

ILLINOIS POLLUTION CONTROL BOARD
February 21, 1974

ABBOTT LABORATORIES)
PETITIONER)
)
)
V.) PCB 73-555
)
)
ENVIRONMENTAL PROTECTION AGENCY)
RESPONDENT)
)

OPINION AND ORDER OF THE BOARD (by Mr. Gardner)

This case comes to the Board on petition of Abbott Laboratories, filed December 26, 1973, for a variance from Rule 502 of the Air Pollution Control Regulations, to allow a one-time open burning of 250 pounds of sodium chips. The Agency recommends the variance be granted. No hearing was held.

Abbott Laboratories is a large pharmaceutical company located in North Chicago, Illinois.

Petitioner uses metallic sodium in the production of sodium pentothal and sodium nembutal.

The metallic sodium is a highly unstable metal. When exposed to air, it breaks into flame. It has a violent reaction when exposed to water. In order to store this material it is kept in drums of solvents (in this case kerosene).

The sodium Abbott proposes to burn is chips that break off 2.5 lb. bars during handling and processing. The Agency states in its recommendation that the scrap sodium is unusable by Abbott in normal processing (Agency Rec. P. 2).

Before such open burning was banned by Rule 502, Abbott burned the material on its property in North Chicago. In the past Petitioner only burned the material when the wind was from the west, taking any objectionable smoke and fumes over the lake. Abbott's property runs from the burning site to the lake.

Abbott proposes to make this a one-time operation. Abbott proposes to carry out this burn as follows:

1. Dig a pit on its north property.
2. The burn would be on a day when there was a brisk west wind. Abbott would contact weather forecasters to determine the time when wind conditions would be most favorable for the burning.
3. The material would be placed in the pit, where it would ignite spontaneously and burn furiously for 30 minutes.
4. Abbott would have its fire equipment and adequate personnel on hand to put out the fire if necessary.
5. Local officials will be notified in advance of the burn so as to put them on notice of the fire.

Open burning is the recommended method of disposing of the sodium (Laboratory Waste Disposal Manual, 2nd Ed., Disposal Procedure #3, September 1969, published by the Manufacturing Chemists Association). The Agency also agrees that open burning is the recommended method of disposal.

There are no community buildings located within 1/4 of a mile from the burn site.

Petitioner has considered two alternate methods for disposing of the sodium. The first is to dispose of it through their wastewater treatment plant. Petitioner alleges that no method was found to do this without great risk to personnel and equipment. The second method was to give the material to contract waste disposal operators, but Abbott considers the risk too great to allow the material to be handled by those not experienced with the dangerous characteristics of this material.

In any future request for variance, the Board will be very interested in any research Petitioner undertakes to develop an alternate method for sodium disposal.

This variance from Rule 502 is brought under Rule 505 of the Regulations, which provides for this burning of explosive wastes on petition to the Board for a variance.

Petitioner's hardship is that if not allowed to burn this material, he will have no safe way of disposing of the sodium. This of course could create a substantial risk if the sodium accumulates in large quantities.

Therefore the Board will grant Petitioner a variance from Rule 502 of the Regulations as provided for by Rule 505.

This Opinion constitutes the findings of fact and conclusions of law of the Board.

ORDER

IT IS THE ORDER of the Pollution Control Board that:

1. Abbott Laboratories is granted a variance from Rule 502 as authorized by Rule 505 of the Air Pollution Regulations to open burn accumulated metallic sodium chips, one time, at its plant in North Chicago, Lake County, Illinois.

2. Abbott Laboratories shall diligently follow the plan outlined in the body of this Opinion.

3. Abbott Laboratories shall perform the burning during the calendar year 1974.

4. Abbott Laboratories shall notify the Agency seven (7) days in advance of the burning and allow Agency personnel to attend the burning.

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, certify that the above Opinion and Order was adopted by the Board on the 21st day of February, 1974, by a vote of 5 to 0.

Christan L. Moffett