INTERIOR-GEOLG



LABORATORY REPORT

Eastern Analytical, Inc. ID#: **83395**

Client: **Woodard and Curran, Inc. (Greenville)** Client Designation: **Greenville Water Dept / EPA # 0991010 | Lagoons - Nov. 2009**

Sample ID: Lagoon EFF

Lab Sample ID: 83395.01

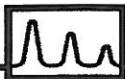
Matrix: aqueous

Date Sampled: 10/8/09

Date Received: 10/8/09

Aluminum < 0.05

Analytical Matrix	Units	Date of Analysis	Method	Analyst
AqTot	mg/L	10/14/09	200.7	DS



LABORATORY REPORT

Eastern Analytical, Inc. ID#: 82349

Client: **Woodard and Curran, Inc. (Greenville)** Client Designation: **Greenville Water Dept / EPA # 0991010 | Lagoons - Sept. 2009**

Sample ID: Lagoon EFF

Lab Sample ID: 82349.01

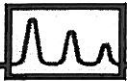
Matrix: aqueous

Date Sampled: 9/1/09

Date Received: 9/1/09

Aluminum < 0.05

Analytical Matrix	Units	Date of Analysis	Method	Analyst
AqTot	mg/L	9/9/09	200.7	DS



LABORATORY REPORT

Eastern Analytical, Inc. ID#: 81755

Client: **Woodard and Curran, Inc. (Greenville)** Client Designation: **Greenville Water Dept / EPA # 0991010 | Lagoons - Aug. 2009**

Sample ID: Lagoon EFF

Lab Sample ID: 81755.01

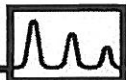
Matrix: aqueous

Date Sampled: 8/7/09

Date Received: 8/11/09

Aluminum < 0.05

Analytical Matrix	Units	Date of Analysis	Method	Analyst
AqTot	mg/L	8/12/09	200.7	DS



LABORATORY REPORT

Eastern Analytical, Inc. ID#: 80401

Client: Woodard and Curran, Inc. (Greenville) Client Designation: Greenville Water Dept / EPA # 0991010 | Lagoons - June 2009

Sample ID: Lagoon EFF

Lab Sample ID: 80401.01

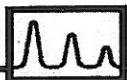
Matrix: aqueous

Date Sampled: 6/30/09 *For July 1*

Date Received: 6/30/09 *" "*

Aluminum < 0.05

Analytical Matrix	Units	Date of Analysis	Method	Analyst
AqTot	mg/L	7/7/09	200.7	DS



LABORATORY REPORT

Eastern Analytical, Inc. ID#: 79593

Client: **Woodard and Curran, Inc. (Greenville)** Client Designation: **Greenville Water Dept / EPA # 0991010 | Lagoons - June 2009**

Sample ID: Lagoon EFF

Lab Sample ID: 79593.01

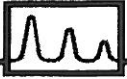
Matrix: aqueous

Date Sampled: 6/1/09

Date Received: 6/2/09

Aluminum < 0.05

Analytical Matrix	Units	Date of Analysis	Method	Analyst
AqTot	mg/L	6/8/09	200.7	DS



LABORATORY REPORT

Eastern Analytical, Inc. ID#: 78944

Client: **Woodard and Curran, Inc. (Greenville)** Client Designation: **Greenville Water Dept / EPA # 0991010 | Lagoons - May 2009**

Sample ID: Lagoon EFF

Lab Sample ID: 78944.01

Matrix: aqueous

Date Sampled: 5/12/09

Date Received: 5/12/09

Aluminum < 0.05

Analytical Matrix	Units	Date of Analysis	Method	Analyst
AqTot	mg/L	5/15/09	200.7	DS