ILLINOIS POLLUTION CONTROL BOARD
February 27, 1975

MARBLEHEAD LIME COMPANY, Petitioner,	)	
vs.	)	PCB 74-146
ENVIRONMENTAL PROTECTION AGENCY, Respondent.	)	

Richard Elledge, Attorney for Marblehead Lime Company
Tom Casper and John Palincsar, Attorneys for the Agency

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

Marblehead Lime Company filed its Petition for Variance on April 24, 1974 seeking relief from Rule 203 (particulates) of the Air Pollution Control Regulations pending installation and operation of air pollution control equipment. The parties engaged in a number of pre-hearing procedures, including discovery. Marblehead waived its right, which exists under Section 38 of the Environmental Protection Act, to have its Variance Petition decided in 90 days. The matter finally went to hearing on September 23, 1974. During this hearing Marblehead sought to introduce testimony dealing with the economic feasibility of alternative control systems. This testimony was not allowed by the Hearing Officer. Marblehead also sought a continuance in order to prepare rebuttal testimony. This Motion was also denied.

On October 2, 1974 Marblehead filed a Motion to Reconvene the hearing alleging that the Hearing Officer had erred in excluding testimony on the economic feasibility of alternative control systems. Over Agency objection the Board ordered that one additional hearing be held at a time convenient to both parties but no later than December 1, 1974. For some reason the additional hearing was not held, but the Agency requested and the Hearing Officer ordered additional discovery.

On December 18, 1974 Marblehead filed a "Motion for Leave to Amend and for Consideration of the Merits of Said Petition". We infer that the company wished to avoid the rather extensive discovery then being sought by the Agency. The Marblehead motion

was in substance a request that the Board decide the case on the basis of the record which had already been established. It was in effect an abandonment of the company's request for additional hearing and the abandonment of further opportunity to introduce evidence regarding economic feasibility of alternative control systems. The Board granted the Marblehead request and will now consider the Amended Variance Petition and the record which was presented.

Marblehead operates a calcimatic kiln in Melrose Township, Adams County, Illinois for the production of pebble lime. The facility, also known as the "Quincy operation", is situated on Illinois Route 57 approximately 1 1/2 miles south of Quincy. Marblehead sold its entire Quincy operation to Calcium Carbonate Company while this action was pending. Under terms of the sale, Marblehead has leased the calcimatic kiln from Calcium Carbonate for an initial term of five years with the option to extend the lease for two successive five-year periods. Calcium Carbonate has agreed to provide Marblehead with sized limestone for the kiln.

Terms of the sale also provide that Marblehead shall indemnify Calcium Carbonate against all expenses, liabilities, losses, damages, injunction suits, fines, penalties, claims and misdemeano arising out of violation of any law, ordinance or regulation.

In the Amended Petition for Variance Marblehead seeks relief from Rules 203(a) and 203(b) in order to operate the kiln pending installation of control equipment and for an indeterminate period of time after installation of the control equipment.

This petition seeks relief from two mutually exclusive regulations for an indefinite period of time. Two problems are immediately apparent. Petitioner's operation is governed either by Rule 203(a) or Rule 203(b) but not both. Further, the Board is not authorized by the Environmental Protection Act to grant indefinite variances (See: Environmental Protection Act, Section 36).

Stipulated facts show that:

1. As of April 14, 1972 and for a period of 60 days thereafter, Petitioner had neither applied for nor been granted a variance from any operation at its Quincy facility,

2. Petitioner had not commenced actual on-site fabrication of equipment to control emissions from the calcimatic kilns, and

3. As of April 14, 1972 no control equipment was installed or operational for the calcimatic kiln.

These stipulated facts clearly show that Petitioner failed to meet the two conditions of Rule 203(c) by which it could have been allowed to comply with Rule 203(b) instead of the more restrictive Rule 203(a). Therefore, emissions from the calcimatic kiln are now subject to compliance with Rule 203(a). Rule 203(b) is not applicable.

The calcimatic kiln is a gas-fired rotary hearth lime kiln. Preheated limestone is fed onto the hearth which rotates at a slow speed under six burners. During one revolution of the hearth, limestone is calcined and then swept off the hearth as it approaches the charging station. The kiln processes an average of 1.5 tons of limestone per hour.

Petitioner's Chief Engineer, Charles Norton, testified that he had observed emissions from this kiln and numerous other Marblehead kilns over a period of years. In particular, he visually compared emissions from the Quincy kiln to emissions from Petitioner's South Chicago operation. These visual comparisons indicated that the Quincy emissions were more clear than the South Chicago emissions. Therefore, Norton believed that the Quincy emissions were in compliance with the limitations of Rule 203(b).

Agency employee, Ed Campbell, testified that he first informed Marblehead of possible violations in a letter dated May 12, 1972. Campbell and another Agency employee then visited the Quincy facility in June 1973. During this visit Campbell again informed Marblehead representatives that emissions from the kiln were, in his opinion, in violation of applicable emission limitations. Norton apparently persisted in his belief that visual comparisons did not show any violation. Because of these differences in opinion, Marblehead agreed to perform a stack test on the kiln emissions.

Two stack tests were conducted on September 29, 1973 by Marblehead personnel in the presence of two Agency observers. At a limestone feed rate of approximately 15,000 lbs./hr. the two tests showed emission rates of 359 and 464 lbs. of particulates per hour. These figures are in excess of the allowable emission rate. At this process weight rate Rule 203(a) allows emissions of 7.55 lbs./hr.

Norton testified that he had no reason to believe the emissions were this high before the test and that he was surprised by the results (R. 90). As a result of these tests, Marblehead decided to send a sample of the particulates to an outside consulting firm for a particle sized distribution analysis. This analysis indicated that about 87% of the particles were in excess of 10 microns. Norton testified that it was the "extremely large size" of the particles that caused his visual observation to be in error (R. 90).

Marblehead proposes to control emissions from the calcinatic kiln by installing two #50 series, 43A Buell cyclones in parallel. These particular cyclones were previously used at Petitioner's South Chicago facility for a number of years. Norton testified that the cyclones were refurbished in 1967 and removed from service in 1969 when Petitioner installed baghouses at the South Chicago facility. The parties have stipulated that the cyclones would be expected to have a collection efficiency of between 94% and 97% under normal operations. At this level particulate emissions would range from 14 to 28 lbs./hr.

Norton testified that Petitioner could install the two cyclones in six months on a "crash program". Routine installation of the two cyclones would take about one year. Some delay could be expected in the crash program if steel delivery were delayed. The cyclone installation project would cost about $25,000 exclusive of the value of the cyclones.

Petitioner has installed the baghouse control devices on every kiln it operates except for the Quincy kiln. Norton estimated that a baghouse for the Quincy kiln would cost between $6 and $8 per ACFM (R. 108) or $150,000 to $200,000 (R. 70). Agency Engineer Campbell disagreed with Norton's assessment stating that Norton's figures were high and that values of $5 to $7 per ACFM and totals of $75,000 to $120,000 were more realistic (R. 158). Campbell conceded that recent inflation would tend to favor the higher estimated cost.

The Quincy operation represents approximately 1 to 2% of Marblehead's total production capability. Clarence Jorgensen, Marblehead's Vice President of Operations, testified that fuel for the kiln was uncertain and that use of oil was questionable because of cost and possible contamination of product.

According to Marblehead fluctuating market conditions, kiln operating costs and kiln capacity would make the installation of a baghouse economically unreasonable. Ten or eleven men now employed to operate the kiln could no longer be employed by Marblehead if the kiln were shut down.

The Agency rejects Petitioner's contention that control efforts were not implemented at an earlier date because the company believed that emissions from the kiln were within the allowable rate. The Agency believes that visual observation, citizen complaints and Agency communications over the past several years should have warned Petitioner that it had a problem.

Only one citizen witness testified about problems caused by emissions from the Quincy facility. Mrs. Charles Dyer, who resides one block from the Quincy facility, testified that her husband had complained to Marblehead about the emissions "a long time ago" (R. 44). Mrs. Dyer is unable to open windows in her house

or hang out clothes to dry because of the emissions. She claimed that paint on their last three automobiles has been ruined by the emissions. Although the record shows the existance of several sources of particulates other than the Quincy kiln, Mrs. Dyer was positive in her identification of the kiln as the source of problems she and her husband have encountered (R. 47).

In this case, as in others (See: EPA v. Marblehead, PCB 73-223) we find that excessive particulate emissions from a limestone processing plant can cause nuisance and short term health effects in the community.

This variance cannot be granted based on the record presented. Emissions from the calcimatic kiln are clearly in violation of the allowable emission rate. Although Petitioner plans to install equipment to reduce these emissions, the record clearly shows that this equipment simply is not capable of bringing the Quincy facility into compliance.

Testimony shows that it would be technically feasible to install a baghouse on the kiln. The dispute boils down to the issue of whether or not the installation of a baghouse is economically reasonable. As the Agency asserts, the mere fact that installation of a baghouse would be more expensive to Petitioner than installation of the cyclones does not justify granting a variance. Section 3(b) of the Environmental Protection Act states that adverse effects upon the environment are to be fully considered and borne by those who cause them. The record shows that Petitioner seeks to operate in continuous violation of the environmental standard under the protection of the variance. We are unable to grant Marblehead that type of relief and would not be inclined to do so if we had the authority.

The record shows that Petitioner has the expertise and capability to design and install baghouse control devices. This capability is clearly shown by the fact that Petitioner has already installed at least 13 baghouse control devices at other installations throughout the country. We do not wish to cause unnecessary expenditures of funds. We favor compliance with environmental standards by the most inexpensive methods available. Petitioner should now re-evaluate its position in order to bring its emissions into compliance. We believe that Marblehead has both the engineering and financial capacity to do this.

We have carefully considered the character and degree of interference with the protection of health, welfare and physical property of the people; the social and economic value of the pollution source; the suitability of the pollution source to the area in which it is located; and the technical practicability and economic reasonableness of reducing the emissions. We conclude that Marblehead has not established its right to the variance requested.

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

ORDER

It is the Order of the Pollution Control Board that the Amended Variance Petition be denied without prejudice.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order was adopted this 27th day of February, 1975 by a vote of 4 to 0.

Christan L. Moffett