MEMORANDUM

SUBJECT: Request for Concurrence as to Applicability of PSD and NSPS Regulations to Marblehead Lime Company Proposed Lime Plant

FROM: Director, Division of Stationary Source Enforcement

TO: James O. McDonald, Director
    Enforcement Division - Region V

This is in response to your memo dated October 7, 1977, concerning the Marblehead Lime Company's proposed lime plant and its applicability to the PSD and NSPS regulations.

PSD

Since this facility has not operated since July 1972, and is now being re-opened as a lime manufacturing plant, I concur with your preliminary determination that this facility be subject to PSD. The PSD regulations require that any changes in emissions occurring over the baseline year of 1974 be reviewed for their effect on air quality. Since this facility was not in operation during 1974, its baseline must be assumed to be zero, and the increase in emissions attributed to its re-opening reviewed to satisfy the PSD requirements.

NSPS

I am in agreement with your determination that the lime hydrator is an affected facility, and therefore subject to the NSPS requirements. I also concur with your preliminary evaluation of the lime kiln and its status as an existing source. The cement kiln which was in operation in July 1972, is the apparatus which was altered so as to become a lime kiln. Since the cement kiln was in existence prior to the date of proposal for the lime standard, the lime kiln will be considered an existing source as defined in 60.2 (aa).
The only conditions under which this source could be subject to the NSPS would be either (1) if there was an increase in emissions and thus a modification or, (2) if the source were reconstructed satisfying the criteria in §60.15.

If you have any additional questions or comments, please contact Rich Biondi (755-2564) of my staff.

Edward E. Reich

cc: Jack Farmer, SDB
     Mike rL11rutna, SIB
DATE: OCT 7 1977

SUBJECT: Request for Concurrence as to Applicability of PSD and NSPS Regulations to Marblehead Lime Company Proposed Lime Plant

FROM: James O. McDonald, Director
Enforcement Division

TO: Edward E. Reich, Director
Division of Stationary Source Enforcement (EN-341)

Marblehead Lime Company is presently in the process of purchasing a facility located in the Detroit, Michigan, area. It has requested direction from this Region regarding the applicability of both the regulations for the Prevention of Significant Deterioration (PSD) and the proposed New Source Performance Standards (NSPS) for lime manufacturing plants. The unique facts of this case present issues not previously encountered in our enforcement program. We therefore request your concurrence in our initial determinations.

FACTS

The facility to be acquired by Marblehead Lime was formerly used to manufacture cement. It consists of a rotary cement kiln and associated equipment such as clinker handling and cooling and a mill for finish grinding. The kiln was last operated in July 1972. It is Marblehead's intention to convert the kiln operation from a cement process to one manufacturing high calcium and hydrated lime. The cement kiln would thus be converted to a lime kiln and a new lime hydrator would be built.

The site of this construction is a nonattainment area for particulate matter and an attainment area for sulfur dioxide. The Company has represented to us that in the case of both pollutants, projected emissions would be substantially less than those discharged by the cement manufacturing facility, in large part due to the use of a baghouse which should meet NSPS.

ISSUES

1. Is this proposed construction subject to the PSD regulations?

40 CFR 52.21(d) includes lime plants in its list of new sources subject to PSD review. This subsection, however, excludes sources which are modified, but do not increase the amount of sulfur oxides or particulate matter emitted.
Assuming that Marblehead can provide the necessary documentation, the major concern here is whether a net decrease in emissions can be based upon the July 1972 emissions, given both the five-year cessation of operation and the absence of the cement kiln emissions in the PSD baseline. The regulations make no mention of either of these factors.

However, we feel that they are important considerations in light of the PSD program's objectives and that they should be relied upon to support a conclusion of PSD applicability.

2. **Is the rotary lime kiln an "affected facility" subject to NSPS?**

On May 3, 1977, new source performance standards were proposed for lime manufacturing plants. 40 CFR Part 60, subpart HH. Both rotary lime kilns and lime hydrators are deemed "affected facilities".

Since the proposed lime hydrator is a completely new construction, it is clearly an affected facility and subject to the applicable standard. The lime kiln, however, appears to fall within the definition of "existing facility" found in 40 CFR 60.2(aa), since the cement kiln is an apparatus which can be altered in such a way so as to be an affected facility and its construction was commenced before the date of the standard's proposal. We have concluded that the kiln is an existing facility.

The Company may also be interested in attempting to bring the lime kiln within the modification exemption in 40 CFR 60.14(d), whereby a source owner or operator may demonstrate a net decrease in total source emissions inspite of the existing facility modification.

Please note that since the fixed capital cost of the converting the cement kiln will not exceed 50 percent of the fixed capital cost necessary to construct a new lime kiln, there is no reconstruction issue under 40 CFR 60.15.

It should be realized that the Company intends on installing a baghouse regardless of our determinations. However, if we conclude that Marblehead is subject to PSD, they may have difficulty in meeting the sulfur dioxide increment. In addition, applicability of NSPS will mandate emission monitoring on the lime kiln two years before it is required under the Michigan implementation plan.

The Company is understandably anxious for our determination. We therefore request, within ten days of your receipt of this memorandum, your concurrence in our conclusions that 1) the proposed lime manufacturing plant is a new source for PSD purposes 2) the lime kiln is an existing facility for NSPS purposes.