

ILLINOIS POLLUTION CONTROL BOARD  
August 30, 1973

BELDEN CORPORATION,	)	
	)	
Petitioner,	)	
	)	
v.	)	PCB 73-230
	)	
ENVIRONMENTAL PROTECTION AGENCY,	)	
	)	
Respondent.	)	

Richard A. Zachar and Thomas J. Regan on behalf of Petitioner;  
John E. Slattery, Assistant Attorney General, on behalf of  
Respondent.

OPINION AND ORDER OF THE BOARD (by Mr. Seaman):

Belden Corporation, operator of a magnet wire manufacturing facility in Chicago, seeks a variance from the provisions of Section 9(a) of the Environmental Protection Act to the extent said provision prohibits odorous emissions to enable the Petitioner to obtain an operating permit previously denied because of likely violation of said section. The original Petition for Variance filed May 30, 1973 sets forth that the facility is located on a three and one-half acre tract adjacent to the Belt Railroad where it has been since 1918, and presently employs 296 people. The permit application aforesaid was denied by letter of the Agency written February 7, 1973, which letter stated inter alia as follows:

"The Agency cannot grant your request for an operating permit for these operations where such operations may 'cause or threaten or allow the discharge or emission of any contaminant into the environment in any State so as to cause or tend to cause air pollution in Illinois, either alone or in combination with contaminants from other sources, or so as to violate regulations or standards adopted by the Board under this Act' (Environmental Protection Act) Section 9(a).

Petitioner proposes to install an emission reduction program which it represents when completed will bring the company into compliance with the hydrocarbon emission standards recently adopted by the Board, and to take effect December 31, 1973, and will at the same time reduce its odor emissions to an extent that Section 9(a) will no longer be violated.

Paper and textile covered copper and aluminum wire and enamel coated copper and aluminum wire are manufactured at the facility. The discharged contaminants which are responsible for the hydrocarbon and odorous emissions result from the wire enameling processes which are detailed in Exhibit C attached to the Petition.

Over the last three years, tests have been conducted on the various machines and equipment to ascertain the extent of emissions and the degree of abatement achieved by the installation of various control equipment. The tests indicate that under the best average conditions, the projected uncontrolled emissions from each emission source would not exceed regulatory limits set forth in Rule 205(f) of Chapter 2, whereas under what has been characterized "worst case conditions", three machine types, the H, M and K machines, would exceed allowable hydrocarbon emissions. Accordingly, as set forth in the original Petition, the following emission reduction program is proposed:

<u>Machine Type</u>	<u>No. of Machines</u>	<u>Emission Reduction Program</u>
H	1	Replace one (1) catalytic afterburner with a direct flame afterburner.
K	3	Replace three (3) catalytic afterburners with direct flame afterburners.
M	6	(A) Replace four (4) catalytic units with direct flame afterburners.  (B) Change Engineering and Operating Instructions on two machines limiting operation to lowest solvent load insulation (i.e., Heavy Armored Polythermaleze, see Summary Sheet 3).

Based upon the proposed abatement program, Petitioner represents that its total plant emission abatement efficiency would be 73.4% deemed of a sufficient degree to achieve both regulatory limits and adequately minimize odor emissions so as to no longer violate Section 9(a) of the Act. Essentially what the emission reduction program calls for is the installation of afterburner equipment which has been designed to be used in conjunction with its enameling machines and possesses the capability of continuous operation at 1400°F. The contemplated dates of installation for the equipment, both that which has been installed and to be installed was set forth in the original Variance Petition as follows:

<u>Machine No.</u>	<u>Date Installed</u>	<u>Date to be Installed</u>
I-4	2/25/73	
M-1	11/9/72	
K-2	3/2/73	
K-1	1/30/73	
H-1	3/30/73	
M-2	4/6/73	
M-3	5/4/73	
M-4		6/15/73
K-3		7/15/73

Assuming that this schedule was followed, all the foregoing installation would have already been accomplished. The installation cost is represented to be \$30,000. Petitioner asserts that denial of the variance and resulting denial of operating permits would constitute an undue hardship disproportionate with the burden on the community in permitting odors to be emitted during the period for which the variance is sought. Petitioner further represents that upon completion of the emission reduction program, the discernible odor from the plant will not be of such level or duration as to unreasonably interfere with enjoyment of life or property in the area involved. Variance is sought to permit the installation of abatement equipment and to enable the issuance of operating permits.

Subsequent to the filing of the original petition, a series of amendments was filed. The first amendment set forth that because of the additional availability of natural gas, the Petitioner was installing two additional direct flame afterburners for use on two I-type machines. In order to enable installation of the necessary equipment, variance is sought through December 31, 1973. The third amendment to the petition sets forth a modified compliance program which, in addition to the installation of afterburners as above set forth in the original petition, and the first amended petition provides for the installation of three additional direct flame afterburners on the I-machines to be completed by April 15, 1974, the retirement of six of the twelve F-type machines and nine of the twelve A-type machines prior to December 31, 1973, and the initiation of a comprehensive odor survey consisting of stack tests to obtain information concerning the level and type of odor being discharged under various operating conditions. In addition, Petitioner would conduct odor tests at the property lines to check on the effectiveness of the emission reduction program and establish procedures to preclude creation of odor emissions through failure or malfunction of the afterburners. The time schedule proposed including equipment already installed would be modified as follows:

<u>Machine No.</u>	<u>Date Installed</u>	<u>Date to be Installed</u>
I-4	2/25/72	
M-1	11/9/72	
K-2	3/2/73	
K-1	1/30/73	
H-1	3/30/73	
M-2	4/6/73	
M-3	5/4/73	
M-4	6/15/73	
K-3		7/28/73
I-3		December, 1973
I-5		January, 1974
I-1		February, 1974
I-2		March, 1974
I-6		April, 1974

Lastly, the Petitioner represents that total plant discharges of hydrocarbons will be reduced 45% and total plant discharges of cresylic acid believed to be the cause of creosol odor will be reduced an estimated 85%.

Hearing was held on the petition in Chicago on July 23, 1973. The testimony of witnesses for the Petitioner substantiated the allegations of the Variance Petition as amended. We believe the proposed compliance program to be an exceptionally good one, and its implementation will serve the dual purpose of bringing Petitioner's operation into compliance with the relevant hydrocarbon regulations at or close to the date when compliance is mandated and at the same time lessen the odor emissions to a degree that nuisance attributes will no longer be present. The variance, however, does not go to the hydrocarbon regulations, but is only with respect to the 9(a) odor potential which served as a basis for the Agency's permit denial. We will require that the Petitioner adhere to the time schedule that it has proposed and pursue the survey, testing, and maintenance procedures that it has already embarked upon.

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

IT IS THE ORDER of the Pollution Control Board that Belden Corporation be granted a variance from the provisions of Section 9(a) of the Environmental Protection Act with respect to odorous emissions until April 15, 1974 in order to enable Belden to make installation of afterburner and other equipment on its H, I, K and M machines as set forth in its Petition for Variance as amended. In addition thereto, Petitioner shall pursue its program of odor survey and testing as set forth in its Petition to ascertain the characteristics of odors detectable at its property lines and shall set forth a definitive procedure to preclude creation of odors through malfunctioning of afterburners, together with maintenance instructions and procedures.

Petitioner shall report to the Environmental Protection Agency on the 30th day of September and on the 30th day of each month thereafter through April 30, 1974 the status of its installation and abatement program and the test results observed pursuant to the foregoing procedures.

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 30<sup>th</sup> day of August, 1973, by a vote of 3 to 0.

Christan L. Moffett

