

STATE OF VERMONT
PUBLIC SERVICE BOARD

Petition of Entergy Nuclear Vermont Yankee,)
LLC, and Entergy Nuclear Operations, Inc., For a) Docket No. 8300
Certificate of Public Good Pursuant to 30 V.S.A.)
§ 248 and 10 V.S.A. § 6522 to Construct a Second)
Independent Spent Fuel Storage Installation)
("ISFSI") at the Vermont Yankee Nuclear Power)
Station)
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PREFILED TESTIMONY OF CHRIS GIANFAGNA

On Behalf of the Vermont Agency of Natural Resources, Department of Environmental
Conservation, Watershed Management Division

Summary of Testimony

Mr. Gianfagna is an Environmental Analyst in the Watershed Management Division. His testimony will address the impacts of the Project with regards to stormwater and outlines the steps required to comply with stormwater regulations and meet Criterion 1 - Water Pollution.

1 **Q1. Please state your name, place of employment, and position.**

2 A1. My name is Chris Gianfagna, I am currently employed by the Vermont Department of
3 Environmental Conservation as an Environmental Analyst with the Stormwater Program.

4
5 **Q2. Please describe your professional background and tenure at the Agency of Natural
6 Resources.**

7 A2. I have held several positions relating directly to water quality, including working on
8 agricultural water quality and sediment loading issues at the Miner Institute in Chazy,
9 NY, working on watershed scale chemical fluxes and predictions of flow in ungagged
10 basins in the NYC water supply watersheds/reservoirs at Syracuse University, and have
11 been employed by the Vermont DEC in my current role since February 2014.

12
13 My resume is attached as **Exhibit ANR-CG-1**.

14

15 **Q3. Please describe your educational background and any relevant certifications that
16 you hold.**

17 A3. I have a Bachelor's Degree in Environmental Science from SUNY Plattsburgh and a
18 Master's Degree in Environmental Engineering, including graduate coursework in
19 stormwater management, from Syracuse University. I am also a Certified Professional in
20 Erosion and Sediment Control- In Training.

21

1 **Q4. While at the Agency, have you engaged in any training or classes related to your**
2 **work in the Stormwater Program?**

3 A4. Yes. I have attended a soils workshop presented by the USDA, a 2-day Green
4 Stormwater Infrastructure conference, the annual 2-day Northeast Chapter of the
5 International Erosion Control Association meeting and conference, and have been active
6 in preparing for Part II of the Certified Professional in Erosion and Sediment Control
7 exam, which I will take in early September 2015.

8

9 **Q5. Have you previously provided testimony to the Public Service Board, the**
10 **Environmental Court, or the District Commissions?**

11 A5. No.

12

13 **Q6. What is the purpose of your testimony?**

14 A6. The purpose of my testimony is to answer questions related to the need of the Project to
15 obtain construction and operational stormwater permits.

16

17 **Q7. Is a construction stormwater permit required for this Project?**

18 A7. Yes. The project as proposed will result in more than 1 acre of earth disturbance, and
19 therefore coverage under the Construction General Permit is required.

20

21 **Q8. What is the status of the construction permit for this Project?**

1 A8. Authorization under the Construction General Permit for this project was granted by
2 Discharge Authorization # 4213-9020 on 6/12/2015 and remains valid until 6/12/2017.

3

4 **Q9. Is an operational stormwater permit required for this Project?**

5 A9. Yes. The project as proposed involves an expansion to existing impervious surfaces such
6 that the total resulting impervious is over the jurisdictional threshold, and therefore
7 requires an operational stormwater permit.

8

9 **Q10. What is the status of the operational stormwater permit for this Project?**

10 A10. The Operational Stormwater Permit, Discharge Authorization # 4213-INDS, was issued
11 on 10/20/2014, and revised and re-issued on 7/2/2015 to address pre-construction
12 changes allowed under Ch. 18-308(j). Due to an oversight, the revised permit was issued
13 without a signature, but this will be rectified in the near future.

14

15 **Q11. Do you have any recommendations to the Board for conditions to be included in any**
16 **CPG issued for this Project?**

17 A11. No.

18

19 **Q12. Does this conclude your testimony?**

20 A12. Yes.

Chris Gianfagna

Contact

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VT Dept. of Environmental Conservation

1 National Life Dr., Main 2

Montpelier, VT 05602

Technical Skills

- Certified Professional in Erosion and Sediment Control In-Training
- Proficient with MS Word, Excel, Powerpoint, HydroCAD and USGS StreamStats
- Familiar with ArcGIS, RUSLE2, HydroDesktop, HEC-RAS, EPA SWMM, EPA NET, and Win TR-55
- Water Quality Analysis/Instrument Use/Water Quality and Quantity Modeling
- Field Data Collection Skills/Standard Methods
- American Red Cross CPR/First Aid Certified
- NYS Licensed Whitewater Raft Guide

Education

MS Environmental Engineering
Syracuse University

Cumulative GPA: 3.8
Graduation Date: December 2012

BS Environmental Science, minor in Hydrogeology
SUNY Plattsburgh

Cumulative GPA: 3.94
Graduation Date: May 2010

Work Experience

Vermont Department of Environmental Conservation
Environmental Analyst, Stormwater Program

1 National Life Dr., Main 2 Montpelier, VT 05602
February 2014 – Present

Technical review of operational, industrial, and construction stormwater permit applications. Technical design assistance, permit compliance inspections, and jurisdictional determinations.

Syracuse University
Graduate Research Assistant/Laboratory Technician/Teaching Assistant

151 Link Hall, Syracuse NY 13210
August 2010 - May 2012

Led and assisted research projects pertaining to water and soil quality in the Catskill Mountains for the NYC water supply. Led summer research group in stream and soil sampling. Performed laboratory tasks including sample preparation, analysis, interpretation of results, and data management. Taught the recitation section of the Introduction to Environmental Engineering course.

W.H. Miner Agriculture Research Institute
Research Assistant/Laboratory Technician

Miner Farm Rd. Chazy, NY 12921
May 2009 - May 2010

Assisted with various environmental and agricultural research projects including studies on eutrophication of the Little Chazy River, subsurface tile drainage, and groundwater hydrology. Processed stream water samples for phosphorus concentrations using a strong acid digest and colorimetric absorbance methods.

ARO Adventures, B.O.B. Rafting, Whitewater Challengers Inc.

Licensed Whitewater Raft Guide/ Safety Kayaker

Black River/Hudson River, New York

Summers 2006 - Present

Guide customers down demanding whitewater while maintaining a safe and enjoyable environment. Trip preparation and customer service, accompany trip as the Rescue Kayaker. Instill a care of flowing waters in my guests.

ASI Environmental Technologies

Sea Lamprey Research Technician

Dexter Hydro-dam, Dexter, New York 13634

April 2006 - June 2006

Performed field data collection including checking of lamprey traps, marking and releasing of lamprey, and measuring and recording of biological and hydrologic data.

Independent Research**Paper Under Review in Journal of Hydrology: Regional Studies: Watershed area ratio accurately predicts daily streamflow in nested catchments in the Catskills, New York.**

Lead author on a paper analyzing the effects of nested vs non-nested reference stream gages for use with the area-ratio method for prediction of flow in ungaged basins. Publication is anticipated.

Master's Thesis: Estimation of Solute Fluxes from Ungaged Catchments in the Catskill Mountains.

Original research on estimation of flow and dissolved chemical fluxes in ungaged watersheds in the Catskill Mountain region of New York State. Involved development of a method for estimating flow in ungaged catchments and extrapolation of solute concentrations based on limited data. Generated using data from the USGS Stream Network and USGS StreamStats.

Undergraduate Research: Hydrology of a Tile Drained Agricultural Field.

Installed groundwater monitoring wells in a tile drained alfalfa field at the Miner Agriculture Research Institute for determining groundwater elevation and fluctuation upon installation of groundwater control structures in the tile drains. Surveyed the well locations and the topography of the field. Prepared a detailed topographic map of the well field to facilitate future research.

Honors, Awards, and Affiliations

Honors and Awards: Boy Scouts of American Eagle Scout, SUNY Plattsburgh Outstanding Senior in Environmental Science, SUNY Plattsburgh Dean's List 2007-2010, SUNY Plattsburgh Transfer Achievement Scholarship

Affiliations: American Whitewater, The Adirondack Mountain Club