

ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT STRATFORD ARMY ENGINE PLANT 550 MAIN STREET STRATFORD, CONNECTICUT 06615-7574

DAIM-BD-N-ST

4 June 2008

Ms. Anne Gobin Chief, Bureau of Air Management Department of Environmental Protection 79 Elm Street Hartford, CT 06106-5127

Re:

Response to Draft Consent Order No. 1924

US Army Stratford Army Engine Plant, Stratford, Connecticut

Dear Ms. Gobin:

I am writing this letter in response to the draft consent order referenced above. The purpose of this letter is to summarize our position on various issues cited in the Consent Order. This letter also provides a summary of the current status relative to these issues as discussed between your staff and our representatives in their meeting on 15 May 2008 and subsequent conversations.

The Consent Order essentially requires the following actions:

- 1. Submission of an application to revise the applicable permit and registration for Boilers 2 and 3 to remove the option to burn oil;
- 2. Conducting a NOx emissions test for Boiler 1;
- 3. Submitting a revised NOx compliance plan; and,
- 4. A civil penalty in the amount of \$28,731.

Our position on each of these issues is discussed below.

1. Permit and Registration revisions for Boilers 2 and 3

This issue has already been addressed. The original letter request to remove the option to burn oil on these boilers was submitted to DEP on 22 August 2006¹. Upon being advised by CTDEP on 15 May 2008 that such request must be submitted on specific forms, an application package to this effect along with the pertinent application fee and the required forms were submitted to Mr. Gary Rose on 30 May 2008.

¹ Copy provided in Attachment A

2. NOx emissions test for Boiler 1

Boiler 1 was last tested on 7 May 2002². The test results were considered "representative of the actual emissions" by DEP as stated in their letter dated 19 June 2002³. Also, DEP approved and accepted the test results since those results were used in the revised Trading Order No. 8137A, issued by DEP on 1 May 2003. On 10 August 2003 DEP issued a revised permit⁴ (NSR Permit No. 0061) for Boiler 1. This permit does not have an expiration date. Part VII of the permit specifically states that there are no stack-testing requirements for Boiler 1. In addition, paragraph C.14 of the Trading Order specifically exempted Boiler 1 from any stack testing requirements stipulated in Section 22a-174-22(k) of RCSA, provided no oil was burned in this boiler. It should be noted that the revised NSR permit for Boiler 1 does not allow operating this boiler on oil. The plumbing and electrical connections to facilitate oil combustion in this boiler were disconnected prior to the permit revisions. In fact, the last time any oil was used in Boiler 1 was on 7 May 2002 for the sole purpose of the stack test.

On 15 May 2008 our representatives discussed the applicability of Section 22a-174-22 for Boiler 1 with your staff. Our representatives explained that since the facility is currently operating under DEP's General Permit to Limit Potential to Emit (GPLPE), it is not a "Major Stationary Source" for NOx as defined under these regulations. Further, it was explained that at the maximum rated capacity of 52.2 MMBTU/hr (as listed in the NSR permit) and the Federally Enforceable permit limit of 0.047 lbs/MMBTU (as documented in Permit No. 0061), the potential emissions for Boiler 1 are less than 137 lbs/day. Based on these observations, which DEP staff did not contest, it was explained Boiler 1 would not meet the applicability criteria stipulated in Section 22a-174-22(b)(1) and would therefore not be subject to the provisions of this entire Section.

On 21 May 2008 Mr. Seng Phouthakoun of your staff advised us⁵ that the Department was willing to remove the civil penalty associated with the failure to stack test Boiler 1. Mr. Phouthakoun also advised us (via same e-mail) that Boiler 1 would remain subject to Section 22a-174-22 because the facility-wide emissions were above 25 tons in the calendar years 1992, 1993 and 1994. He specifically cited Section 22a-174-22(b)(2) as the basis of his assessments.

² As documented on DEP's Trading Order No. 8137A, Table 1. Copy provided in Attachment B.

³ Copy provided in Attachment C. ⁴ Copy provided in Attachment D.

⁵ As indicated in Mr. Phouthakoun's e-mail dated 21 May 2008. Copy provided in Attachment E.

We request that the Department reconsider this assessment.

First, it seems that paragraph (b)(2) is limited to sources that otherwise meet or exceed the criteria listed in paragraph (b)(1), which Boiler 1 does not. If paragraph (b)(2) was in fact intended to override or supersede the provisions of paragraph (b)(1) it would have started with the phrase "Notwithstanding the provisions of paragraph (b)(1)....", which is not the case.

Second, even if paragraph (b)(2) was applicable, it brings in the applicability of subsections (d) through (k) for sources having significant emissions after 31 May 1995 and not 1990. All emission levels cited in Mr. Phouthakoun's e-mail represent calendar years prior to 1995.

Third, for the last decade or so, our actual NOx emissions have been significantly below 25 tons/year limit being cited by DEP. Due to a significantly restricted use of these boilers, our premise-wide actual NOx emissions have been in the range of 3 to 5 tons/year.

Fourth, it should be noted that this facility is currently is in a completely different mode than it was in early 1990's. Unlike those early years when the facility was engaged in manufacturing tank engines, for the past decade or so the facility has been in a "shutdown" mode with no manufacturing activities whatsoever. In fact, the only reason we have kept our boilers running is to prevent the water pipes from freezing during winter months. We are required to maintain these water pipes to prevent/mitigate any fires and also to prevent other environmental issues arising from such freezing and/or breakdown of these pipes. Therefore, it is not the case where these premises would get any competitive advantage for their manufacturing activities by not being subject to a specific environmental regulation.

Finally, in response to any "once in always in" policies that may be cited, we wish to draw your attention to the reasons based on which the stack testing provisions were waived for Boiler 1 in the Trading Order. Clearly, any such policy did not affect the waiver granted at that time. Further, all such reasons, namely the agreement to not burn oil, are still in place. It would seem counter-intuitive that while the Department would grant the waiver from stack testing requirements when the facility was allowed to burn oil, it would withdraw it when the facility:

has voluntarily and permanently given up the option to burn oil on not just Boiler
 but ALL of its boilers;

- has voluntarily and permanently accepted to burn only cleaner fuel (natural gas) on all the boilers; and,
- is operating in an extremely limited non-production mode.

Based on these observations, we hope that the Department will reconsider its requirements to stack test Boiler 1.

3. Revised NOx Compliance plan

We can submit a revised NOx compliance plan. As discussed above, all this plan will essentially be is to operate all three boilers on natural gas, which we have already agreed to and are complying with. The most recent test results on these boilers demonstrate that each boiler complies with the applicable NOx limit of 0.2 lb/MMBTU. Therefore we feel that we are already in compliance with the NOx regulations and unlike other sources do not need to submit documentation outlining a "plan" for achieving compliance. However, if the Department still requires it, we can submit this information on the pertinent forms. Before we submit the revised compliance plan however, we do need to resolve the issue relative to stack testing requirements for Boiler 1. After this issue is resolved we can submit our revised NOx compliance plan.

4. Civil Penalty

Based on the discussion presented above we feel that of all the issues cited in the consent order, the only requirements we were deficient on was a timely submission of the GPLPE application and the stack testing requirements for Boiler 2 and 3. Please note that the only reason for this delay was that the facility had originally planned to and did in fact, discontinue the use of Boilers 2 and 3. This action and our understanding relative to the GPLPE renewal and stack testing for Boiler 2 and 3 was in fact notified to DEP in our letter dated 13 July 2008⁶. The facility had planned to operate only Boiler 1 to meet the fire, safety and environmental requirements. This would have taken us out the requirement to register under the GPLPE and stack test Boilers 2 and 3. Contrary to these plans, after consultation with by the local fire authorities, we determined that adequate protection related to critical safety and environmental concerns, we must maintain a back-up to Boiler 1. Accordingly, we had to reactivate Boilers 2 and 3. To accommodate this change in plans, we subsequently did register under the GPLPE and did perform (and pass) the emissions tests for Boilers 2 and 3.

⁶ Copy provided in Attachment F.

This unanticipated change of plans however, caused us to be about six months late for both the GPLPE submission and the stack test requirements.

Relative to the civil penalties, we feel that at this point the outstanding issues, if any, are relatively minor and therefore the facility should not be subject any civil penalties. The Department has already agreed to remove the penalty relative to Boiler 1. The registration and permit revisions for Boilers 2 and 3 have already been submitted. Boiler 1 should not be subject to additional test requirements. We agree to submit the revised NOx plan provided the requirement to test Boiler 1 is removed. We are willing to work with the Department to resolve these remaining issues and to pay any applicable fees for the Department's efforts.

In conclusion, based on the facts and observations presented in this letter, we feel that the facility has consistently demonstrated a good faith effort to comply with the regulations, has consistently cooperated with the Department's requests, has not made any willful violations and has not had any competitive advantage by avoiding any compliance requirements. In addition, the facility has voluntarily and permanently given up the option to burn oil and has agreed to burn only natural gas in all three boilers.

Therefore, we request that the Department process the requested revisions to the permit and registration for Boilers 2 and 3; continue to exempt Boiler 1 from stack testing requirements; and remove the civil penalties cited in the proposed Consent Order. Upon completion of these actions, if required, the facility can submit the revised NOx compliance plan.

We appreciate your cooperation in this matter and look forward to a response from your office. In the mean time if you have any questions or need additional information, please do not hesitate to contact this office.

Sincerely.

Peter W. Szymanski Installation Manager Attachment A



DEPARTMENT OF THE ARMY STRATFORD ARMY ENGINE PLANT 550 MAIN STREET STRATFORD, CONNECTICUT 06615-7574

August 22, 2006

Installation Manager

Mr. Jaimeson Sinclair
Bureau of Air Management
Department of Environmental Protection
State of Connecticut
79 Elm Street
Hartford, CT 06106-5127

Re⁻ Notices of Violation Nos 15739 and 15740 at the U.S. Army Stratford Army Engine Plant, Stratford, Connecticut

Dear Mr Sinclair:

Stratford Army Engine Plant (SAEP) is submitting this letter as a follow-up to your meeting with Richard Barlow and Rajat Garg on August 10, 2006 regarding Notices of Violations referenced above. As discussed in the meeting, please note the following:

- 1 The facility will not burn #6 oil in Boiler Nos 2 and 3 As described in our previous correspondence, the fuel and electrical supplies to these boilers have already been disconnected. All #6 oil storage has been depleted and will not be replaced
- The facility will reconnect the gas and electrical supply to Boiler Nos. 2 and 3 so that they can be used as back up to Boiler No. 1. Boiler No. 1 will continue to operate under the terms of the current NSR Permit No. 0061.
- 3 The facility will submit a GPLPE renewal application by September 15, 2006.
- 4. The facility will submit an "Intent to Test" package for Boiler Nos 2 and 3 by September 15, 2006 These boilers will be tested for NOx emissions using natural gas These boilers will not be tested on #6 oil.

Based on these observations, planned actions and applications, the facility requests the following:

- 1 Please revoke the existing Trading Order and Agreement No 8137A. Since the facility will no longer be using #6 oil on any of the boilers, this order is no longer required.
- 2. Please modify the existing DEP registrations for boiler Nos 2 and 3 to remove the option to operate these boilers on #6 fuel oil. These boilers will be operated only on natural gas

Please let me know if you need any additional information to implement the actions requested above. With these changes and the actions requested above, it is our understanding that the facility has adequately addressed the violations cited in the Notices of Violations referenced above. Accordingly, it is requested that these notices be closed and a confirmation to that effect, be submitted to this office

Should you have any questions, please contact me at the address above, telephonically at (203)385-6600, FAX (203)385-6601 or at peter w szymanski@us army mil

Sincerely,

Peter W. Szymanski Installation Manager Attachment B



STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION



In the matter of The State of Connecticut and)))	Trading Agreement and Order No. 8137A
United States Army Stratford Army Engine Plant)	

Whereas, the Commissioner of Environmental Protection ("Commissioner") and the United States Army Stratford Army Engine Plant ("USASAEP"), agree that it is in the public interest that they work cooperatively to improve the air quality within the State of Connecticut and that the use of discrete emissions reduction credit ("DERC") trading to reduce nitrogen oxide ("NOx") emissions will achieve this result in a timely and cost-effective manner:

- A. At the request and with the agreement of USASAEP, the Commissioner finds the following:
 - This Trading Agreement and Order supercedes Trading Agreement and Order No. 8137 issued on November 19, 1996, Trading Agreement and Order No. 8137 Modification issued on July 8, 1997, and Trading Agreement and Order No. 8137 Modification No. 2 issued on April 29, 1999.
 - 2. USASAEP is a Department of the United States government that operates the Stratford Army tank engine and turbine engine manufacturing facility at 550 Main Street in Stratford, Connecticut ("facility") under contract to the U.S. Army Tank-Automotive and Armaments Command.
 - 3. At the facility, USASAEP operates fuel-burning equipment consisting of one (1) permitted steam boiler ("boiler 1") and two (2) registered steam boilers 2 and 3 ("boilers 2 and 3") capable of burning natural gas and No. 6 fuel oil, which are subject to the requirements of Section 22a-174-22 of the Regulations of Connecticut State Agencies ("Regulations") pertaining to the control of nitrogen oxides ("NOx").
 - 4. U.S. Environmental Protection Agency ("EPA") Method 7 emission tests resulted in NOx emissions rates as follows:

		U	T SASAEP – Strat on Rates, Allowa	Table 1 ford Army E	ngme Plant nd FLERs lbs	/MMBtu		Nove
Unit- Permit # P- Reg. #	Fuel	Mfg Heat Input MMBtu/hr	Actual Heat input during emissions	Emission Test Rate	Allowable Rate	FLERs	Date of Last Emission Test	Next Test Due
R- Boiler #1 P-0061	No. 6 oıl Nat. Gas	51 51	39.8 45.2 35.7	0.318 0.046 0.382	0.25 0.20 0 25	N/A N/A 0.41	5/7/02 5/7/02 4/11/01	5/7/07 5/7/07 4/11/06
Boiler #2: R-0116 Boiler #3: R-0001	No. 6 oil Nat. Gas No. 6 oil Nat. Gas	75 75 89 89	33 6 34 42.7	0.072 0.331 0.088	0 20 0 25 0.20	0.08 0.35 0.10	4/11/01 4/11/01 4/11/01	4/11/06 4/11/06 4/11/06

- 5. When burning No. 6 fuel oil in boiler 1, USASAEP exceeds the NOx emissions limit specified in permit P-0061.
- 6. To reduce NOx emissions from boiler 1, USASAEP proposes to burn only natural gas.
- 7. When burning natural gas in boiler 3, USASAEP exceeded the full load emission rate ("FLER") specified in Trading Agreement and Order No. 8137 and as a result created 1.32 tons of invalid averaging credits.
- 8. On June 26, 2002, the Department issued Notice of Violation ("NOV") No. 14899, to USASAEP for exceeding the FLER limit specified in Trading Agreement and Order 8137.
- 9. In response to NOV No. 14899, USASAEP has permanently retired without use 1.32 tons of approved DERCs plus a 100% premium for a total of 2.64 tons in accordance with Trading Agreement and Order No. 8137.
- 10. Section 22a-174-22(k) of the Regulations requires that emissions testing to be conducted when the source is operating at or above 90 percent of its highest maximum operating capacity, unless allowed otherwise by the Commissioner in a permit or order.
- 11. As shown in Table 1, when conducting emissions testing, USASAEP operated boilers 1, 2 and 3 at less than the minimum 90 percent specified in Section 22a-174-22(k) of the Regulations.
- 12. On June 26, 2002, the Department issued NOV No. 14901, to USASAEP for operating boilers 1, 2 and 3 at less than the minimum 90 percent during testing.
- 13. In response to NOV No. 14901, USASAEP proposes to comply with Section 22a-174-22(k) by accepting an operating restriction for boilers 1, 2 and 3, which will reduce the maximum operating capacity heat input to a level that will equal 90 percent of the last Commissioner approved emissions testing level for each boiler and fuel as shown in Table 3 of this Trading Agreement and Order.

- 14. USASAEP agrees to comply with the requirements of Section 22a-174-22 of the Regulations by using discounts, FLERs, design margin and an emission limitation restriction ("cap") for boilers 2 and 3 as specified in this Trading Agreement and Order.
- 15. The Commissioner, pursuant to Section 22a-174-22 of the Regulations, previously approved the NOx DERCs referenced in Table 2 of this Trading Agreement and Order. DERC creation serial numbers if assigned by the Department to these previously approved DERCs are provided in Table 2 of this Trading Agreement and Order. Unused DERCs are subject to the vintage restrictions of this Trading Agreement and Order. Dates after which the unused DERCs will no longer be eligible for use as a result of the vintage restrictions are provided in Table 2 of this Trading Agreement and Order in the expiration date column.

	USASAEP -		able 2 usly Approved DERCs		
Year	Ozone season	Tons	Non-ozone season	Tons	Expiration Date
Pre-2000	S/N not assigned	7	N/A	N/A	12/31/04
2001	CT01/8136A2(DC)NOx oz(1-2)	2	N/A	N/A	12/31/06

- B. Whereas the Commissioner, in accordance with the provisions of this Trading Agreement and Order, pursuant to Section 22a-174-22(d)(3), (e) and (j) of the Regulations, hereby allows USASAEP to comply with Section 22a-174-22 of the Regulations through use of emissions averaging and DERC trading and applicable emission limitations at the facility as provided herein.
- C. With the agreement of USASAEP, the Commissioner, acting under the Connecticut General Statutes Section 22a-6, 22a-171, 22a-174, 22a-176, and 22a-177, orders USASAEP as follows:
 - 1. Upon issuance of this Trading agreement and Order, USASAEP shall cease burning No. 6 fuel oil in boiler 1 and only burn natural gas.
 - 2. Upon issuance of this Trading Agreement and Order, at the facility, USASAEP shall comply with Section 22a-174-22 of the Regulations through emission reduction trading. Until USASAEP achieves permanent compliance with the emissions standard in Section 22a-174-22(e) of the Regulation or by April 30, 2007, whichever is earlier:
 - a. USASAEP shall certify in writing to the Commissioner of the DEP, that USASAEP has permanently retired without use 2.64 tons of DERCs in accordance with paragraph A.10 this Trading Agreement and Order;
 - b. USASAEP shall use approved DERCs as required under this Trading Agreement and Order;

ii. Estimated debits (tons) = [heat input in MMBtu x ((0.85 x allowable limit lbs/MMBtu) - FLER in lbs/MMBtu)] ÷ 2000 lbs/ton.

Where:

- Heat input = for the appropriate boiler and fuel as shown in Table 3.
- Allowable limit = allowable limit rate in lbs/MMBtu for the appropriate boiler shown in Table 1 of this Trading Agreement and Order.
- Full load emission rate = FLER for the appropriate boiler and fuel as shown in Table 1 of this Trading Agreement and Order.
- 0.85 = the 10% averaging debit discount and 5% design margin.
- Fuel heating value = 142,000 BTU per gallon for No. 6 fuel oil.
- iii. Calculate and have on hand at the beginning of each month the sufficient approved DERCs for each calendar month as follows:
 - Estimated net debits = the sum of the total estimated debits (negative number) plus the total estimated credits (positive number).
- iv. The minimum quantity of DERCs required to be on hand for such month shall equal to the calculated net negative debits.
- b. <u>Calculate Monthly Actual Averaging Credits and Debits</u> Calculate the actual monthly averaging credits generated when burning natural gas and the actual monthly debits when burning No. 6 fuel oil in boilers 2 and 3 during that month as follows:
 - i. By the tenth day of the of the following month calculate the sum of the actual debits and credits created during that previous month as follows:
 - Actual credits (tons) = [heat input in MMBtu x ((0.80 x allowable limit lbs/MMBtu) FLER in lbs/MMBtu)] ÷ 2000 lbs/ton.
 - Actual debits (tons) = [heat input in MMBtu x ((0.85 x allowable limit lbs/MMBtu) FLER in lbs/MMBtu)] \div 2000 lbs/ton.

- 6
- ii. Calculate the actual net debits required for each calendar month as follows:
 - Actual net debits (tons) = the sum of the total actual debits (negative number) plus the total actual credits (positive number).
- iii. The quantity of DERCs required to be permanently retired for such month shall equal the calculated net negative debits. No approved DERCs will be required for emissions in any month during which there are more credits than debits. Net positive credits may not be carried forward to the next month.
- 4. Unit operating Restrictions and Annual Emissions Cap.
 - a. US EPA Trading Program Guidelines require that an emission restriction ("Cap") shall be used to prevent exceeding the lower of historical actual or allowable emission limits ("1990 historic levels"). USASAEP's total NOx emissions from boiler 2 and 3 shall not exceed an emissions cap of 12.6 tons per year.
 - b. If the cap is exceeded, approved DERCs may be used to offset emissions above the cap; however, said DERCs shall be separated from DERCs and/or averaging credits used for meeting allowable emission limits specified in Table 1 of this Trading Agreement and Order. The quantity of DERCs required to offset excess emissions above the cap shall equal the difference between the total emissions (in tons) and the cap (in tons), plus a 100% premium equal to the difference in DERCs for exceeding the cap.
 - c. For purposes of calculating total emissions, only emissions from boilers 2 and 3 shall be included; emissions used shall be for a calendar year, based on most recent official emissions test results. Approved DERCs shall be in USASAEP's possession before the historic level is exceeded.
 - d. To determine if the total annual emissions are approaching or exceeding the annual cap, USASAEP shall calculate the total annual emissions by allocating the fuel heat input use from each boiler times the appropriate emissions factors for the fuels used and summing the results. USASAEP shall calculate the annual emissions by adding the most recent monthly total for boilers 2 and 3 to the previous 11 months total and compare the result with the cap. USASAEP shall notify the Department in writing within 30 days of exceeding the cap.
- 5. If at any time the period while this Trading Agreement and Order remains in effect, USASAEP exceeds this new maximum operating limit stated in paragraph C.2.e., USASAEP shall conduct NOx emissions testing of that subject boiler on or before

sixty (60) days after the exceedance of the above limits in accordance with the following:

- a. USASAEP shall submit to the Commissioner for his review and written approval an Intent-To-Test ("ITT") protocol not less than thirty (30) days prior to the emissions testing required pursuant to paragraph C.5., of this Trading Agreement and Order. The ITT protocol shall include at least:
 - i) The Department of Environmental Protection's Bureau of Air Management Test Form No. 1, "Intent to Test";
 - ii) System operating parameters indicative of the highest operating rate since the last Commissioner approved stack test, including, but not limited to: steam output rate, temperature and pressure, fuel firing rate, and NOx emissions rate.
 - iii) The ITT protocol shall provide that USASAEP shall perform testing as specified in Sections 22a-174-5 and 22a-174-22 of the Regulations, including operating the subject boiler at not less than ninety percent (90%) of its maximum rated capacity limit as specified in Table 3 of this Trading Agreement and Order or highest operating rate since its last/previous emissions test, whichever is higher.
 - iv) USASAEP shall perform all testing required by paragraph C.5. in accordance with the approved ITT protocol.
 - v) In conducting and performing the testing required by paragraph C.5, and in analyzing the results of such testing, USASAEP shall adhere to methods specified in Sections 22a-174-5 and 22a-174-22 of the Regulations and as approved by the EPA and the Commissioner.
 - vi) USASAEP shall schedule all emissions testing so as to allow the Commissioner to be present during such testing and to independently verify facility operations, air pollution control equipment parameters, and testing procedures.
 - vii) Within thirty (30) days after completing any emissions testing required by this Trading Agreement and Order, USASAEP shall submit to the Commissioner a written report providing the results of such testing; within 15 days of a notice from the Commissioner indicating any deficiencies in such report, USASAEP shall submit a revised report.
- 6. USASAEP shall make and keep records of: daily fuel use and fuel type; excess NOx emissions; the number of DERCs in its possession, created, purchased and used (by serial number if assigned) each month in accordance with the

appropriate emission rates and limits in this Trading Agreement and Order; the number of DERCs used during the ozone season and non-ozone season (the remainder of the year); as well as documentation attesting to the fact that approved DERCs used during the ozone season were generated during the ozone season. Generator certification of this fact shall be sufficient.

- 7. Record Keeping. USASAEP shall retain records and supporting documentation as described in this Trading Agreement and Order for a minimum of five years, commencing on the date such records were created. USASAEP shall provide the records specified above to the Commissioner within thirty (30) days of receipt of a written request from the Commissioner.
- 8. Annual Emission Statement. No later than March 1, of every year after issuance of this Trading Agreement and Order, USASAEP shall include with the Annual Emission Statement provided to the Commissioner, a record of each sale or other transfer, and use of any and all of the DERCs approved within and subsequent to issuance of this Trading Agreement and Order until all such DERCs have been used. USASAEP shall also include NOx emissions from each boiler using or generating DERCs, and the amount of all DERCs used including serial number (if assigned) and approved DERCs generated and/or purchased from other facilities), generated and/or approved for the previous calendar year. These reports shall be on a form prescribed by the Commissioner and shall be in monthly increments. Should USASAEP choose to discontinue the generation of DERCs, USASAEP will notify the Commissioner upon discontinuance.
- 9. Allowance Use. Pursuant to Section 22a-174-22(d)(3) of the Regulations, USASAEP may use NOx allowances, through April 30, 2007, pursuant to Section 22a-174-22 (j) of the Regulations to achieve all or a portion of the reductions required by Section 22a-174-22 of the Regulations. Any allowance used for compliance with Section 22a-174-22(e) of the Regulations shall be subject to all restrictions and/or requirements applicable to DERCs contained in this Trading Agreement and Order;
 - a. In order for USASAEP to use NOx allowances, USASAEP shall create a general account in EPA's NOx Allowance Tracking System ("NATS"); and
 - b. Each allowance used for compliance with Section 22a-174-22 of the Regulations shall be equivalent to one discrete emission reduction credit Allowances shall be considered used for compliance with Section 22a-174-22 of the Regulations when they are transferred from the facility's NOx general account in the NATS to the CT State NOx Retirement Account (Account ID CT0000000300 in the NATS).
- 10. <u>DERC Doubling</u>. At a minimum, DERCs required shall be adjusted upwards by 100% if DERCs are not in USASAEP's possession prior to the first day of each

month for use. However, based on the gravity of noncompliance, the Commissioner may require additional upward adjustment.

- 11. Vintage Restriction. For the purposes of compliance with Section 22a-174-22 of the Regulations, DERCs/allowances shall only remain valid for five (5) calendar years from the year of the generation/allocation of such DERCs/allowances.

 DERCs/allowances older than five (5) calendar years from their creation/allocation are not valid for use for compliance with Section 22a-174-22 of the Regulations.

 Notwithstanding the above, DERCs/allowances generated/allocated prior to calendar year 2000 are valid for use for compliance with Section 22a-174-22 of the Regulations up to and including December 31, 2004.
- 12. FLER Exceedance. Noncompliance with an established FLER shall subject USASAEP to make restitution by matching the quantity of emissions ("true up") caused by the exceedance plus a 100% premium. The true up in tons of DERCs shall be equal to the FLER exceedance in lbs/MMBtu, multiplied by the total heat input during the period of noncompliance divided by 2000 lbs/ton. If the period of noncompliance is not known, the time period from the completion of the last/previous Department witnessed emission test through the date the FLER compliance is achieved as approved by the Commissioner shall be used. However, nothing in this Trading Agreement and Order shall affect the Commissioner's authority to institute any proceeding or take any other action to require additional upward adjustment, based on the gravity of any alleged noncompliance or violation of law.
- 13. <u>FLER Modification</u>. FLERs set forth in Table 1 of this Trading Agreement and Order may be modified only after the consent of the Commissioner by written modification of this Trading Agreement and Order.
- 14. Emissions Testing. Pursuant to Section 22a-174-22(k) of the Regulations, USASAEP shall conduct NOx emission tests of the boilers 1, 2 and 3 at least once every five years commencing from the dates of the NOx emission tests for the boilers 1, 2 and 3 as provided in Table 1 of this Trading Agreement and Order, unless otherwise required for boilers 2 and 3 by paragraph C.5. of this Trading Agreement and Order. Notwithstanding the above, USASAEP shall not be required to test boiler 1 pursuant to Section 22a-174-22(k) of the Regulations, if USASAEP is in compliance with paragraph C.1 of this Trading Agreement and Order.
- 15. Extension. No later than April 30, 2007 for the boilers 2 and 3, USASAEP shall comply with the requirements in Section 22a-174-22(d)(1) of the Regulations. However, after full program review of this and other Trading Agreements and Orders and if determined to be appropriate, the Commissioner may grant written extension of this Trading Agreement and Order.
- 16. Future Compliance Report. On or before September 1, 2006, USASAEP shall submit a report indicating how the facility will comply with Section 22a-174-22 of the Regulations after April 30, 2007.
- 17. Full compliance. USASAEP shall not be considered in full compliance with this Trading Agreement and Order until all actions required by this Trading Agreement and Order have been completed as approved and to the Commissioner's satisfaction.

- 18. Approvals. USASAEP shall use best efforts to submit to the Commissioner all documents required by this Trading Agreement and Order in a complete and approvable form. If the Commissioner notifies USASAEP that any document or other action is deficient, and does not approve it with conditions or modifications, it is deemed disapproved, and USASAEP shall correct the deficiencies and resubmit it within the time specified by the Commissioner or, if no time is specified by the Commissioner, within 30 days of the Commissioner's notice of deficiencies. In approving any document or other action under this Trading Agreement and Order, the Commissioner may approve the document or other action as submitted or performed or with such conditions or modifications as the Commissioner deems necessary to carry out the purposes of this Trading Agreement and Order. Nothing in this paragraph shall excuse noncompliance or delay.
- 19. <u>Definitions</u>. As used in this Trading Agreement and Order, "Commissioner" means the Commissioner or a representative of the Commissioner. "Ozone season" means the period from May 1 through September 30 in any given calendar year. The date of "issuance" of this Trading Agreement and Order is the date the Trading Agreement and Order is deposited in the U.S. mail or personally delivered, whichever is earlier. Approved DERCs are defined for purposes of this Trading Agreement and Order as those for which the Commissioner has provided written authorization for use in compliance with Section 22a-174-22 of the Regulations.
- 20. Dates. The date of submission to the Commissioner of any document required by this Trading Agreement and Order shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this Trading Agreement and Order, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is deposited in the U.S. mail or is personally delivered, whichever is earlier. Except as otherwise specified in this Trading Agreement and Order, the word "day" as used in this Trading Agreement and Order means calendar day. Any document or action which is required by this Trading Agreement and Order to be submitted or performed by a date which falls on a Saturday, Sunday or a Connecticut or federal holiday shall be submitted or performed by the next day which is not a Saturday, Sunday or Connecticut or federal holiday.
- 21. Certification of documents. Any document, including but not limited to any notice, which is required to be submitted to the Commissioner under this Trading Agreement and Order shall be signed by USASAEP or, if USASAEP is not an individual, by an individual who is an authorized representative of USASAEP, in accordance with Section 22a-174-2a(a) of the Regulations of Connecticut State Agencies, and by the individual(s) responsible for actually preparing such document, and each such individual shall certify in writing as follows:

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information is punishable as a criminal offense under §53a-157b of the Connecticut General Statutes and any other applicable law."

- 22. Noncompliance. This Trading Agreement and Order is a final order of the Commissioner with respect to the matters addressed herein, and is nonappealable and immediately enforceable. Failure to comply with this Trading Agreement and Order may subject USASAEP to an injunction and penalties.
- 23. <u>False statements</u>. Any false statement in any information submitted pursuant to this Trading Agreement and Order is punishable as a criminal offense under §53a-157b of the Connecticut General Statutes and any other applicable law.
- 24. Notice of transfer; liability of USASAEP. Until USASAEP has fully complied with this Trading Agreement and Order, USASAEP shall notify the Commissioner in writing no later than 15 days after transferring all or any portion of the facility, the operations, the site or the business which is the subject of this Trading Agreement and Order or after obtaining a new mailing or location address. USASAEP's obligations under this Trading Agreement and Order shall not be affected by the passage of title to any property to any other person or municipality.
- 25. Commissioner's powers. Nothing in this Trading Agreement and Order shall affect the Commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, recover costs and natural resource damages, and to impose penalties for past, present, or future violations of law. If at any time the Commissioner determines that the actions taken by USASAEP pursuant to this Trading Agreement and Order have not successfully corrected all violations, fully characterized the extent or degree of any pollution, or successfully abated or prevented pollution, the Commissioner may institute any proceeding to require USASAEP to undertake further investigation or further action to prevent or abate violations or pollution.
- 26. <u>USASAEP's obligations under law</u>. Nothing in this Trading Agreement and Order shall relieve USASAEP of other obligations under applicable federal, state and local law.
- 27. No assurance by Commissioner. No provision of this Trading Agreement and Order and no action or inaction by the Commissioner shall be construed to constitute an assurance by the Commissioner that the actions taken by USASAEP pursuant to this Trading Agreement and Order will result in compliance or prevent or abate pollution.
- 28. Access to facility. Any representative of the Department of Environmental Protection may enter the facility without prior notice for the purposes of monitoring and enforcing the actions required or allowed by this Trading Agreement and Order.
- 29. No effect on rights of other persons. This Trading Agreement and Order neither creates nor affects any rights of persons or municipalities that are not parties to this Trading Agreement and Order.
- 30. No Creation of Property Rights. This Trading Agreement and Order does not create any property rights with respect to these DERCs.
- 31. Notice to Commissioner of changes. Within fifteen (15) days of the date USASAEP becomes aware of a change in any information submitted to the Commissioner under

this Trading Agreement and Order, or that any such information was inaccurate or misleading or that any relevant information was omitted, USASAEP shall submit the correct or omitted information to the Commissioner.

- 32. Notification of noncompliance. In the event that USASAEP becomes aware that it did not or may not comply, or did not or may not comply on time, with any requirement of this Trading Agreement and Order or of any document required hereunder, USASAEP shall immediately notify by telephone the individual identified in the next paragraph and shall take all reasonable steps to ensure that any noncompliance or delay is avoided or, if unavoidable, is minimized to the greatest extent possible. Within five (5) days of the initial notice, USASAEP shall submit in writing the date, time, and duration of the noncompliance and the reasons for the noncompliance or delay and propose, for the review and written approval of the Commissioner, dates by which compliance will be achieved, and USASAEP shall comply with any dates which may be approved in writing by the Commissioner. Notification by USASAEP shall not excuse noncompliance or delay, and the Commissioner's approval of any compliance dates proposed shall not excuse noncompliance or delay unless specifically so stated by the Commissioner in writing.
- 33. Submission of documents. Any document required to be submitted to the Commissioner under this Trading Agreement and Order shall, unless otherwise specified in this Trading Agreement and Order or in writing by the Commissioner, be directed to:

Mr. Roland L. Severance Jr., PE
Department of Environmental Protection
Bureau of Air Management
Compliance and Field Operations Division
Emissions and Credit Trading Section
79 Elm Street, 5th Floor
Hartford, Connecticut 06106

USASAEP consents to the issuance of this Trading Agreement and Order without further notice. The undersigned certifies that he/she is fully authorized to enter into this Trading Agreement and Order and to legally bind USASAEP to the terms and conditions of the Trading Agreement and Order.

United States Army Stratford Army Engine Plant

Signature:

Name: PGTER W. SEYN

Title: INSTALLATION MANAGER

Date: <u>30 Apr 03</u>

Issued as a final order of the Commissioner of Environmental Protection

on ///ay / , 2003.

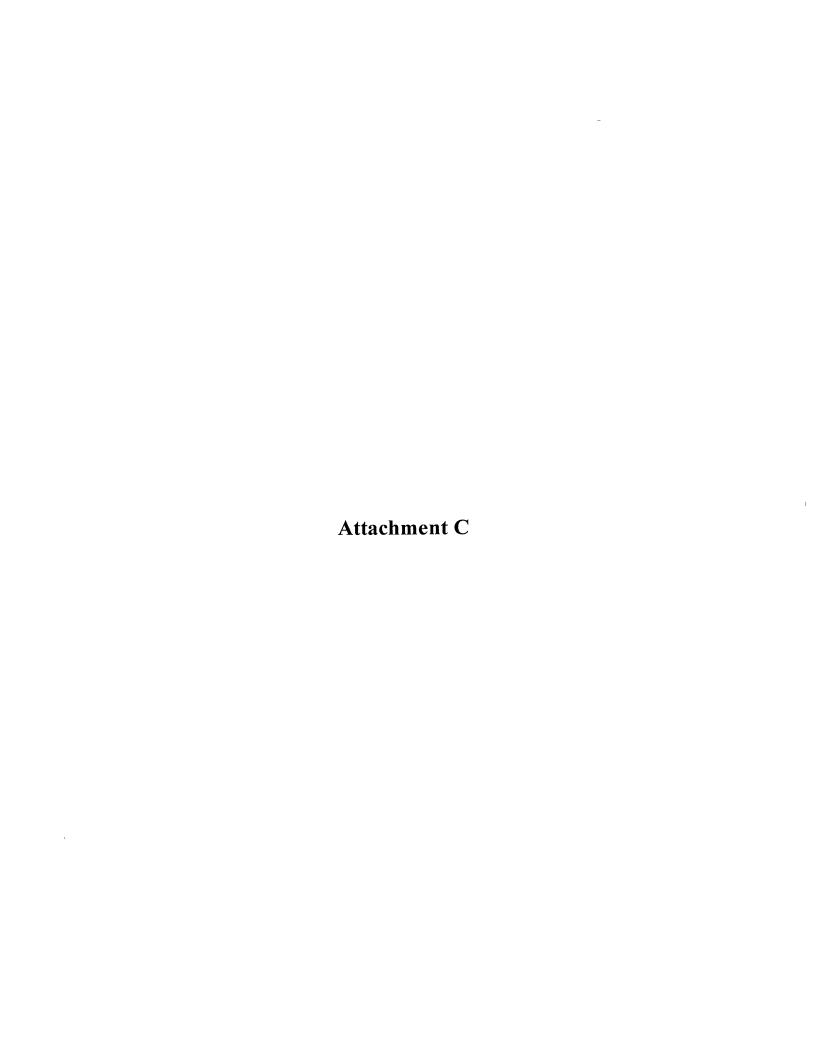
Arthur J. Rocque, Jr.

Commissioner

CITY OF STRATFORD LAND RECORDS

MAILED CERTIFIED MAIL, RETURN RECEIPT REQUESTED

Certified Document No.





STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION



June 19, 2002

Leigh Gammie Project Engineer ROJAC Air Testing Services, Inc. 120 Mountain Ave. Bloomfield, CT 06002

Re: ROJAC Project #AEC0202 / DEP ITT # 202040

Dear Mr. Gammie:

The test report for sampling Nitrogen Oxides emissions from the Cleaver Brooks Model DL-52-LH Boiler (Boiler #1), owned by the US Army and operated by the Industrial Property Management, and located in Stratford, Connecticut, has been reviewed. The emission values are considered representative of the actual emissions.

The final results have been forwarded to our Emissions Trading section. Final acceptance of the test report is dependent upon their review and approval of the operating parameters incurred the test program. Industrial Property Management will be notified if further regulatory action is to be taken.

If you have any questions regarding this letter, please contact Mark Spiro at (860)424-3956.

Very truly yours

Dennis Demchak

Acting Assistant Director

DJD:mrs

cc:

R. Garg, Aquair Environmental Consultants, LLC

R. Meier, Industrial Property Management

R. Severance, CTDEP Emissions Trading

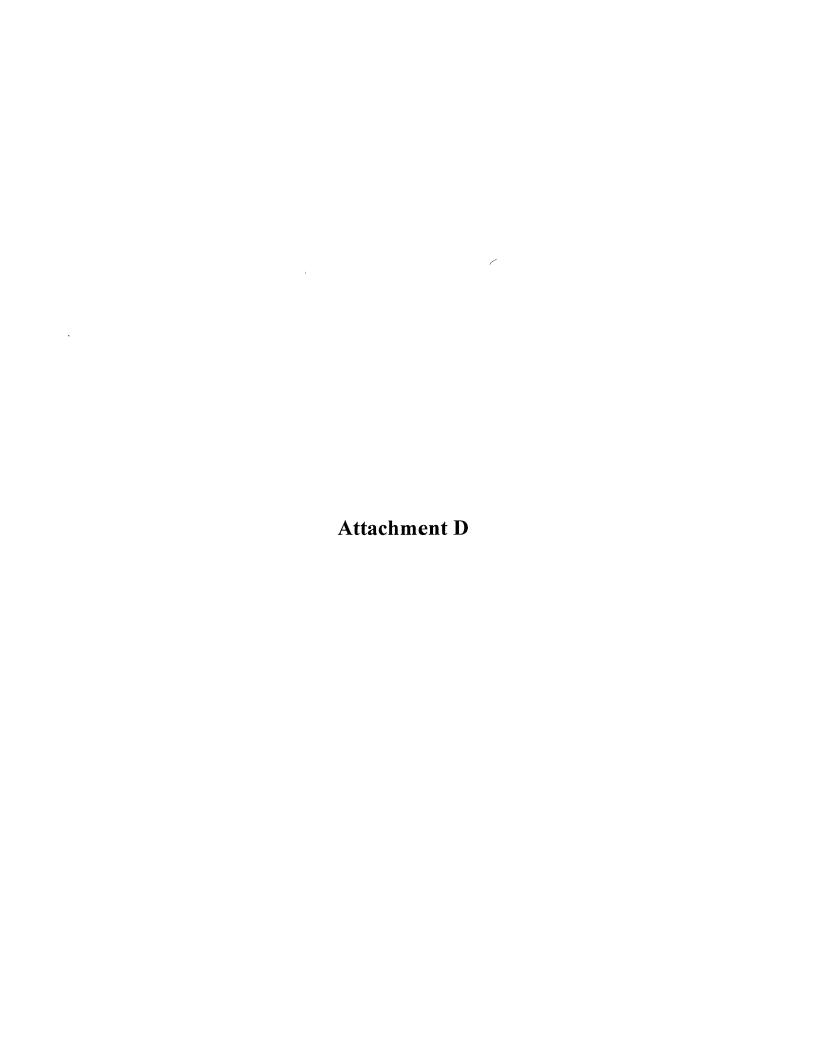
M. Spiro, CTDEP Source Emission Monitoring

ITT File #202040

(Printed on Recycled Paper)

79 Elm Street • Hartford, CT 06106 - 5127

http://dep.state.ct.us





STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION

AUG 1 0 2003



Mr. Peter Szymanski United St.:tes Army Stratford Army Engine Plant 550 Main Street Stratford, CT 06615

Dear Mr. Szymanski:

Enclosed is a certified copy of your original revised permit to construct and operate a Cleaver Brooks boiler at the above location.

This letter does not relieve you of the responsibility to comply with the requirements of other appropriate Federal, State, and municipal agencies. The permit is not transferable from one permittee to another (without prior written approval), from one location to another (unless the subject equipment is a portable rock crusher), or from one piece of equipment to another. The permit must be posted for easy access at the site of operation.

Permit renewal applications must be filed at least one hundred twenty (120) days prior to the permit expiration date, if applicable. Pursuant to Section 22a-174-3a of the Regulations of Connecticut State Agencies, United States Army Stratford Army Engine Plant must apply for a permit modification/revision in writing if it plans any physical change, change in method of operation, or addition to this source which constitutes a modification or revision pursuant to Section 22a-174-1 and 22a-174-2a, respectively. Any such changes should first be discussed with Ms. Lidia Howard of the Bureau of Air Management, by calling (860) 424-3539. Such changes shall not commence prior to the issuance of a permit modification.

NATURE SAVER FAX MEMO D1616 Date 8/20/03 Poles >

To Payat 6 From L; Sia Howard

Co./Dept Co.

Phone + Phone + 424-3539

Fax + 653 - 1710

GSR:LJH:jad Enclosure Sincerely,

Gary S. Rose

Director

Engineering and Technical Services Division Bureau of Air Management

Page 1 of 7



STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF AIR MANAGEMENT

NEW SOURCE REVIEW PERMIT TO CONSTRUCT AND OPERATE A STATIONARY SOURCE

Issued pursuant to Title 22a of the Connecticut General Statues and Section 22a-174-3a of the Regulations of Connecticut State Agencies.

Owner/Operator:

U.S. Army Stratford Army Engine Plant

Address:

550 Main Street, Stratford, CT 06497

Equipment Location: 550 Main Street, Stratford, CT 06497

Equipment Description: Cleaver Brooks Boiler DL-52-LH; Burner-400-CN-3;

ID #W-3670

Permit Number:

0061

Town/Premises Numbers:

178/19

Original Permit Issue Date: 12/19/1994

Revision Issue Date:

AUG 1 0 2003

Expiration Pate:

Arthur J. Commissioner

Page 2 of 7

PERMIT FOR FUEL BURNING EQUIPMENT

STATE OF CONNECTICUT, DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF AIR MANAGEMENT

The conditions on all pages of this permit and attached appendices shall be verified at all times except those noted as design specifications. Design specifications need not be verified on a continuous basis; however, if requested by the Commissioner, demonstration of compliance shall be shown.

PART I: OPERATIONAL CONDITIONS

A.	Operating Limits
	1. Fuel Type(s): Natural Gas 2. Maximum Fuel Consumption over any Consecutive Twelve (12) Month Period: 204,340,000 ft
в.	Design Specifications
	1. Maximum Fuel Firing Rate(s): 51,079 ft ³ /hr 2. Maximum Gross Heat Input (MM BTU/hr): 52.2 3. Minimum Stack Height (ft): 65 4. Minimum Exhaust Gas Flow Rate (acfm): 10,000 5. Stack Exit Temperature (°F): 450 6. Minimum Distance from Stack to Property Line (ft): 530
PA: for	RT II. CONTROL EQUIPMENT (Applicable if -X- Checked) (See Appendix E c Specifications)
A.	Туре
Ħ	None Scrubber Electrostatic Precipitator Cyclone Multi-Cyclone Thermal DeNox Selective Non-Catalytic Reduction Selective Catalytic Reduction Low NOx Burner Fabric Filter Particulate Trap 15 % Flue Gas Recirculation
В.	Minimum Efficiency
	1. Capture Efficiency (%): 2. Removal Efficiency (%): 3. Overall Efficiency (%): 40%

FIRM NAME: U.S. Army Stratford Army Engine Plant	_
EQUIPMENT LOCATION: 550 Main Street, Stratford, CT 06497	
EOUIPMENT LOCATION: 550 Main Street, Stratford, Cr 00457	
EQUIPMENT DESCRIPTION (MODEL, I.D. #): Cleaver Brooks Boiler DL-52-LH;	
EQUIPMENT DESCRIPTION (MODEL, 1.B. #/: Cleaver broken	_
Burner-400-CN-3; ID #W-3670	
Bullet-400-cn-3; 15 #W 3070	_

Town No: 178

Premise No: 19 Permit No: 0061 Stack No. 03

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PERMIT FOR FUEL BURNING EQUIPMENT

STATE OF CONNECTICUT, DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF AIR MANAGEMENT

PART III. CONTINUOUS EMISSION MONITORING REQUIREMENTS AND ASSOCIATED EMISSION LIMITS (Applicable if -X- Checked)

CEM shall be required for the following pollutant/operational parameters and enforced on the following basis:

Pollutant/Operational	Averaging	Emission	Units
Parameter	Times	Limit	
<pre>None Opacity Sox Nox CO CO₂ O₂ Temperature</pre>	six minute block 3 hour rolling 24 hour rolling 1 hour block 1 hour block 1 hour block continuous	s.	9

(See Appendix A for General Requirements)

PART IV. MONITORING, RECORD KEEPING AND REPORTING REQUIREMENTS

- A. The permittee shall keep records of annual fuel consumption. Annual fuel consumption shall be based on any consecutive twelve (12) month time period and shall be determined by adding the current month's fuel usage to that of the previous eleven (11) months. The permittee shall make these calculations within thirty (30) days of the end of the previous month.
- B. The permittee shall keep records on premises indicating continual compliance with all above conditions at all times and shall make them available upon request by the Commissioner for the duration of this permit, or for the previous five (5) years, whichever is less.

FIRM NAME: U.S. Army Stratford Army Engine Plant
EQUIPMENT LOCATION: 550 Main Street, Stratford, CT 06497
EQUIPMENT DESCRIPTION (MODEL, I.D. #): Cleaver Brooks Boiler DL-52-LH;
Burner-400-CN-3; ID #W-3670

Town No: 178

Premise No: 19

Permit No: 0061

Stack No: 03

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PERMIT FOR FUEL BURNING EQUIPMENT

STATE OF CONNECTICUT, DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF AIR MANAGEMENT

PART VI. ALLOWABLE EMISSION LIMITS

The Permittee shall not exceed the emission limits stated herein at any time.

Criteria Pollutants	#/MM BTU	TPY
TSP	0.007	0.78
PM-10	0.007	0.78
SOX	0.001	0.06
NOx	0.047	4.91
VOC	0.005	0.56
CO	0.082	8.58
Non-Criteria Pollutants	MAS (ug/	C * m³)
Formaldehyde	6,47	3

*Maximum allowable stack concentration, 8 hr Hazardous Limiting Value Formaldehyde (HLV): 12 ug/m³

Demonstration of compliance with the above emission limits shall be met by calculating the emission rates using emission factors from the following sources:

Criteria Pollutants

- TSP/PM-10: 7.6 lb/10⁶ ft³: AP-42, Section 1.4, Table 1.4.2 (7/98)
 SOx: 0.6 lb/10⁶ ft³: AP-42, Section 1.4, Table 1.4.2 (7/98)
- 3. NOx: 0.047 lb/MMBTU: Cleaver Brooks Manufacturer's information
- 4. VOC: 5.5 lb/10⁶ ft³: AP-42, Section 1.4, Table 1.4.2 (7/98)
- 5. CO: 84 lb/10⁶ ft³; AP-42, Section 1.4, Table 1.4.1 (7/98)

Non-Criteria Pollutants

Formaldehyde: 7.5E-2 lb/106 ft3: AP-42, Section 1.4, Table 1.4.3 (7/98)

The above statement shall not preclude the Commissioner from requiring other means (e.q. stack testing) to demonstrate compliance with the above emission limits, as allowed by state or federal statute, law or regulation.

FIRM NAME: U.S. Army Stratford Army Engine Plant
FOULTPMENT LOCATION: 550 Main Street, Stratford, CT 06497
EQUIPMENT DESCRIPTION (MODEL, I.D. #): Cleaver Brooks Boiler DL-52-LH;
Burner-400-CN-3; ID #W-3670

Town No: 178

Premise No: 19

Permit No: 0061 Stack No: 03

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PERMIT FOR FUEL BURNING EQUIPMENT

STATE OF CONNECTICUT, DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF AIR MANAGEMENT

PART VII. STACK EMISSION TEST REQUIREMENTS (Applicable if -X- Checked)
Stack emission testing shall be required for the following pollutant(s):
None at this time
TSP SOX NOX CO
□ VOC □ PM-10 □ Pb
(See Appendix B for General Requirements)
PART VIII. APPLICABLE REGULATORY REFERENCES (The Regulations of Connecticut State Agencies, hereinafter referred to as the Regulations)
22a-174-3a; 22a-174-18; 22a-174-19; 22a-174-29(b); 22a-174-22
These references are not intended to be all inclusive - other sections of the Regulations may apply.
PART IX. SPECIAL REQUIREMENTS
A. The Permittee shall operate and maintain this equipment in accordance with the manufacturer's specifications and written recommendations.
B. Noise (for non-emergency use)
The Permittee shall operate this facility at all times in a manner so as not to violate or contribute significantly to the violation of any applicable state noise control regulations, as set forth in Sections 22a-69-1 through 22a-69-7.4 of the Regulations.
C. The Permittee shall comply with all applicable sections of the following New Source Performance Standard(s) at all times. (Applicable if -X- checked)
40 CFR Fart 60, Subpart: 🗌 Db 🛛 Dc 🔲 GG 🔀 A
☐ None (See Appendix C for Detailed Requirements)
PART X. ADDITIONAL TERMS AND CONDITIONS
A. This permit does not relieve the permittee of the responsibility to conduct, maintain and operate the regulated activity in compliance with all applicable requirements of any federal, municipal or other state agency. Nothing in this permit shall relieve the permittee of other obligations under applicable federal, state and local law.
FIRM NAME: U.S. Army Stratford Army Engine Plant EQUIPMENT LOCATION: 550 Main Street, Stratford, CT 06497 EQUIPMENT DESCRIPTION (MODEL, I.D. #): Cleaver Brooks Boiler DL-52-LH; Burner-400-CN-3; ID #W-3670

Premise No: 19 Permit No: 0061 Stack No: 03

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PERMIT FOR FUEL BURNING EQUIPMENT

STATE OF CONNECTICUT, DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF AIR MANAGEMENT

PART X. ADDITIONAL TERMS AND CONDITIONS, continued:

- B. Any representative of the DEP may enter the permittee's site in accordance with constitutional limitations at all reasonable times without prior notice, for the purposes of inspecting, monitoring and enforcing the terms and conditions of this permit and applicable state law
- C. This permit may be revoked, suspended, modified or transferred in accordance with applicable law.
- D. This permit is subject to and in no way derogates from any present or future property rights or other rights or powers of the State of Connecticut and conveys no property rights in real estate or material, nor any exclusive privileges, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the facility or regulated activity affected thereby. This permit shall neither create nor affect any rights of persons or municipalities who are not parties to this permit.
- E. Any document, including any notice, which is required to be submitted to the Commissioner under this permit shall be signed by a duly authorized representative of the permittee and by the person who is responsible for actually preparing such document, each of whom shall certify in writing as follows: "I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offense under section 22a-175 of the Connecticut General Statutes, under section 53a-157b of the Connecticut General Statutes, and in accordance with any applicable statute."
- F. Nothing in this permit shall affect the Commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, recover costs and natural resource damages, and to impose penalties for violations of law, including but not limited to violations of this or any other permit issued to the permittee by the Commissioner.
- G. Within fifteen days of the date the permittee becomes aware of a change in any information submitted to the Commissioner under this permit, or that any such information was inaccurate or misleading or that any relevant information was omitted, the permittee shall submit the correct or omitted information to the Commissioner.

FIRM NAME: U.S. Army Stratford Army Engine Plant
EQUIPMENT LOCATION: 550 Main Street, Stratford, CT 06497
EQUIPMENT DESCRIPTION (MODEL, I.D. #): Cleaver Brooks Boiler DL-52-LH;
Burner-400-CN-3; ID #W-3670

Town No: 178

Premise No: 19

Permit No: 0061

Stack No: 03

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PERMIT FOR FUEL BURNING EQUIPMENT

STATE OF CONNECTICUT, DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF AIR MANAGEMENT

PART X. ADDITIONAL TERMS AND CONDITIONS, continued:

- H. The date of submission to the Commissioner of any document required by this permit shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this permit, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date three days after it is mailed by the Commissioner, whichever is earlier. Except as otherwise specified in this permit, the word "day" means calendar day. Any document or action which is required by this permit to be submitted or performed by a date which falls on a Saturday, Sunday or legal holiday shall be submitted or performed by the next business day thereafter.
- I. Any document required to be submitted to the Commissioner under this permit shall, unless otherwise specified in writing by the Commissioner, be directed to: Office of Assistant Director; Compliance & Field Operations Division; Bureau of Air Management; Department of Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.

FIRM NAME: U.S. Army Stratford Army Engine Plant
EQUIPMENT LOCATION: 550 Main Street, Stratford, CT 06497
EQUIPMENT DESCRIPTION (MODEL, I.D. #): Cleaver Brooks Boiler DL-52-LH;
Burner-400-CN-3; ID #W-3670

Premise No: 19

ORIGINAL 178

Permit No: 0061

Stack No: 03

Attachment E

US Stratford Army Engine Plant CO 1924 Subi

5/21/2008 9:30:23 A.M. Eastern Daylight Time Date.

Seng Phouthakoun@ct.gov From:

rajatgarg@aol com To:

Rajat:

On May 15, 2008, the Department met with you and Richard Barlow to discuss draft Consent Order 1924. During the meeting you claimed that Boiler #1 is not subject to stack test as required by Section 22a-174-22(k) of the Regulations. The basis of your claim was that:

- US Army Stratford Army Engine Plant is not a major source since it is registered 1) under the GPLPE.
- Because Boiler #1 burns only natural gas, Boiler #1 has potential emissions of NOx less than 137 lbs/day exempting it from testing under 22a-174-22(b)(2)(B).

After the meeting, I conducted a record review and determined that Boiler #1 is subject to stack test per Section 22a-174-22(k) of the Regulations and Boiler #1 is not exempted from stack test under Section 22a-174-22(b)(2) of the Regulations.

Pursuant to Section 22a-174-22(b) of the Regulations, subsections (d) to (k), inclusive, of this section shall not apply to the owner or operator of a source if the actual emissions of NOx since January 1, 1990 from the premises at which such source is located have not exceeded 25 tons in any calendar year if such premises are located in a severe nonattainment area for ozone...

In May 1995, the facility reported to the Department that its actual NOx emissions were 75 tons in 1992; 54 tons in 1993 and 43 tons in 1994. Because actual NOx emissions from the premises exceeded 25 tons after 1990, the Department determined that Boiler #1 is required to stack test pursuant to Section 22a-174-22(k) of the Regulations.

At this time, the Department proposes to remove the civil penalty associated for failure to stack test Boiler #1 because Boiler #1 appeared to burn only natural gas and was exempted from testing per paragraph C.14 of the expired Trading Agreement and Order 8137A. However, since the Trading Order expired and actual NOx emissions exceeded 25 tons per year, Boiler #1 will be required to conduct stack test pursuant to Section 22a-174-22(k) of the Regulations.

Should you have any concerns regarding this issue, please contact me.

Seng Phouthakoun Air Pollution Control Engineer CT Department of Environmental Protection

Tel:(860) 424-3426 Fax:(860) 424-4082





DEPARTMENT OF THE ARMY STRATFORD ARMY ENGINE PLANT 550 MAIN STREET STRATFORD, CONNECTICUT 06615-7574

July 13, 2006

Installation Manager

Mr. William J. Wihbey
Bureau of Air Management
Department of Environmental Protection
State of Connecticut
79 Elm Street
Hartford, CT 06106-5127

Re: Notices of Violation Nos. 15739 and 15740 at the U.S. Army Stratford Army Engine Plant, Stratford, Connecticut

Dear Mr. Wihbey:

Stratford Army Engine Plant (SAEP) is submitting this letter in response to two Notices of Violation (NOV 15739 and 15740) issued for our facility. These notices were received by our office on July 3, 2006.

Please note that as indicated in our previous correspondence, the SAEP has disconnected the fuel and electrical connections to boilers No. 2 and 3 operated at this location. These boilers were last operated on March 23, 2006.

With these changes and as referenced in Mr. Santos's inspection report, it is our understanding that the facility is no longer subject to Title V permitting requirements. Also, since these boilers have been disconnected, it is our understanding that they would not be subject to the stack testing requirements.

Based on this discussion, we request that these notices of violation be closed.

We would also like to request an opportunity to meet with the CTDEP to review the documentation required to keep these boilers available as a backup to boiler No. 1, for a limited period of time. We request that this meeting be scheduled as soon as possible to facilitate a timely submission of the documentation required to keep this option available.

We look forward to hearing from you. Should you have any questions, please contact me at (203)385-6600, FAX (203)385-6601 or at szymansp@optonline.net.

Sincerely,

Peter W. Szymanski Installation Manager

COMPLIANCE STATEMENT

This Compliance Statement shall be signed by: (I) You (if an individual-the individual signs); (if a corporation or partnership-by a responsible corporate officer/general partner or duly authorized representative of such person, as those terms are defined in Section 22a-430-3(b)(2) of the Regulations of Connecticut State Agencies); or (if a municipality-chief elected official or principal executive officer) and (II) if different, by the individual responsible for actually preparing such statement, each of whom shall read and sign the certification regarding false statements on the Compliance Statement.

William J. Wihbey

Bureau of Air Management

Provide written response to: Compliance and Field Operations

79 Elm Street

Hartford, Connecticut 06106

Within fifteen days of the date you become aware of a change in any information in the Compliance Statement, or that any information was inaccurate or misleading or that any relevant information was omitted, submit the correct or omitted information to the staff contact identified on the Notice of Violation.

Notice of Violation No 15739

Facility Name U.S. Army Stratford Army Engine Plant

(Site)Address 550 Main Street Stratford, CT 06615

In accordance with the directions in the above-referenced Notice of Violation, I certify that the noted violation has been corrected in the following manner.

(Please see attached)

Attach additional sheet(s) as needed (Enclose supporting documentation demonstrating compliance)

Certification of Accuracy

I certify that the information in this Compliance Statement and any attachments thereto are true, accurate and complete, and I understand that any false statement may be punishable as criminal offense under Connecticut General Statutes Section 27a-6 and 53a-157.

7/13/06

Date

(203) 385-6600

Telephone

7/13/06

Date

(203) 385-6628 Telephone

Signature

Peter W. Szymanski Installation Mgr.

(Type name and Title)

550 Main St. Stratford CT 06615-7554

re, if different than above

Garv W. Hamann

 $\langle \rangle$

(Type name and Title)

550 Main St. Stratford CT 06615-7554 Address

COMPLIANCE STATEMENT

This Compliance Statement shall be signed by: (I) You (if an individual-the individual signs); (if a corporation or partnership-by a responsible corporate officer/general partner or duly authorized representative of such person, as those terms are defined in Section 22a-430-3(b)(2) of the Regulations of Connecticut State Agencies); or (if a municipality-chief elected official or principal executive officer) and (II) if different, by the individual responsible for actually preparing such statement, each of whom shall read and sign the certification regarding false statements on the Compliance Statement.

William J. Wihbey

Bureau of Air Management

Provide written response to:

Compliance and Field Operations

79 Elm Street

Hartford, Connecticut 06106

Within fifteen days of the date you become aware of a change in any information in the Compliance Statement, or that any information was inaccurate or misleading or that any relevant information was omitted, submit the correct or omitted information to the staff contact identified on the Notice of Violation.

Notice of Violation No 15740

Facility Name

U.S. Army Stratford Army Engine Plant

(Site)Address

550 Main Street Stratford, CT 06615

In accordance with the directions in the above-referenced Notice of Violation, I certify that the noted violation has been corrected in the following manner

(Please see attached)

Attach additional sheet(s) as needed (Enclose supporting documentation demonstrating compliance)

Certification of Accuracy

I certify that the information in this Compliance Statement and any attachments thereto are true, accurate and complete, and I understand that any false statement may be punishable as criminal offense under Connecticut General Statutes Section 22a-6 and 53a-157

7/13/06

Date

<u>(203) 385-6600</u>

Telephone

7/13/06

Date

(203) 385-6628

Telephone

Signature

Peter W. Szymanski Installation Mgr.

(Type name and Title)

550 Main St. Stratford CT 06615-7554

Address

Preparer's Signature, if different than above

Gary W. Hamann Project Engineer

(Type name and Title)

550 Main St. Stratford CT 06615-7554

Address

This document contains the Connecticut regulations for Section 22a-174-22. Control of nitrogen oxides emissions. These regulations will become effective on January 1, 2005. This document was prepared by the State of Connecticut Department of Environmental Protection and is provided for the convenience of the reader. This is not the official version of the regulations. The official regulations are published by the State of Connecticut, Judicial Branch, Commission on Official Legal Publications in the Connecticut Law Journal. In the event there is inconsistency between this document and the regulations as published in the Connecticut Law Journal, the Connecticut Law Journal publication will serve as the official version.

Sec. 22a-174-22. Control of nitrogen oxides emissions

(a) Definitions

For purposes of this section, the following definitions shall apply:

- (1) "Contract" means: (A) an agreement between a utility and a customer (or other person) to provide electricity; or (B) a change in any agreement between a utility and a customer (or other person) to provide electricity.
- (2) "Electricity supplier" means "electric supplier" as defined in section 16-1(a)(30) of the Connecticut General Statutes, and "municipal electric utility" as defined in section 7-233b(8) of the Connecticut General Statutes.
- "Emergency engine" means a stationary reciprocating engine or a turbine engine which is used as a means of providing mechanical or electrical power only during periods of testing and scheduled maintenance or during either an emergency or in accordance with a contract intended to ensure an adequate supply of electricity for use within the state of Connecticut during the loss of electrical power derived from nuclear facilities. The term does not include an engine for which the owner or operator of such engine is party to any other agreement to sell electrical power from such engine to an electricity supplier, or otherwise receives any reduction in the cost of electrical power for agreeing to produce power during periods of reduced voltage or reduced power availability.
- (4) "Emergency" means an unforeseeable condition that is beyond the control of the owner or operator of an emergency engine and that:
 - (A) Results in an interruption of electrical power from the electricity supplier to the premises;
 - (B) Results in a deviation of voltage from the electricity supplier to the premises of three percent (3%) above or five percent (5%) below standard voltage in accordance with subsection (a) of section 16-11-115 of the Regulations of Connecticut State Agencies;
 - (C) Requires an interruption of electrical power from the electricity supplier to the premises enabling the owner or operator to perform emergency repairs;
 - (D) Requires operation of the emergency engine to minimize damage from fire, flood, or any other catastrophic event, natural or man-made; or
 - (E) Notwithstanding section 22a-174-22(a)(3) of the Regulations of Connecticut State Agencies, requires operation of the emergency engine under an agreement with the New England region system operator during the period of time the New England region system operator is

implementing voltage reductions or involuntary load interruptions within the Connecticut load zone due to a capacity deficiency.

- (5) "Gas" or "gaseous fuel" means natural gas, propane, or any other fuel that is in the gaseous state under standard conditions.
- (6) "gm/bk hp-hr" means grams per brake horsepower-hour.
- (7) "lb" means pound.
- (8) "MMBTU" means million BTU of heat input.
- (9) "MMBTU/hr" means million BTU of heat input per hour.
- (10) "MRC" means maximum rated capacity.
- (11) "Major stationary source of NOx" means a premises with potential emissions of NOx equal to or greater than fifty (50) tons per year in a serious nonattainment area for ozone, or twenty-five (25) tons per year in a severe nonattainment area for ozone.
- (12) "NOx Budget Program source" means:
 - (A) A fossil-fuel-fired stationary source that serves a generator with a nameplate capacity of fifteen megawatts (15 MW) or more; or
 - (B) A fossil-fuel-fired boiler or indirect heat exchanger with a maximum heat input capacity of 250 MMBTU or more.
- "NOx discrete emission reduction credit" or "NOx DERC" means the reduction of one ton of NOx at a source during a discrete period of time, which the commissioner has certified as real, quantifiable, surplus, permanent, and enforceable.
- (14) "Other boiler" means a boiler that is not a cyclone furnace, fast-response double-furnace naval boiler, or fluidized-bed combustor.
- (15) "Other oil" means a fuel that is liquid at standard conditions and is not residual oil.
- (16) "ppmvd" means parts per million by volume on a dry basis.
- (17) "Premises" means "premises" as defined in section 22a-174-1 of the Regulations of Connecticut State Agencies.

- (18) "Reciprocating engine" means a stationary internal combustion engine having a crankshaft turned by linearly reciprocating pistons.
- (19) "Selective noncatalytic reduction" means emission control technology that involves the injection of a chemical reagent at high flue gas temperatures to selectively reduce NOx emissions to nitrogen and water.
- (20) "Turbine engine" means a stationary internal combustion engine that continuously converts an air-fuel mixture into rotational mechanical energy through the use of moving vanes attached to a rotor.
- (21) "Waste combustor" means an incinerator as defined in subsection 22a-174-18(a) of the Regulations of Connecticut State Agencies, a resources recovery facility as defined in section 22a-207 of the Connecticut General Statutes, or a sewage sludge incinerator. The term does not include a flare or an industrial fume incinerator.

(b) Applicability

- (1) This section applies to the owner or operator of:
 - (A) Any of the following sources, provided such sources are located at a major stationary source of NOx:
 - (i) A reciprocating engine with a maximum rated capacity of three (3) MMBTU/hr or more;
 - (ii) Fuel-burning equipment, other than a reciprocating engine, with a maximum rated capacity of five (5) MMBTU/hr or more;
 - (iii) Equipment that combusts fuel for heating materials and that has a maximum rated capacity of five (5) MMBTU/hr or more;
 - (iv) A waste combustor with a design capacity of two thousand (2000) pounds or more of waste per hour; or
 - (B) Fuel-burning equipment, a waste combustor, or a process source that has potential emissions of NOx in excess of the following:
 - (i) One hundred thirty-seven (137) pounds during any day from May 1 to September 30, inclusive, of any year, if such source is located in a severe nonattainment area for ozone; or
 - (ii) Two hundred seventy-four (274) pounds during any day from May 1 to September 30, inclusive, of any year, if such source is located in a serious nonattainment area for ozone.

- Subsections (d) to (k), inclusive, of this section shall not apply to the owner or operator of a source if the actual emissions of NOx since January 1, 1990 from the premises at which such source is located have not exceeded twenty-five (25) tons in any calendar year if such premises are located in a severe nonattainment area for ozone, or fifty (50) tons in any calendar year if such premises are located in a serious nonattainment area for ozone. Notwithstanding this provision, subsection (d) to subsection (k), inclusive, of this section shall apply to such owner or operator if after May 31, 1995, actual emissions of NOx from such premises exceed the following:
 - (A) In any calendar year: twenty-five (25) tons for premises located in a severe nonattainment area for ozone, or fifty (50) tons for premises located in a serious nonattainment area for ozone; or
 - (B) On any day from May 1 to September 30, inclusive, of any year: one hundred thirty-seven (137) pounds for premises located in a severe nonattainment area for ozone or two hundred seventy-four (274) pounds for premises located in a serious nonattainment area for ozone.
- (3) Subsections (d) through (k) of this section shall not apply to the owner or operator of an emergency engine. In addition, the actual emissions from emergency engines operating during an emergency shall not be included in the determination of the applicability of subsection (b)(2)(B) of this section.
- (4) The owner or operator of an emergency engine shall not include the actual emissions from any such engine for purposes of determining applicability in accordance with subsection (b)(2)(B) of this section, provided such emissions result from operation in accordance with a contract with a utility operating pursuant to a permit or order which:
 - (A) Requires the permittee to maintain a list which identifies all sources with whom the permittee has a contract;
 - (B) Requires either the permittee or the owner or operator of the emergency engine to record and submit to the Commissioner data on fuel consumption and hours of operation of any emergency engine operating under such contract; and
 - (C) Requires the permittee to obtain NOx emission reductions to offset the NOx emissions that result from the generation of customer-contracted electricity.
- Notwithstanding subdivision (3) of this subsection, subsections (d) through (k) of this section shall apply to the owner or operator of an emergency engine if, after May 1, 1997, such engine operates for routine, scheduled testing or maintenance

on any day for which the Commissioner has forecast that ozone levels will be "moderate to unhealthful," "unhealthful," or "very unhealthful." The Commissioner may exempt, by permit or order, the owner or operator of an emergency engine from this subdivision, if such emergency engine is unattended, the testing is automated and cannot be modified from a remote location.

(c) Exemption.

This section shall not apply to the owner or operator of a mobile source.

(d) General requirements.

- (1) On and after May 31, 1995, the owner or operator of a stationary source subject to this section shall:
 - (A) comply with all applicable emission limitations for such source in subsection (e) of this section;
 - (B) comply with the provisions for multi-fuel sources in subsection (f) of this section;
 - (C) reduce the NOx emission rate from such source by forty percent (40%), pursuant to subsection (g) of this section, in accordance with a permit issued by the Commissioner;
 - (D) file a permit application to modify the schedule of operations at such source, pursuant to subsection (i) of this section, in accordance with a permit issued by the Commissioner.
- On October 1, 2003, and during the period from October 1 to April 30, inclusive, each year thereafter, the owner or operator of a stationary source subject to this section that is also a NOx Budget Program source shall:
 - (A) Comply with the emission limitation in subsection (e)(3) of this section; or
 - (B) Use NOx DERCs, or NOx allowances, or both, pursuant to subsection (j) of this section, to achieve all or a portion of the NOx emission reductions required by the emission limitation in subsection (e)(3) of this section.
- The owner or operator of a stationary source subject to this section, in accordance with an order or permit issued by the Commissioner, may use NOx DERCs AND NOx allowances, pursuant to subsection (j) of this section, to achieve all or a portion of the reductions required by this section. The Commissioner shall submit such permit or order to the Administrator for approval in accordance with the provision of 42 U.S.C. 7401-7671q.

(4) Nothing herein shall preclude the Commissioner from issuing an order to an owner or operator of a stationary source subject to this section to comply with the requirements of this subsection.

(e) Emission limitations.

- (1) The owner or operator of a stationary source subject to this section may, in accordance with subsection (d)(1)(A) of this section, comply with the requirements of this section by meeting applicable emission limitations specified in Table 22-1 of this section. Emission limitations in Table 22-1 for turbine engines that are quantified in units of ppmvd shall be corrected to fifteen percent (15%) oxygen.
- (2) For any stationary source for which there is no applicable emission limitation in Table 22-1, the owner or operator of such source shall not cause or allow emissions of NOx therefrom in excess of the following:
 - (A) For fuel-burning equipment fired by a fuel other than those fuels cited in Table 22-1: 0.3 pounds per MMBTU;
 - (B) For any waste combustor subject to the requirements of subdivision (4) of this subsection: 0.38 pounds per MMBTU;
 - (C) For any waste combustor not subject to the requirements of subdivision (2)(B) of this subsection which has a waterwall furnace: 0.38 pounds per MMBTU;
 - (D) For any other waste combustor: 0.33 pounds per MMBTU;
 - (E) For a glass melting furnace: 5.5 pounds of NOx per ton of glass produced;
 - (F) For a stationary source, other than a glass melting furnace, that combusts fuel for heating materials: 180 ppmvd, corrected to twelve percent (12%) carbon dioxide; or
 - (G) For any stationary source not having an emission limitation in subparagraphs (A) through (F) of this subdivision: seven hundred (700) ppmvd.
- (3) For a source subject to this section that is also a NOx Budget Program source: 0.15 pounds per MMBTU during the period from October 1 to April 30, inclusive.
- (4) In addition to complying with the emission limitation in subdivision (2)(B) of this subsection, by May 31, 1995 the owner or operator of any waste combustor that combusts refuse derived fuel shall install and operate selective noncatalytic reduction or other NOx emissions control technology capable of reducing the

NOx emission rate by at least thirty percent (30%) from the average emission rate in calendar year 1990 on one boiler unit at such facility. If the Commissioner determines that operations during 1990 were not representative of normal operations of the facility, the Commissioner may use another calendar period that is more representative. In addition, actual annual average NOx emissions from other boiler units at such facility shall each not exceed 420 tons per year. The Commissioner may consider, in the same manner as for other sources, any emission reduction below 0.38 pounds per MMBTU to be eligible as surplus emissions reductions for purposes of emission reduction credits pursuant to subsection (j) of this section until May 31, 1999.

TABLE 22-1

	Gas-fired	Residual-oil- fired	Other-oil-fired	Coal-fired
Turbine engine with MRC = 100 MMBTU/hr	55 ppmvd	not applicable	75 ppmvd	not applicable
Turbine engine with MRC < 100 MMBTU/hr	0.90 lb/MMBTU	not applicable	0.90 lb/MMBTU	not applicable
Cyclone furnace	0.43 lb/MMBTU	0.43 lb/MMBTU	0.43 lb/MMBTU	0.43 lb/MMBTU
Fast-response double-furnace Naval boiler	0.20 lb/MMBTU	0.30 lb/MMBTU	0.30 lb/MMBTU	0.30 lb/MMBTU
Fluidized bed combustor	not applicable	not applicable	not applicable	0.29 lb/MMBTU
Other boiler	0.20 lb/MMBTU	0.25 lb/MMBTU	0.20 lb/MMBTU	0.38 lb/MMBTU
Reciprocating engine	2.5 gm/bk hp- hr	not applicable	8 gm/bk hp-hr	not applicable

(f) Multi-fuel sources.

- (1) When, pursuant to subsection (d)(1)(B) of this section, the owner or operator of a stationary source subject to this section switches the use of fuel, converts to a new fuel, or is capable of burning two or more different fuels, such owner or operator shall comply with the requirements of this subsection.
- (2) The owner or operator of a stationary source that is capable of firing two or more fuels shall not cause or allow emissions of NOx from such source, in excess of the following:
 - (A) For fuel-burning equipment that simultaneously fires two or more different fuels: an emission limitation calculated by 1) multiplying the heat input of each fuel combusted by the emission limitation established in this section for such fuel, 2) summing those products, and 3) dividing the sum by the total heat input; or
 - (B) For fuel-burning equipment that is capable of interchangeably firing two or more fuels: the emission limitation in Table 22-1 for the particular equipment and fuel used. Notwithstanding this requirement, the owner or operator of a stationary source that operates exclusively on other oil or gas from May 1 through September 30 of any year and on another fuel during the remainder of the year shall not cause or allow emissions of NOx from such source in excess of 0.2 pounds per MMBTU from May 1 to

September 30, inclusive, and 0.29 pounds per MMBTU for the remainder of the year.

- (3) The owner or operator of a stationary source that, on or after January 1, 1990, converts the fuel used at such source, shall not cause or allow emissions of NOx from such source in excess of the following:
 - (A) 0.29 pounds per MMBTU, when such source burned coal to provide more than fifty percent (50%) of its total heat input during the last full calendar year immediately prior to such conversion; or
 - (B) 0.225 pounds per MMBTU, if such source burned residual oil to provide more than fifty percent (50%) of its total heat input during the last full calendar year immediately prior to such conversion.

(g) Forty percent (40%) reduction.

- (1) When the owner or operator of a stationary source subject to this section reduces the NOx emission rate from such source by forty percent (40%), as provided in subsection (d)(1)(C) of this section, such owner or operator shall comply with the emission limitations of this section established in a permit issued by the Commissioner. Such permit shall specify such source's NOx emission limitation to be the more restrictive of:
 - (A) sixty percent (60%) of such source's emission rate at maximum capacity during calendar year 1990; or
 - (B) sixty percent (60%) of the emission limitation applicable to the source on January 1, 1990.

Such permit shall express the NOx emission limitation in the same units of measurement as the NOx emission limitation that would otherwise apply to such source in subsection (e) of this section.

- (2) To determine the actual emission rate specified in subdivision (1)(A) of this subsection, such owner or operator shall conduct an emission test at such source under operating conditions representative of those conditions in existence at the source in calendar year 1990, at the maximum capacity at which the source was operated during such calendar year.
- (3) If the Commissioner determines that operations during calendar year 1990 were not representative of normal operations from such source, the Commissioner may use another calendar year which is more representative.
- (h) Reconstruction or replacement. Repealed.

(i) Schedule modification.

- (1) If the owner or operator of a stationary source subject to this section proves to the satisfaction of the Commissioner that it is not technologically or economically feasible for such source to comply with the emission limitations in subsections (e) through (g) of this section, except the emission limitation in subsection (e)(3) of this section, the Commissioner may by permit require NOx emission reductions through modifications of the schedule of NOx-emitting activities and implementation of other measures to reduce NOx emissions at such source. Such permit may include restrictions on operations on any day for which the Commissioner has forecast that ozone levels will be "moderate to unhealthful," "unhealthful," or "very unhealthful."
- (2) This subsection shall only apply to the following:
 - (A) Oil-fired turbine engines or fast-response double-furnace Naval boilers that generate power to create simulated high-altitude atmospheres for the testing of aircraft engines;
 - (B) Testing of fuel-burning equipment undergoing research and development; or
 - (C) Compression-ignition reciprocating engines used exclusively for the training personnel in the operation and maintenance of such engines aboard submarines.

(j) Emissions reduction trading.

- (1) The owner or operator of a stationary source subject to this section may use NOx DERCs or NOx allowances or both to comply with the applicable emission limitation contained in subsection (e) of this section pursuant to a permit or order issued by the commissioner.
- (2) Such owner or operator shall retire one (1) NOx DERC or one (1) NOx allowance for each ton of NOx emitted in excess of the applicable emission limitation in subsection (e) of this section, as calculated pursuant to a permit or order issued by the commissioner. Such owner or operator shall conduct an emission test or submit another method acceptable to the Commissioner to estimate the number of tons of NOx emitted in excess of such applicable emission limitation. Such emission test shall be conducted under operating conditions that demonstrate the maximum emission rate of such source. Such emission test shall be certified pursuant to subsection (k) of this section.
- (3) Any creation or use of NOx DERCs or NOx allowances for the purpose of this subsection shall be consistent with the provisions of 40 CFR 51, Subpart U and the U.S. Environmental Protection Agency's "Emissions Trading Policy

Statement," published December 4, 1986 (Federal Register, Volume 51, page 43814). The use of NOx allowances pursuant to this subsection shall also be consistent with the provisions of section 22a-174-22a(f)(4) and section 22a-174-22b(i)(5) of the Regulations of Connecticut State Agencies.

- (4) Vintage restrictions. For the purposes of this section, the following vintage restrictions shall apply:
 - (A) Any DERC shall be used for the purpose of compliance with this section within five (5) calendar years from the year of generation; and
 - (B) Any NO_x allowance allocated to, or otherwise acquired by, the owner or operator of a stationary source subject to this section, if used for the purpose of compliance with this section, shall be used within five (5) calendar years from the year of initial allocation.

(k) Emissions testing and monitoring.

- The owner or operator of a stationary source subject to an emission limitation (1) under this section shall conduct an emission test to demonstrate compliance with this section no later than one year after becoming subject to this section. Each such emission test shall be conducted in accordance with section 22a-174-5 of the Regulations of Connecticut State Agencies. Compliance with the emission limitations of this section shall be determined based on the average of three (3) one-hour tests, each performed over a consecutive 60-minute period. Any analysis of nitrogen content conducted as part of such emission testing shall be in accordance with Method D-3228 of the American Society for the Testing of Materials. If the commissioner determines that three (3) one-hour tests are not reasonable given the location, configuration or operating conditions of a stationary source, the commissioner may approve testing where compliance with the emission limitations of this section shall be determined based on the average of four (4) fifteen-minute tests, each performed over a consecutive fifteen-minute period. Any owner or operator of a stationary source who has not installed and operated a continuous emissions monitor at such source shall conduct emission testing once every five years from the date of the previous test or five years from the date the previous test was due, whichever is earlier.
- (2) The owner or operator shall demonstrate compliance with emission limitations of this section using sampling and analytical procedures approved under 40 CFR 60, Appendix A, or under procedures in section 22a-174-5(d) of the Regulations of Connecticut State Agencies. Sampling shall be conducted when the source is at normal operating temperature and, unless allowed otherwise by the Commissioner in a permit or order, is operating at or above ninety percent (90%) of maximum capacity for a fuel-burning source or a process source, or at or above ninety percent (90%) of design capacity for a waste combustor. Notwithstanding the foregoing requirements of this subdivision:

- (A) If the commissioner determines that operating at or above ninety percent (90%) of maximum capacity for a fuel burning source or a process source during sampling is not reasonable given the location, configuration or operating conditions of a source, the commissioner may approve testing of a fuel burning source or process source at an alternative maximum capacity where compliance with the emission limitations of this section shall be determined based on operating at or above ninety percent (90%) of the alternative maximum capacity approved by the commissioner; and
- (B) Any source that has operated in excess of one hundred percent (100%) of its maximum capacity at any time since May 31, 1995 shall be tested when the source is operating at or above ninety percent (90%) of its highest operating rate since May 31, 1995.
- On and after May 31, 1995, the owner or operator of any source that emitted more than one hundred (100) tons of NOx from a single stack during any calendar year beginning January 1, 1990, shall install, calibrate, maintain, operate and certify a continuous emissions monitor for NOx for each such stack. The owner or operator shall notify the Commissioner in writing at least thirty (30) days prior to conducting any performance or quality assurance testing of any such monitor. Any such testing shall be conducted in accordance with a testing protocol approved by the Commissioner. Any continuous emission monitor for NOx shall be installed, calibrated and operated in accordance with the performance and quality assurance specifications contained in 40 CFR 60, Subpart A, Appendix B and Appendix F.
- Unless otherwise specified by the commissioner in a permit or order, the averaging times for the following emission limitations shall be applicable to a source that has or is required to have a continuous emissions monitor for NOx:
 - (A) For the emissions limitation is subsection (e)(3), the period from October 1 to April 30, inclusive, including all periods of operation, including startup shutdown, and malfunction; and
 - (B) For any other emission limitation contained in this section, twenty-four (24) hours, measured from midnight at the beginning of any day to midnight of the end of that day, including all periods of operation, including startup, shutdown and malfunction.

(l) Reporting and record keeping.

(1) The owner or operator of a stationary source subject to this section, shall keep the following records:

- (A) For an emergency engine, daily records of operating hours of such engine, identifying the operating hours of emergency and non-emergency use;
- (B) For any premises for which subsections (b)(2) or (b)(3) of this section applies, records (e.g. fuel use, continuous emissions monitoring, operating hours) to determine whether the NOx emissions from such premises on any day from May 1 to September 30, inclusive, are in excess of one hundred thirty-seven (137) pounds for premises located in a severe nonattainment area for ozone or two hundred seventy-four (274) pounds for premises located in a serious nonattainment area for ozone.
- (C) Monthly and annual records (e.g. fuel use, continuous emissions monitoring, operating hours) to determine whether NOx emissions from such premises in any calendar year are in excess of twenty-five (25) tons for premises located in a severe nonattainment area for ozone or fifty (50) tons for premises located in a serious nonattainment area for ozone;
- (D) Records of all tune-ups, repairs, replacement of parts and other maintenance;
- (E) Copies of all documents submitted to the Commissioner pursuant to this section;
- (F) For any source required to install, calibrate, and operate a continuous emissions monitor for NOx under subdivision (k)(3), all charts, electronically stored data, and printed records produced by such continuous emissions monitor;
- (G) Procedures for calculating NOx emission rates in (B) and (C) above;
- (H) Records of the dates, times, and places of all emission testing required by this section, the persons performing the measurements, the testing methods used, the operating conditions at the time of testing, and the results of such testing;
- (I) For any source required to install, calibrate, and operate a continuous emissions monitor for NOx under subdivision (k)(3) of this section, records of all performance evaluations, calibration checks and adjustments on such monitor; a record of maintenance procedures; and all data necessary to complete the quarterly reports required under subdivision (l)(4) of this section; and
- (J) Any other records or reports required by an order or permit issued by the Commissioner pursuant to this section.
- (2) Within thirty (30) days of the completion of emission tests conducted under the requirements of subdivision (k)(1) of this section, the owner or operator of such

source shall submit a written report of the results of such testing to the Commissioner.

- (3) Within sixty (60) days of the completion of certification tests conducted under the requirements of subdivision (k)(3) of this section, the owner or operator of such source shall submit a written report of the results of such testing to the Commissioner.
- (4) The owner or operator of any source required to be equipped with a continuous emissions monitor for NOx under subdivision (k)(3) of this section shall submit to the Commissioner written quarterly reports of excess emissions and CEM malfunctions. Such reports shall be submitted to the Commissioner on or before January 30, April 30, July 30, and October 30 and shall include data for the three calendar month period ending the month before the due date of the report. For each period of excess emissions, such report shall include the date and time of commencement and completion of such period, the magnitude and suspected cause of the excess emissions and all actions taken to correct the excess emissions. For each malfunction of the CEM system, such report shall include the date and time of when the malfunction commenced and ended, and all actions taken to correct the malfunction.
- (5) The owner or operator of a stationary source subject to this section shall retain all records and reports produced pursuant to the requirements of this section for five (5) years. Such records and reports shall be available for inspection at reasonable hours by the Commissioner or the Administrator. Such records and reports shall be retained at the source, unless the Commissioner approves in writing the use of another location in the State.
- On or before April 15 of each year, the owner or operator of a stationary source subject to this section shall submit a report on NOx emissions from such source, on a form provided by the Commissioner.
- (7) The Commissioner may use data recorded by continuous emissions monitors for NOx and any other records and reports to determine compliance with applicable requirements of this section.

(m) Compliance plans.

(1) The owner or operator of a stationary source subject to this section shall submit a compliance plan to the Commissioner by September 1, 1994, on forms provided by the Commissioner. Such compliance plan shall document how such source will comply with all applicable requirements of this section. The owner or operator of a stationary source that becomes subject to this section after May 1, 1994, shall submit a compliance plan within four (4) months of the date on which such source becomes subject to this section.

- Any compliance plan submitted pursuant to this subsection shall include a certification signed by a responsible corporate officer or a duly authorized representative of such officer, as those terms are defined in subdivision 22a-430-3(b)(2) of the Regulations of Connecticut State Agencies, and by the individual delegated by such officer with the responsibility of actually preparing the compliance plan. Such certification shall read as follows: "I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offense under section 22a-175 of the Connecticut General Statutes, under section 53a-157b of the Connecticut General Statutes, and in accordance with any applicable statute."
- (3) If a compliance plan does not contain all measures necessary to comply with all requirements of this section, the Commissioner may notify the owner or operator of such source of the deficiency. Such owner or operator shall resubmit a revised compliance plan within thirty (30) days of receipt of such notice.
- (4) Notwithstanding the provisions of subdivision (1) of this section, the owner or operator of a NOx Budget Program source who is subject to a revised emission standard shall not be required to submit a revised compliance plan unless the commissioner requests so in writing.