



STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION



STATE OF CONNECTICUT

VS.

HARTFORD HOSPITAL

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) ORDER NO. 7016A
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IN THE MATTER OF CONSENT ORDER NO. 7016A

WHEREAS, Hartford Hospital (hereinafter, the Hospital), a Connecticut based non-profit corporation doing business at 80 Seymour Street, Hartford, Connecticut, operates five (5) Bigelow watertube boilers which, while burning fuel oil, emit sulfur oxides subject to Section 22a-174-24(d) of the Connecticut's Administrative Regulations for the Abatement of Air Pollution (hereinafter, Regulations) concerning the Primary Ambient Air Quality Standards (AAQS) for sulfur oxides; and

WHEREAS, the Hospital and CCF-1, the latter a Connecticut corporation with its principal office in Meriden, Connecticut (hereinafter, CCF-1) have entered into a contractual agreement under which CCF-1 has constructed and committed to the operation of a cogeneration facility on land leased from the Hospital with the goal of supplying to the Hospital most of the steam and electricity which the Hospital now generates for itself from its five (5) Bigelow boilers; and

WHEREAS, the Hospital requires that it retain the capacity to periodically supplement the steam generated by CCF-1 with steam generated from the five (5) Bigelow boilers and, thus, cannot eliminate its boiler plant; and

WHEREAS, the ambient impact modeling analysis conducted by the Department on the Hospital's boilers and CCF-1 gas turbines, the latter performed in conjunction with new source permit review for this equipment, revealed a projected exceedance of the Primary AAQS for sulfur oxides. The applicable standard of 365 micrograms per cubic meter, maximum 24 hour concentration, is projected to be exceeded as a result of stack downwash on various occasions when fuel oil is burned. This projected exceedance is determined through the use of the Industrial Source Complex Short-Term (ISCST) model, applying operating parameters designed at maximum rated capacity utilizing 1% sulfur by weight (dry basis) fuel oil for the Hospital's boilers and assuming a simultaneous operation of CCF-1's turbines utilizing a maximum of 0.3% sulfur by weight (dry basis) fuel oil; and

WHEREAS, the Hospital has submitted, on November 9, 1989 and December 29, 1989, screening/single-source refined dispersion and multiple-source modeling analyses which have been approved by this Department and which demonstrate compliance with the Primary AAQS for sulfur oxides under the operating scenarios set forth in paragraphs 1 and 2 below.

NOW, THEREFORE, by authority of Section 22a-178 et. seq. of the Connecticut General Statutes and Section 113(d) of the Clean Air Act as amended 42 U.S.C. Section 7413(d), the Commissioner hereby orders and the Hospital hereby agrees to the following operating restrictions for the five (5) Bigelow watertube boilers to bring sulfur oxide emissions into compliance with applicable Regulations. These restrictions shall be implemented in the manner stipulated below and by the deadlines set forth in the Compliance Timetable which is hereby incorporated by reference into this Order. Copies of applicable statutes and regulations are enclosed.

1. The Hospital shall:

- A) Order and accept fuel oil containing a maximum of 0.3% sulfur by weight (dry basis).
- B) Burn a maximum of 555 gallons per hour of 0.3% sulfur by weight (dry basis) fuel oil whenever CCF-1 is operating at full capacity.
- C) Burn a maximum of 1125 gallons per hour of 0.3% sulfur by weight (dry basis) fuel oil whenever CCF-1 is operating at 50% of full capacity.
- D) Burn a maximum of 1240 gallons per hour of 0.3% sulfur by weight (dry basis) fuel oil whenever CCF-1 is not operating.

2. In addition to the operating restrictions outlined above, the Hospital agrees to comply with the following operating restrictions during those transitional periods when either one or both of CCF-1's gas turbines are coming on-line or going off-line. The Hospital agrees to operate for no longer than one hour in any day in a transitional mode.

The Hospital shall:

- A. Burn a maximum of 1240 gallons per hour of 0.3% sulfur by weight (dry basis) fuel oil at any time that CCF-1 is starting up or shutting down both turbines, 0% to 100% of capacity or 100% to 0% of capacity, respectively.
 - B. Burn a maximum of 1240 gallons per hour of 0.3% sulfur by weight (dry basis) fuel oil at any time that CCF-1 is starting up or shutting down one turbine while the second turbine is not operating, 0% to 50% of capacity or 50% to 0% of capacity, respectively.
 - C. Burn a maximum of 1125 gallons per hour of 0.3% sulfur by weight (dry basis) fuel oil at any time that CCF-1 is starting up or shutting down one turbine while the second turbine is operating, 50% to 100% of capacity or 100% to 50% of capacity, respectively.
3. Notwithstanding the above operating restrictions, the Hospital retains the right to supplement operations by firing Boilers Nos. 4 and 5 with natural gas which has been determined, by this Department, to have a negligible sulfur content.
 4. The Hospital shall comply with the following recordkeeping requirements and shall submit all required reports by the dates specified in the Compliance Timetable accompanying this Order.

The Hospital shall:

- A. Require and maintain vendor certification of fuel sulfur content for each truckload of fuel oil received.
- B. Maintain records of hourly steam load and daily fuel usage for the five (5) Bigelow boilers. Totals shall represent the combined value for all five (5) boilers.
- C. Submit all reports required pursuant to this paragraph in accordance with the schedule established by the Compliance Timetable accompanying this Order.

5. The fuel sulfur content limitations and operating restrictions imposed by this Order represent limitations agreed to by the Hospital to eliminate any projected exceedances of the Primary AAQS for sulfur oxides in the vicinity of the Hospital. The Hospital retains the right to demonstrate to this Department at any time in the future, through modeling performed by the Hospital or its designee, and approved by this Department, that the use of fuel oil containing greater than 0.3% sulfur by weight (dry basis) but no greater than 1.0% sulfur by weight (dry basis) in the five (5) Bigelow watertube boilers, or that the implementation of operating scenarios not addressed by this Order, will not result in a projected exceedance of the Primary AAQS for sulfur oxides. Should this Department approve the Hospital's demonstration of compliance, the Department shall revise the Order, and the Order will be processed as a revision to the Connecticut State Implementation Plan (SIP) by the U.S. Environmental Protection Agency (EPA). The Hospital may, upon EPA's approval of the SIP Revision, proceed with any equipment modification which may be required, and may purchase and utilize the approved sulfur by weight fuel oil and/or begin implementation of the approved operating scenarios.
6. Failure to comply with any of the requirements of paragraphs 1 through 5 above, or of any document approved thereunder, or failure to complete any of these requirements by the deadlines contained in the Compliance Timetable, may subject the Company to liability for the following stipulated penalties:

For the first day following the date compliance was required, or for each violation, five hundred dollars (\$500.00); and for each thirty (30) day period of violation thereafter one thousand dollars (\$1,000.00). The latter amount will be corrected accordingly for violation periods of less than thirty (30) days.

In addition, for any violation of the fuel sulfur content limitation imposed by this Order, the Hospital shall be subject to the penalties described below. A violation shall be defined as the Hospital's acceptance of a truckload of fuel oil containing a sulfur content in excess of 0.3% as certified by the vendor at the time of delivery.

For the first occurrence, ten cents (\$.10) per gallon.

For the second occurrence, twenty cents (\$.20) per gallon.

For each occurrence thereafter, the sum to be paid shall increase by five cents (\$.05) per gallon until a maximum of fifty cents (\$.50) per gallon is reached, which sum shall be paid upon each subsequent occurrence.

The Hospital waives its right to administrative appeal of any stipulated penalties issued pursuant to this paragraph.

In court proceedings to enforce the provisions of this paragraph, the Commissioner need prove only that the Hospital failed to comply with any requirement of paragraphs 1 through 5 of this Order, or of any document approved thereunder within the time specified. The Hospital waives the opportunity to contest the amount of any penalty specified herein or the justification for its imposition, except that the Hospital may prove compliance or that compliance was impossible due to any of the following acts or events; riots, wars, sabotage or other acts of violence beyond the control of the Hospital, flood, hurricane or other natural disaster, or any other act or event which is beyond the Hospital's control and is equally unforeseeable and irreparable. The burden of persuasion shall be upon the Hospital with respect to any fact allegedly relieving the Hospital of the obligation to pay stipulated penalties under this paragraph.

7. Notwithstanding the liabilities contained in paragraph 6, failure to complete any step or steps (other than Progress Report requirements) detailed in this Order and accompanying Compliance Timetable by the specified dates shall be a violation of an order of the Commissioner and may subject the Hospital to liability for civil assessments of up to twenty-five thousand dollars (\$25,000.00) plus one thousand dollars (\$1,000.00) per day pursuant to Section 22a-6b(a)(3) of the Connecticut General Statutes and Section 22a-6b-603 of the Department's Regulations.

Failure to submit a Progress Report by the dates set forth in the Compliance Timetable may subject the Hospital to liability for civil assessments pursuant to Section 22a-6b(a)(3) of the Connecticut General Statutes and Section 22a-6b-601 of the Department's Regulations.

- The Hospital retains the right to administrative hearing of any penalty assessed pursuant to this paragraph.
8. Departmental action under this authority in no way prevents the Commissioner from seeking, in addition or separately, an injunction enforcing this Order together with penalties of up to one thousand dollars (\$1,000.00) per day for each day of continuing violation in court proceedings pursuant to Section 22a-180 of the Connecticut General Statutes.
 9. Payment of penalties under this order shall be mailed or personally delivered to Elizabeth I. Hotaling, Department of Environmental Protection, Bureau of Air Management, 165 Capitol Avenue, Room 136, Hartford, Connecticut 06106, and shall be by certified or bank check payable to the State of Connecticut, Department of Environmental Protection.
 10. No provisions of this Order shall be construed to constitute an assurance or certification from this Department that the control technology, operating procedures or equipment modifications selected by the Hospital will result in compliance. The Hospital, at all times, maintains the burden of selecting the appropriate emissions control strategy and demonstrating compliance with applicable Regulations in accordance with the deadlines set forth in this Order.
 11. Compliance with the terms and requirements of this Order does not excuse the Hospital from complying with any other current and/or future federal, state or local legislation.

Any document or notice required to be submitted to the Commissioner under this Order shall, unless otherwise specified in writing by the Commissioner, be directed to:

Elizabeth I. Hotaling
Department of Environmental Protection
Bureau of Air Management
165 Capitol Avenue, Room 136
Hartford, Connecticut 06106
Phone (203) 566-6682.

As a duly authorized representative of Hartford Hospital, I hereby consent to the terms and conditions of this Order and do hereby waive the right to appeal this Order pursuant to Section 22a-174-12 (b)(4) of the Regulations this 5th day of FEB, 1992.

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HARTFORD HOSPITAL

By: *Seal Toombs*

Title: *Dir. of ENGR*

Entered as a final order of the Commissioner of the Department of Environmental Protection this 14th day of Feb, 1992.

Timothy R. Keeney

Timothy R. E. Keeney
Commissioner
Dept. of Environmental Protection

Enc.

Certified Document No.

COMPLIANCE TIMETABLE

INTERNAL USE ONLY

TYPE OF SOURCE: MAJOR MINOR PROCEDURAL OTHER _____

PRIME CONTACT: Mr. Sid Toombs	SOURCE NAME: Hartford Hospital
TITLE OF CONTACT PERSON:	
SOURCE ADDRESS: 80 Seymour Street Hartford, Connecticut	PREMISE NO.: PREMISE CLIENT NO.: CLIENT NO. ORDER NO.: 7016A DATE ISSUED:
TELEPHONE NO.:	N.Y. NO.: DATE ISSUED:
VIOLATION SUBSECTION: 22a-174-24(d)	EQUIPMENT TYPE: Boilers and CCF-1 gas turbines
	REG. NO.: INSPECTOR AND NO.:

STEP	EVENTS LEADING TO COMPLIANCE	TIMETABLE	COMPLETED	VER.
1.	Respondent shall burn fuel containing no greater than 0.3% sulfur by weight in the 5 Bigelow Watertube boilers.	Upon the effective date of this Consent Order		
2.	Respondent shall implement the operating restrictions and recordkeeping requirements stipulated by paragraphs 1 through 4 of this Order for the 5 Bigelow Watertube boilers.	Upon the effective date of this Consent Order		
3.	Respondent shall obtain a certification of fuel sulfur content from the vendor for each truckload of fuel oil received and shall submit this documentation to the Department as described below. For each certification, Respondent shall record the date of delivery and shall document the total gallons of fuel oil received. To reduce paperwork, Respondent may, whenever feasible, copy a number of vendor certifications onto one reporting sheet. Respondent shall maintain records of hourly steam load and daily fuel usage for the 5 Bigelow boilers as further described in paragraph 4 of this Order. Respondent shall submit the information required pursuant to this step with the Progress Report form supplied by the Department. The reporting deadlines are as follows:	Upon the effective date of this Consent Order		

COMPLIANCE TIMETABLE

SOURCE NAME: Hartford Hospital	PREMISE NO.:	CLIENT NO.:
VIOLATION SUBSECTION: 22a-174-24(d)	ORDER NO.: 7016A	DATE ISSUED:

STEP	EVENTS LEADING TO COMPLIANCE	TIMETABLE	COMPLETED	VER.
	<p><u>Month</u> <u>Deadline</u></p> <p>January 1992 February 15, 1992</p> <p>February 1992 March 15, 1992</p> <p>Notwithstanding the above, any violation of the 0.3% fuel sulfur content limitation shall be immediately reported, in writing, to this Department.</p>			
4.	<p>After February 29, 1992, Respondent will continue to maintain the records required pursuant to Step No. 3 of this Compliance Timetable and will supply these records for Department review during facility inspections. Each year's records shall be maintained for a three year period and may be discarded after December 31st of that year. (For example, records for 1991 may be discarded December 31, 1994).</p>			
5.	<p>Respondent shall continue to utilize fuel oil containing a maximum of 0.3% sulfur by weight and shall continue to maintain the records required pursuant to Step Nos. 3 and 4 of this Compliance Timetable until such time as the Department approves the Respondent's modeling demonstration of compliance with the AAQS for sulfur oxides utilizing no greater than 1.0% sulfur content fuel (dry basis) and submits such demonstration to the EPA as a revision to Connecticut's SIP. Respondent may utilize the approved sulfur by weight fuel oil and/or begin implementation of the approved operating scenarios only after EPA approval of Respondent's demonstration of compliance.</p>			