

PERMIT APPLICATION REVIEW SUMMARY

New Hampshire Department of Environmental Services Air Resources Division P.O. Box 95, 29 Hazen Drive Concord, NH 03302-0095

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Facility:	Eversource Energy- Newington Station			Engineer:	PB		
Location:	Newington, NH						
AFS#:	3301500054	Application #:	16-0183	Date:	12/22/16	Page 1 of 2	

FACILITY DESCRIPTION

Public Service of New Hampshire dba Eversource Energy (Eversource) - Newington Station is a fossil fuel-fired electricity generating facility. The facility is comprised of one utility boiler (NT1), two No. 2 oil fired auxiliary boilers (NTAB1 & NTAB2), one emergency generator, two bulk oil storage tanks, and one bulk oil storage day tank. Newington Station is currently operating under the following air permits:

Permit	Description	Date issued	Date Expires
TV-OP-054	Title V Operating Permit	March 9, 2007; Minor modification issued on January 29, 2010	March 31, 2012. Renewal application was received on September 30, 2011. Application shield applies.
TP-0120	Temporary Permit for a new temporary steam boiler	December 26, 2012	June 30, 2014. Eversource submitted a request on March 18, 2014 to include this device in Newington's Title V Permit. Application shield applies.
TP-0176	This Temporary Permit includes applicable requirements of 40 CFR 63 Subpart DDDDD (Major Source Boiler MACT) associated with both limited-use and unlimited-use operating scenarios for the two auxiliary boilers.	January 6, 2016	June 30, 2017

PROJECT DESCRIPTION

Eversource submitted a Temporary Permit Application in support of an air dispersion modeling analysis which was conducted as part of the New Hampshire Department of Environmental Services (DES) response to the United States Environmental Protection Agency (EPA) Order on Title V Petition VI-2014-04. The EPA Order was in response to Sierra Club's Petition regarding the issuance of Title V Operating Permit TV-0053 to Eversource Energy-Schiller Station (AFS# 3301500012). Eversource submitted an updated modeling report on October 6, 2016. The modeling also addressed the Data Requirements Rule (DRR) ¹ for the 2010 1-hour Sulfur Dioxide (SO₂) Primary National Ambient Air Quality Standard (NAAQS).

- 1.) The DRR applies to any air agency in whose jurisdiction is located one or more applicable sources of SO₂ emissions that have annual actual SO₂ emissions of 2,000 tons or more; or in whose jurisdiction is located one or more sources of SO₂ emissions that have been identified by the air agency or by the EPA Regional Administrator as requiring further air quality characterization. On January 5, 2016, DES submitted to EPA-Region 1 a list of stationary sources that were identified as requiring further air quality characterization: Eversource Energy Schiller and Newington Stations. These two sources are located in New Hampshire's sea coast region.
- 2.) Under the DRR, state air agencies have the flexibility to characterize air quality using either modeling of actual source emissions or using appropriately sited ambient air quality monitors. Modeling was used to characterize

https://www.epa.gov/so2-pollution/final-data-requirements-rule-2010-1-hour-sulfur-dioxide-so2-primary-national-ambient

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1-hour SO₂ concentrations in New Hampshire's seacoast region as part of DES's obligations under the DRR. In the modeling analysis², Eversource proposed the following fuel oil sulfur limits for Newington Station:

Modeled Source	Maximum Fuel Limitation Modeled
Utility Boiler (NT1)	Burn No. 6 fuel oil with maximum of 1.0 % sulfur content
•	(vs. 2.0% sulfur content as allowed under TV-OP-054)
Auxiliary Boilers	Burn No. 2 fuel oil with maximum of 0.20 % sulfur content
(NTAB1 and NTAB2)	(vs. 0.40% sulfur as allowed under TV-OP-054)

This Temporary Permit establishes fuel oil sulfur limits that were proposed in the October 2016 modeling analysis for NT1, NTAB1 and NTAB2. Please note that these limits are more stringent than Env-A 1600 *Fuel Specifications*.

EMISSION CALCULATIONS

Summary of emissions from NT1, NTAB1 and NTAB2 are shown in Table 1 of the application.

COMPLIANCE STATUS

* Reports

Annual compliance certification (for 2015) was received on April 15, 2016.

Semi-annual Permit Deviation/Monitoring report (covering January 1 - June 30) was received on July 29, 2016.

Fees

Emission reports and fees for the facility are current through the second calendar quarter of 2016.

Inspections

On-site compliance inspection was conducted on March 9, 2016. No deficiencies were found.

REVIEW OF REGULATIONS

State Regulations

Env-A 607.01(w) Temporary Permits - Applicable

Env-A 800 Testing and Monitoring Procedures - Applicable

Env-A 900 Owner or Operator Recordkeeping and Reporting Obligations - Applicable

Env-A 2300 Mitigation of Regional Haze - Applicable to NT1

NT1 is subject to:

- SO₂ emission limit of 0.50 lb/MMBtu (30-day rolling average) as recorded by a CEMS.
- PM limit of 0.04 lb/MMBtu as verified through stack testing. Most recent stack test for NT1 was conducted on July 21, 2016. Average PM from the stack test = 0.0017 lb/MMBtu.

NH RSA 125-C:10-d Sulfur Limits of Certain Liquid Fuels – Applicable on July 1, 2018

No person shall sell, offer for sale, supply, distribute for sale or use, except for fuel remaining in storage for a device not requiring a permit pursuant to RSA 125-C:11, any of the following liquid fuels:

- (a) No. 2 oil, also referred to as distillate oil, with a sulfur content greater than 0.0015 percent by weight;
- (b) No. 6 fuel oil, also referred to as residual oil, with a sulfur content greater than 0.5 percent by weight.

https://www.epa.gov/sites/production/files/2016-06/documents/so2modelingtad.pdf

² The DRR modeling used maximum allowable emissions (vs. the use of a minimum of three years of actual emissions as allowed under EPA's August 2016 Technical Assistance Document)