STATE OF NEW HAMPSHIRE
DEPARTMENT OF ENVIRONMENTAL SERVICES
AIR RESOURCES DIVISION

Full Compliance Evaluation Report
Off-Site Report

CONCORD STEAM CORPORATION
105 ½ PLEASANT STREET
CONCORD, NH 03302-1377
Merrimack County

AFS # 3301300032

Inspection Date: September 25, 2007

Report: September 25, 2007
I. Inspection
On September 25, 2007, the New Hampshire Department of Environmental Services, Air Resources Division (“DES”) conducted an offsite full compliance evaluation of Concord Steam Corporation (“CSC”), located in Concord, New Hampshire, and Merrimack County.

Date/Time of Inspection: September 25, 2007,
Type of Inspection: Off-site Full Compliance Evaluation, Calendar years 2005 and 2006
Inspected by: Mike O’Brien
Source Contact(s): James Garlow, Operations Supervisor
Mark Saltsman, General Manager

Since the fall of 1980, CSC has been operating a steam generating facility on the grounds of the New Hampshire State Hospital in Concord. CSC generates steam for sale to local businesses for use as building heat and for hot water. The steam is also used to generate electricity for CSC via steam driven turbines, and any excess electricity is put up for sale to the local utility.

Each boiler exhausts to a common stack which is equipped with a certified continuous emissions monitoring system (“CEMS”) and a certified continuous opacity monitoring system (“COMS”). The primary sources of air emissions at the facility are fuel-burning devices, which emit criteria pollutants, regulated toxic air pollutants (“RTAPs)” and hazardous air pollutant (“HAP”) from the burning of wood, number 6 fuel oil, and specification waste oil (“spec. oil”).

CSC operates three 8-hour shifts per day for continuous operation of its boilers and currently has 14 employees.

II. Process Description
CSC operates four boilers that produce steam heat, as well as electricity using a steam turbine system. The facility also operates a Cummins diesel-fired emergency generator rated at 900 horsepower.

The boilers can operate on various fuels, including #6 fuel oil, spec. oil, and natural gas (NG). Boilers #5 and #6 also can burn wood chips. The ratio at which CSC burns #6 fuel oil and spec. oil varies. CSC is blending the oils in one tank. However, CSC is permitted to combust 100% #6 oil or 100% spec. oil in Boilers #1, #3 or #5, and can either burn wood, #6 fuel oil, NG or a mix of these fuels in Boiler #6. Boiler #6 is not designed to burn spec. oil. Based on the amount of fuel in the tank and the amount of spec. oil added, CSC is able to track the amount of virgin #6 fuel oil and spec. oil fed to each boiler.

CSC modified Boiler #6 to burn wood chips in addition to oil and NG and began burning wood in this device in December 2003. CSC also modified Boiler #5 and began burning wood chips in this unit in the fall or early winter of 2004. The wood chips that CSC burns in both boilers is a clean wood chip, which it receives from “Dirt Doctor” located in Concord on Route 106. The wood chips
are a blend of soft and hard wood from whole trees and clean pallets. CSC does not use chips from ground stumps because of the dirt mixed with the chips.

III. Observations
An onsite visit was not included in this offsite records review compliance determination. CSC is a major source based on its actual emissions of NOx and CO and it has been issued a Title V permit for the facility as described above. CSC is required to maintain and operate a Continuous Emissions Monitoring (“CEM”) system to measure its emissions of NOx, CO and a Continuous Opacity Monitor (“COM”) for its opacity emissions. The CEM system also measures the concentration of the diluent gas oxygen (“O2”) and stack volumetric stack flowrate.

CSC has a Title V Permit, TV-OP-033 (“the Permit”) for five fuel burning devices at its facility in Concord. Table I identifies CSC’s fuel burning devices, operating limitations and reported emission.

<table>
<thead>
<tr>
<th>Device</th>
<th>Capacity</th>
<th>Permit Operating Limits</th>
<th>Reported</th>
</tr>
</thead>
</table>
| EU01 – Bigelow Boiler #1 | 40.0 MMBtu/hr                         | No more than 2,421,300 gallons #6 fuel oil or spec. oil (with a maximum of 1.3% sulfur by weight), or any combination thereof, per consecutive 12-month period (all boilers combined), or any amount such that SO2 emissions do not exceed 249 tons per consecutive 12-month period. | 2005 – 931,709 gallons  
|                      |                                       | Sulfur content in #6 fuel oil & spec. oil not to exceed 1.3% by weight.                  | 2006 – 964,908 gallons       |
| EU02 – Bigelow Boiler #3 | 60.0 MMBtu/hr                         | Combined heat input rate from all devices combined not to exceed 250 MMBTU/hr.            | 2005 – SO2 61.39 tons        |
| EU03 - Bigelow Boiler #5 | 60.0 MMBtu/hr (using #6 fuel oil, mixture of the #6 and spec. oil, or wood alone) |                                                                                         | 2006 – SO2 57.92 tons        |
|                      | 65.0 MMBtu/hr (co-firing wood and #6 fuel oil, or wood and #6 fuel oil/spec. oil mixture). |                                                                                         | Avg. sulfur content         |
|                      | 80.0 MMBtu/hr                         |                                                                                         | 2005 - 0.78 %               |
| EU04 - Union HP Boiler #6 | 75.0 MMBtu/hr (using #6 oil)          |                                                                                         | 2006 – 0.77%                |
|                      | 65.0 MMBtu/hr (using wood)            |                                                                                         | Operating below 250 MMBtu/hr limit. |
|                      | 80.0 MMBtu/hr (using natural gas)     |                                                                                         |                              |
|                      | 80.0 MMBtu/hr (co-firing wood with #6 fuel oil) |                                                                                         |                              |
| EU05 –                | 6.1 MMBtu/hr                          | Cannot operate greater than 500                                                         | 2005 – 612.55 gal (40.1 hr) |
Cummins VT A1710GS32 Emergency Generator

<table>
<thead>
<tr>
<th>Description</th>
<th>Emission Unit Controlled</th>
</tr>
</thead>
<tbody>
<tr>
<td>(43.7 gallons/hr maximum heat input rate). 900 bhp</td>
<td>2006 – 1107.82 gal (98.5 hr)</td>
</tr>
<tr>
<td>hour, during any consecutive 12-month period. (note: 500 hours at full load is equivalent to 21,850 gal/yr) Diesel fuel to contain less than 0.4% by weight</td>
<td>Avg. sulfur content unknown at this time, CSC not recording/reporting sulfur content of #2 fuel</td>
</tr>
</tbody>
</table>

Table III: Fuel Consumption

<table>
<thead>
<tr>
<th>Fuel</th>
<th>*Calendar Year 2005</th>
<th>*Calendar Year 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood (tons)</td>
<td>41,379</td>
<td>40,240</td>
</tr>
</tbody>
</table>

Table III Air Pollution Control Equipment

<table>
<thead>
<tr>
<th>Pollution Control Equipment</th>
<th>Description</th>
<th>Emission Unit Controlled</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCE #1, Zurn Cyclone Separator</td>
<td>Particulate Control</td>
<td>EU03 (Boiler #5)</td>
</tr>
<tr>
<td>PCE #2, Zurn Cyclone Separator</td>
<td>Particulate Control</td>
<td>EU04 (Boiler #6)</td>
</tr>
<tr>
<td>PCE #3, Barron Side Stream Cyclone Separator</td>
<td>Particulate Control</td>
<td>EU04 (Boiler #6)</td>
</tr>
</tbody>
</table>

IV. Regulatory Compliance

CHAPTER Env-A 600 - Statewide Permit System

As stated above, the Permit was issued to CSC for the operation of air pollution sources at the facility. The Permit was issued on December 13, 2000, and is valid until December 13, 2005. On June 10, 2005, DES received CSC’s renewal application and on June 17, 2005 DES sent CSC an administrative completeness letter.

The air pollution emission sources and pollution control equipment located at this facility are listed in Tables I and II above. Also, CSC intends to submit an application for a temporary permit in the spring of 2006 for the modifications to Boiler #1. As of the date of this report, this application has yet to be submitted.

PART Env-A 604.02 – Permit Terms and Conditions

CSC operates 365 days per year and is limited to 2,421,300 gallons of #6 fuel oil (or a mixture of #6 fuel oil and spec. oil) to fire the boilers in any consecutive 12-month period. However, this total may be exceeded as long as the total facility-wide SO2 emissions do not exceed 249 tons in any consecutive 12-month period. A review of CSC’s records indicates that CSC fuel consumption for Calendar Year (“CY”) 2005 is less than the permitted amount and SO2 emissions remained below 249 tons. CSC’s fuel consumption is as follows:
CSC’s emergency generator operation is limited to 500 hours per year. To ensure that the emergency generator will start and operate during emergency situations, CSC periodically operates its emergency generator for approximately 15-30 minutes at a time. This generator was installed in 1981 and operates < 500 hours per year. CSC’s records show that the generator used 612.55 and 1,107.82 gallons of diesel fuel during 2005 and 2006, respectively.

Table IV shows the emission rates for the devices and the entire facility. CSC is in compliance with the following permit conditions.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrogen Oxide</td>
<td>Facility-wide: 28.3 lbs/hour averaged over a 365-day avg.</td>
<td>In Compliance (14.7 lbs/hr)</td>
<td>In Compliance (11.9 lbs/hr)</td>
</tr>
<tr>
<td>EU-02, Boiler #3: 0.3 lb/MMBtu (oil), and 0.1 lb/MMBtu (gas), or install low NOx burners</td>
<td>In Compliance (Installed LNB)</td>
<td>In Compliance (Installed LNB)</td>
<td></td>
</tr>
<tr>
<td>EU-03, Boiler #5 – 0.3 lb/MMBtu (#6 oil), and 0.25 lb/MMBtu (wood/oil), or install low NOx burners</td>
<td>In Compliance (0.156lb/MMBtu)</td>
<td>In Compliance (0.215 lb/MMBtu)</td>
<td></td>
</tr>
<tr>
<td>EU-04, Boiler #6 – 0.3 lb/MMBtu (#6 oil), 0.1 lb/MMBtu (gas), and 0.25 lb/MMBtu (wood/oil), or install low NOx burners</td>
<td>In Compliance (Installed LNB)</td>
<td>In Compliance (Installed LNB)</td>
<td></td>
</tr>
<tr>
<td>EU-05, Emergency Generator – less than 25 tons during any consecutive 12-month avg.</td>
<td>0.13 tons</td>
<td>0.24 tons</td>
<td></td>
</tr>
<tr>
<td>Facility wide Annual Emissions</td>
<td>39.17 tons</td>
<td>50.2 tons</td>
<td></td>
</tr>
<tr>
<td>Sulfur Dioxide</td>
<td>Facility shall not exceed 249 tpy</td>
<td>61.39 tons</td>
<td>57.92 tons</td>
</tr>
<tr>
<td>Carbon Monoxide</td>
<td>Facility-wide limits of:</td>
<td>In Compliance</td>
<td>In Compliance</td>
</tr>
<tr>
<td></td>
<td>125 lb/hr (calendar day avg.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>57.0 lb/hr (consecutive 365-day avg.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Facility wide Annual Emissions 249 tons/yr</td>
<td>158.75 tons</td>
<td>189.17 tons</td>
</tr>
<tr>
<td>Particulate Matter</td>
<td>Facility-wide limit of 0.24 lb/MMBtu</td>
<td>36.8 tons</td>
<td>44.4 tons</td>
</tr>
<tr>
<td>Non-Exempt VOCs</td>
<td>No device specific limit</td>
<td>0.94 tons</td>
<td>0.90 tons</td>
</tr>
</tbody>
</table>
PART Env-A 622 - Non-attainment Areas
CSC is located in Merrimack County, NH and is in the Northeast Ozone Transport Region, but is not a new source or a major source making a major modification in the non-attainment area.

CHAPTER 800 - Testing and Monitoring Procedures
CSC is required to conduct stack testing every three years for compliance with NOx RACT on Boilers #3, #5, and #6. Table V is a summary of NOx RACT testing at CSC:

<table>
<thead>
<tr>
<th>Date of Test</th>
<th>Emission Unit/Boiler</th>
<th>Test Parameter</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 30, 2005</td>
<td>Boiler #3</td>
<td>NOx RACT Oil</td>
<td>Pass</td>
</tr>
<tr>
<td>December 12, 2005</td>
<td>CEMS</td>
<td>RATA</td>
<td>Pass</td>
</tr>
<tr>
<td>April 18, 2006</td>
<td>Boiler #6</td>
<td>TSP</td>
<td>Pass</td>
</tr>
<tr>
<td>April 19, 2006</td>
<td>Boiler #5</td>
<td>TSP</td>
<td>Failed</td>
</tr>
<tr>
<td>November 29 &amp; 30, 2006</td>
<td>All boilers</td>
<td>NOx RACT d</td>
<td>Pass</td>
</tr>
<tr>
<td>December 19, 2006</td>
<td>CEMS</td>
<td>RATA</td>
<td>Pass</td>
</tr>
</tbody>
</table>

CSC also conducted a successful relative accuracy test audit on its NCEMS in October 2002.

PART Env-A 802 – Stack testing
CSC is required to conduct stack testing of total suspended particulate matter by following those methods specified in Env-A 802. In June 1992 and again in September 1995, CSC conducted total suspended particulate (TSP) testing on Boiler #6 while firing wood/oil at maximum load. The results of the June 1992 and September 1995 testing showed that Boiler #6 emissions were 0.330 and 0.333 lb/MMBtu, respectively, which are greater than the limit of 0.24 lb/MMBtu. Boiler #5 was also stack tested in June 1992 while firing wood/oil and the results of that testing showed that TSP emissions were 0.227 lb/MMBtu which is lower than 0.24 lb/MMBtu. On September 27, 1995, CSC failed its TSP testing on Boiler #6. Testing showed that Boiler #6 TSP emissions were 0.333 lb/MMBtu.

PART Env-A 803 – NOx RACT Testing Requirements
Boilers #3, #5, and #6 are subject to NOx RACT testing. CSC passed its NOx RACT testing for the three boilers. CSC is working with DES to schedule its next required NOx RACT stack tests. CSC is currently meeting the NOx RACT testing requirements.

Part Env-A 803.04 requires CSC to perform measurements of CO, NOx, CO2 and O2 on Boiler #1 following the performance of tune-up activities as specified under Env-A 1211. The boiler has no automated controls and is manually controlled and adjusted whenever it is operated and its emissions are tracked through the NCEMS. On April 15, 2005, DES
received a letter from CSC describing how its adjustments and manual tuning of the boiler is consistent with the intent of Env-A 1211 and Condition VIII, Table 5, Item 9 of the Permit, (Attachment 041505MOB01D).

PART Env-A 808 – Continuous Emission Monitoring
CSC has continuous monitoring for CO, NOx, CO\(_2\), volumetric flow and opacity. The NCEMS is not certified annually. The last certification occurred in October 2002. However, CSC performs daily calibrations of the NOx, CO\(_2\), and CO monitors and the volumetric flow monitor for zero and span. The NCEMS calibration gases were observed to have the following concentrations: CO, 302.2 ppm; NOx, 288.4 ppm; and CO\(_2\), 13.85%. The calibration gas cylinder identification number was CN CC13804 and was a “Certified Standard”. As required under Condition VIII.D.11 of the Permit, the stack flow monitor is removed annually for inspection and cleaning. Values observed at the control panel during the inspection indicated that the facility was not exceeding the maximum limits for NOx and CO.

PART Env-A 808.06 – Quality Assurance/Quality Control Plan Requirements
CSC submits an update to its QA/QC Plan to ARD annually. CSC reviews the plan at least once each year, as required by Env-A 808.06(a)(3), and revises it as necessary.

PART Env-A 806.07 – General Audit Requirements for All CEM Systems
On March 13, 1998, DES sent CSC a letter stating, among other things, that it could operate its emission monitoring system as a NCEMS, which would waive the requirements of this section. Conditions in the letter state, among other things, that if the 24-hour average CO emissions exceed 100 lbs/hr (80% of the standard for any calendar day), then CSC is required to recertify its NCEMS. On November 11, 2005, CSC had a series of boiler malfunctions, which resulted in the 24-hour CO average of 114.3 lb/hr.

PART Env-A 808.11 – Quarterly Emission Reports
CSC is submitting the required quarterly emission reports to ARD. These reports include fuel usage, NOx, CO, SO\(_2\) and VOC daily average emissions.

CHAPTER Env-A 900 - Owner or Operator Recordkeeping
CSC has records for all required monitoring data, record keeping and reporting requirements of the Permit except for regulated toxic air pollutants (RTAPS) emissions. CSC receives analytical results from Clean Harbors on the spec. oil burned in Boilers #1, #3, and #5. CSC is not maintaining records of its RTAP emissions as required by the Permit. CSC has requested DES’s assistance in calculating its RTAP emissions.

PART Env-A 903.03 - General Recordkeeping Requirements for Combustion Devices
CSC has the required records for #6 fuel oil, spec. oil, and natural gas combusted at this facility. CSC’s reports indicate emissions have not exceeded any of the permitted fuel limits. CSC is not recording the sulfur content of the diesel fuel combusted in its
emergency generator. During the inspection, CSC said that it would request its vendor to include this information on the diesel fuel delivery tickets.

PART Env-A 903.04 - General Recordkeeping Requirements for Sources with Continuous Emissions Monitoring Systems
CSC has the required records for its NCEMS. CSC maintains its NCEMS in accordance with the conditions of the Permit and the March 13, 1998 letter.

PART Env-A 905.02 - General NOx Recordkeeping
CSC has the required records for its NOx emissions to show emissions are within the Permit limits. NCEM data indicates that NOx emissions do not exceed the Permit limit of 0.3 lb/MBtu based on a 24-hour average. NOx emissions were reported to be 64.63 and 52.35 tons for 2003, and 2004 respectively.

Part Env-A 907.01 – General Recordkeeping Requirements
CSC is required by the Permit to submit by April 15th the previous year’s facility emissions. CSC provided the required information for calendar year 2003 and 2004. However, CSC is not reporting its RTAP emissions in accordance with the Permit.

PART Env-A 907.02 – Reporting Requirements for Sources Subject to the Acid Deposition Control Program
CSC is required to submit to DES an annual report pursuant to Env-A 903.03. CSC is reporting the required information with the exception of the sulfur content of the diesel fuel combusted in its emergency generator. CSC is not recording the sulfur content of the diesel fuel combusted in its emergency generator. CSC said that it would require its vendor of diesel fuel to include this information on the delivery tickets.

PART Env-A 909.03 - NOx Reporting Requirements
CSC has reported its 2003 and 2004 NOx emissions as required by this condition and by the dates specified.

V. Compliance with State and Federally Enforceable Rules

CHAPTER ENV-A 1000 – Prevention, Abatement, and Control of Open Sources Air Pollution

PART Env- 1002.04 – Fugitive Dust
CSC is subject to the requirements of this part and must control fugitive dust and, in this case, wood dust. On February 2, 2004, DES received a complaint of fugitive wood dust coming from CSC. As a result of the complaint, CSC made several improvements to its wood chip conveyor system, which has helped to improve the control of fugitive dust. During the inspection, no fugitive wood dust was observed and DES was shown the improvements made since February 2, 2004.
CHAPTER ENV-A 1200 - Stationary Source Air Pollution

PART Env-A 1204 - Stationary Sources of VOCs
CSC does not have any processes or devices with VOC emissions that subject them to VOC RACT.

PART Env-A 1211 - Nitrogen Oxides
CSC operates four boilers at its facility in Concord and is subject to the requirements of this part. These units combined emitted 54.6 and 55.0 tons of NOx in calendar years 2003 and 2004, respectively. When compared to previous years, NOx emissions have increased. This increase in emissions is attributed to CSC combusting more fuel; in particular CSC is now operating two boilers on wood/oil/spec. oil.

PART Env-A 1211.01(j) – Applicability
CSC has an emergency generator that is limited to less than 500 hours of operation during any consecutive 12-month period. The emergency generator is normally run for 15 to 30 minutes each week and in calendar years 2003 and 2004, the emergency generator was operated 13.5 hours and 25.38 hours, respectively. As long as the generator is operated less than 500 hours per year and NOx emissions from this device remain below 25 tons, the generator will not be subject to this part.

PART Env-A 1211.05(b) – Emission Standards for Industrial Boilers over 5 MMBtu/hr but Less than 50 MMBtu/hr
Prior to April 1st, CSC is required to perform its annual boiler efficiency testing. The testing must be done in accordance with the test procedures specified in ASME/ANSI Boiler test Code 4.1. When it is being operated, CSC performs continuous, manual tuning of Boiler #1; CSC is following the above specified test procedures for the other devices.

PART Env-A 1211.05(c) – Emission Standards for Industrial Boilers over 50 MMBtu/hr but Less than 100 MMBtu/hr
Boilers #3, #5, and #6 are subject to the RACT emission limit of 0.30 lb/MMBtu based on a 24-hour average. CSC also has the option of complying with RACT by installing low-NOx burners. Low NOx burners have been installed on Boilers #3 and #6, while low-NOx burner tips have been installed on all boilers. Quarterly exceedence reports and results of stack testing indicate that the NOx emissions do not exceed 0.30 lb/MMBtu.

CHAPTER ENV-A 1400 - Regulated Toxic Air Pollutants

PART Env-A 1402 - Applicability and Part Env-A 1404 - Permit Requirements
CSC conducted a determination for air toxics emissions per the requirements of Env-A 1400. This determination was done for the spec. oil burned at the facility. Limits on used oil constituents have been established in the Permit to ensure that the Env-A 1400 ambient air limits are not exceeded. The constituents of each load of spec. oil delivered to CSC are
entered into a tracking spreadsheet to ensure that the #6 fuel oil/spec. oil blend does not exceed the Permit limits. Based on a review of CSC’s spreadsheet and a review of the analytical data from Clean Harbors, no Env-A 1400 limits have been exceeded. However, CSC is required to report its RTAP emissions annually to DES. **CSC is not reporting its RTAP emissions.** CSC has requested assistance from DES to calculate this information. Attached is a copy of a report from Clean Harbors (Attachment 101905MOB02D)

**CHAPTER ENV-A 1600 - Fuel Specifications**

**PART Env-A 1604.01 - Maximum Sulfur Content Allowable in Liquid Fuels**
CSC burns #6 fuel oil, spec. oil, a mixture of the two fuels, and diesel fuel at the facility. The sulfur content for the #6 fuel oil and spec. oil and the blend of the two fuels does not exceed the Permit limit of 1.3 percent sulfur by weight. A review of delivery tickets indicates that the sulfur content in the #6 fuel oil and spec. oil ranges approximately from 0.9-1.0 percent by weight. However, CSC is not reporting to DES the sulfur content of the diesel fuel combusted in its emergency generator. CSC said that it would request its vendor of diesel fuel to include this information on the delivery tickets.

**CHAPTER ENV-A 2000 - Fuel Burning Devices**
CSC’s boiler is limited to 20% opacity. At the time of the inspection, the opacity monitor indicated that opacity was between 5 and 10%. The COMS data indicates that CSC is compliant with the opacity requirement most of its operating time. However, CSC submits many permit deviation reports for exceedance of the 20% limit, which DES is currently reviewing.

**VI. Compliance with Federal Regulations**

**40 CFR 70.6(a)(3)(iii)(A) – Semi-Annual Permit Deviation and Monitoring Report**
CSC is completing the semi-annual permit deviation and monitoring data reports as required by the Permit. CSC’s semi-annual reports include the information specified in the Permit.

**40 CFR 70.6(a)(3)(iii)(B) – Reporting Permit Deviations**
CSC is required to submit permit deviation reports in accordance with the reporting requirements in Env-A 911.05. CSC submits its permit deviation reports, most of which are reports of opacity emissions exceeding the 20% limit, in accordance with the requirements. CSC operates its boilers following good boiler operating practices. However, these practices do result in occasional increases in opacity emissions. During periods of routine boiler maintenance, CSC has on many occasions had opacity emissions greater than 20%. Most of these exceedances are caused by grate cleaning, or soot blowing, which is part of good boiler maintenance and necessary for efficient operation. CSC told me during the inspection and at other times that CSC takes opacity deviations seriously and works very hard at keeping the deviations to a minimum.
**40 CFR 70.6(c)(1) – Compliance Certification**

CSC is required to submit an annual compliance certification report by April 15th in which it certifies its compliance status with the requirements of the Permit for the previous calendar year. CSC has submitted the required annual compliance certifications, which are certified by the responsible official of CSC.

**VII. Compliance with Permit Fee System**

**PART Env-A 705.01 – Emission Based Fees**

CSC has paid its emission-based fees through calendar year 2004. On January 18, 2005, DES sent CSC a letter, which stated, among other things, that calendar year 2004 annual emission-based fees were due to DES by July 15, 2005. As a result of requesting and receiving an invoice, on September 9, 2005, DES received payment for CSC’s calendar year 2004 emissions.

**VIII. Compliance and Enforcement Status**

On February 9, 2001, ARD issued a Notice of Past Violation to CSC for a CO exceedance. On September 13, 2002, DES sent CSC a letter stating that CSC failed to certify compliance of all the conditions of the Permit. DES requested that CSC re-submit its 2001 annual compliance certification which DES received on October 13, 2002. On May 4, 2004, DES sent CSC a letter (Attachment 050404MO BDES) stating, among other things, that on January 10, 2004, CO emissions exceeded the Permit limit. DES requested, that CSC provide additional information concerning the incident, emissions data, and plans to prevent such incidents from re-occurring. The letter also requested a full description of the modifications being performed and steps being taken to minimize CO emissions and opacity emission from Boiler #5. On June 25, 2005, DES received CSC’s response to the letter which is attached as Attachment 062505MOB04D.

On November 11, 2005, CSC experienced problems with its boiler operation. As a result of the incident, CSC submitted a permit deviation report which DES received November 14, 2005. According to the permit deviation report, between 03:06 and 23:54 the incident resulted in 118 minutes of opacity emissions greater than 20% with the highest 6-minute average of 90.8% at 23:36. CSC stated the reasons for the opacity exceedances as follows: grate cleaning, fuel oil control, shut down, start-up, and boiler air control. The permit deviation report further states that on November 12, 2005, between 00:18 and 20:36, CSC had 78 minutes of opacity emissions greater than 20% and the highest 6-minute average was 48.6% at 13:12. In calendar years 2003, 2004, and through November 2005, CSC submitted 108, 151, and 199 permit deviation reports, respectively.

**IX. Conclusion and Recommended Actions**

During the closing meeting with CSC, I explained that no significant problems were noted, however, there are some recordkeeping issues that need to be addressed. I told Mr. Garlow that CSC is required to document the sulfur content of its diesel fuel and required to report
RTAP emissions in its annual emissions report. Also, I discussed the fact that CSC was not tracking those RTAPs specified in the Permit. However, CSC is tracking lead emissions and from the records reviewed these emissions are less than the ambient air limits. CSC requested assistance from DES calculating its RTAP emissions.

X. Attachments:

041505MOB01D (1 page) Title V Operating Permit #TV-OP-033, Table 5, Item 19, Unit EU01;
101905MOB02D (1 page) Clean Harbors analysis of specification used oil;
050404MOV03D (4 pages) May 4, 2004 DES letter, CO emissions; and

Mike O’Brien
Senior Compliance Assessment Specialist
Air Resources Division

filename: 05-0928 Concord Steam Corporation FCE Onsite Report