

ILLINOIS POLLUTION CONTROL BOARD
March 22, 1985

DEPARTMENT OF THE NAVY,)
NAVY PUBLIC WORKS CENTER,)
)
Petitioner,)
)
v.) PCB 84-156
)
ILLINOIS ENVIRONMENTAL)
PROTECTION AGENCY,)
)
Respondent.)

LIEUTENANT GARY W. WISE, APPEARED ON BEHALF OF PETITIONER; and
MR. JOSEPH R. PODLEWSKI, JR., ATTORNEY, APPEARED ON BEHALF OF
RESPONDENT.

OPINION AND ORDER OF THE BOARD (by J. Theodore Meyer):

This matter comes before the Board on a October 18, 1984
petition filed by the Department of the Navy, Navy Public Works
Center (Navy), for a variance from the opacity limitations of 35
Ill. Adm. Code 212.123.* The Illinois Environmental Protection
Agency (Agency) filed its recommendation that the variance be

*The question has been raised whether it is necessary for
the Navy to seek a variance from the opacity standard in Section
212.123 given the decision by the Illinois Supreme Court
invalidating this standard in Celotex Corp. v. Pollution Control
Bd., 445 N.E. 2d 752 (Ill. 1983). The Celotex court held that
the earlier invalidation of former Rule 203(g)(1) (for failure of
the Board to consider technical feasibility and economic
reasonableness) required the invalidation of former Rule 202, now
Sections 212.121 to 212.125, because of their close and
substantial relationship. The Court, however, invalidated Rule
202 only insofar as it applied to emission sources governed by
Rule 203(g)(1).

Former Rule 203(g)(1), now recodified under subpart E as
Sections 212.201 to 212.205, regulates particulate matter
emissions from "fuel combustion emission sources." The
definitions of Parts 201 and 211 apply to Part 212 (see Section
212.112). Section 211.122 defines fuel combustion emission source
as "any furnace, boiler or similar equipment used for the primary
purpose of producing heat or power by indirect heat transfer".
Since the incinerator in question is primarily used to destroy
pathological wastes, and not to produce heat or power, the
opacity standard remains applicable to this source.

granted subject to conditions on January 7, 1985, pursuant to leave to file its variance recommendation instanter granted by Board order on January 10, 1985. Notice was given and hearing was held on February 8, 1985, as required by federal regulations. 40 C.F.R. 51.4 and 51.6 (1984). No members of the public attended the hearing.

The subject of this petition is a BRULE pathological waste incinerator owned and operated by the Navy and located at the Great Lakes Naval Base, Great Lakes, Illinois. The incinerator has a maximum capacity of 250 pounds per hour. Waste disposed of at this incinerator is generated by the Naval Hospital and Veteran's Administration Hospital and is typically composed of: plastic and cloth gowns, gloves, towels, sheets, human and animal tissue, waste from isolation wards, expired drugs and urine samples in four ounce plastic bottles. Between two and four tons of pathological waste and approximately three tons of general waste are incinerated per week.

The Navy possesses a valid operating permit for this incinerator but has been unable to operate it in consistent compliance with the opacity standard of 30% contained in 35 Ill. Adm. Code 212.123. As no alternative means of disposal exist, the Navy has committed to the construction of a new incinerator, which is expected to be operational by July 30, 1985. A variance for the present incinerator is requested in the interim.*

Opacity is an indicator of particulate emissions. The present incinerator was observed to violate the opacity limitations on three separate occasions (September 8, 1983; April 6, 1984; and July 13, 1984). The Navy has tried various operational changes to eliminate the opacity problem. These included: 1) increasing the water pressure in the breach; 2) slowing down material input; 3) increasing burn time from 12 to 16 hours per day; 4) adjusting the gas rate; 5) constant monitoring of flame adjustment to insure proper burn temperature; 6) installing two make-up air intake vents; 7) varying the temperature from 1400 F to 1800 F; and 8) ongoing upgrading and rebuilding of the emission stack. Unfortunately, these measures were unsuccessful and the Navy agrees that it cannot operate the incinerator within the required standards.

The Navy also investigated the possibility of incinerating the waste elsewhere. After contacting eleven hospitals, the Navy determined that Ravenswood Hospital, located in Chicago, was capable of accepting the waste but later advised the Agency that

*The Navy originally requested a variance to April 30, 1985. However, at hearing, the Agency introduced a letter from the Navy dated December 31, 1984 indicating a revised schedule for compliance by July 30, 1985. Accordingly, the Agency moved to amend its recommendation to provide for expiration of the variance on July 30, 1985.

federal competitive bidding procedures would prohibit award of such a contract. The Agency also investigated the feasibility of ceasing incineration and storing the waste until the new incinerator is operational. However, the Navy does not possess the capacity to store the waste on-site. As no other means of disposal exists, cessation of incinerator operations was not considered a viable alternative. Moreover, potential health hazards are created by storing pathological wastes.

Shields Township, where the naval base is located, is an attainment area for both the primary and secondary state and national ambient air quality standards for total suspended particulates (TSP). The TSP monitor closest to the naval base, approximately three miles northwest, is located in Waukegan at the North Shore Fire Station. In 1983, the 24-hour primary standard for TSP (260 ug/m^3) was exceeded once at this monitor (May 6, 1983 - 490 ug/m^3). As no stack tests are required to be performed on the incinerator, the Agency calculated probable particulate emissions based on the performance of similar pathological incinerators. This calculation yielded probable emissions of 4.78 lbs/hr TSP which is below the allowable limit of 12.9 lbs/hr TSP under 35 Ill. Adm. Code 212.181 (0.10 grains/SCF). Based on this calculation, the Agency concluded that any adverse environmental impact would be minimal if the variance were granted.

The Board finds that to require the Navy to cease incineration until the new incinerator is operational would impose an arbitrary and unreasonable hardship. Due to the short-term nature of this variance, any adverse environmental impact will be minimal. Moreover, any environmental and aesthetical harm caused by operating the incinerator is far outweighed by the potential public health hazard which would result if it were shut down. Because Section 212.123 was approved as part of the State Implementation Plan (SIP), grant of this variance will require a SIP revision. The Agency has concluded that this order, consistent as it is with their recommendation, should be approvable as such a revision. Accordingly, variance is granted from 35 Ill. Adm. Code 212.123 until July 30, 1985, subject to conditions.

This Opinion constitutes the Board's findings of fact and conclusions of law in this matter.

ORDER

The Department of the Navy, Navy Public Works Center is hereby granted a variance from 35 Ill. Adm. Code 212.123 for its pathological waste incinerator subject to the following conditions:

1. This variance shall expire no later than July 30, 1985.

2. The Navy shall attain compliance with the opacity limitation of 35 Ill. Adm. Code 212.123 through construction of a new pathological incinerator to be installed by June 7, 1985 and start-up activities completed by July 30, 1985.
3. Beginning with the first calendar month following the grant of the variance, the Navy shall submit to the Agency monthly reports detailing its progress in achieving final compliance and informing the Agency of any delays, whether incurred or anticipated, in meeting its compliance schedule. The Navy shall report the reasons for delay and the remedial action taken, if any. Copies of these reports shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
2200 Churchill Road
Springfield, Illinois

Illinois Environmental Protection Agency
Division of Air Pollution Control
Region I/FOS
1701 S. First Avenue
Suite 600
Maywood, Illinois 60153

4. The afterburner of the present pathological waste incinerator should be pre-heated to 1400 F or greater and maintained at that temperature during its operation throughout the period of the variance.
5. Within 45 days of the date of this Order, the Navy shall execute a Certificate of Acceptance and Agreement to be bound to all terms and conditions of this variance. Said Certification shall be submitted to the Agency at 2200 Churchill Road, Springfield, Illinois 62706. The 45-day period shall be held in abeyance during any period that this matter is being appealed. The form of said Certification shall be as follows:

CERTIFICATION

I, (We) _____, hereby accept and agree to be bound by all terms and conditions of the Order of the Pollution Control Board in PCB 84-156, March 22, 1985.

Petitioner

Authorized Agent

Title

Date

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 22nd day of March, 1985 by a vote of 6-0.

Dorothy M. Gunn
Dorothy M. Gunn, Clerk
Illinois Pollution Control Board