STATE OF MICHIGAN
DEPARTMENT OF NATURAL RESOURCES
OFFICE OF THE DIRECTOR

In the matter of administrative proceedings involving the **MARBLEHEAD LIME COMPANY, BRENNAN AVENUE PLANT**, a corporation organized under the laws of the State of Michigan and doing business at 9785 Brennan Avenue in the City of Detroit, County of Wayne, State of Michigan.	SIP No. 21-1993 Revised: 9/9/94

STIPULATION FOR ENTRY OF FINAL ORDER
BY
CONSENT

This proceeding results from provisions of the Federal Clean Air Act ("CAA"), 42 U.S.C. Section 7401 et seq., as amended by the Clean Air Act Amendments of 1990, P.L. No. 101-549, 104 Stat. 2399 (Nov. 15, 1990), that designate a portion of Wayne County as non-attainment for PM-10 (particulate matter less than 10 micrometers) and require a State Implementation Plan ("SIP"), based on legally enforceable control measures, that provides for a demonstration of attainment and maintenance of the primary National Ambient Air Quality Standard ("NAAQS") for PM-10 in Wayne County. Further, pursuant to Section 15 of the Michigan Air Pollution Act, 1965 PA 348, as amended ("Act 348"), companies in the standard industrial classifications listed in 15(1), and which are located in areas listed in Table 36 of R 336.1371 of the Michigan administrative code, are required to develop and implement an approved fugitive dust control operating program and to have the program embodied in a legally enforceable order or as part of an approved permit to install or operate.

The Marblehead Lime Company ("Company") owns and operates the Brennan Avenue Plant ("Plant"), which is a lime manufacturing facility, located at 9785 Brennan Avenue, City of Detroit, County of Wayne, State of Michigan. The Michigan Department of Natural Resources ("MDNR") alleges that the Plant is a significant source of fugitive dust emissions which contribute to the non-attainment problem. Further, the requirements for the control of fugitive dust, set forth in Section 15 of Act 348, apply to the Plant.

The Company and the MDNR stipulate as follows:

1. The Air Pollution Act, 1965 PA 348, as amended, ("Act 348"), MCL 336.11 et seq; MSA 14.58(1) et seq is an act to control air pollution in this state.

2. The Director of the MDNR ("Director") is authorized pursuant to Section 5 of Act 348 to administer and enforce all provisions of Act 348.

3. The Director has delegated authority to the Air Quality Division ("AQD Chief") to enter into the Consent Order.

4. The resolution of this matter by a Consent Order pursuant to Section 16c of Act 348 is proper and acceptable.

5. This Consent Order becomes effective on the date of execution ("effective date of this Consent Order") by the AQD Chief.

6. The emissions of fugitive dust from the Plant are subject to the opacity limitations and prohibitions contained in Sections 15 and 15a of Act 348. The particulate matter and fugitive dust emissions from the Plant must not cause or contribute to a violation of the PM-10 NAAQS. Further, the CAA and Act 348 require the application of all reasonably available control measures ("RACM") for the control of PM-10 emissions.

7. This Consent Order is designed to ensure attainment and maintenance of the PM-10 NAAQS, compliance with Sections 15 and 15a of Act 348, and compliance with the RACM requirements of the CAA and Act 348.

COMPLIANCE PROGRAM

8. On and after the effective date of this Consent Order, the Company shall fully comply with the provisions and requirements of the fugitive dust control operating program and Recordkeeping for Fugitive Dust Sources Addendum, which is attached as Exhibit A, incorporated by reference, and made an enforceable part of this Consent Order.

RECORDKEEPING AND REPORTING

9. On and after the effective date of this Consent Order, the Company shall keep records as specified in Exhibit A.

10. On and after the effective date of this Consent Order, the records required pursuant to this Consent Order shall be kept on file at the Company for a period of at least two (2) years, and shall be made available to MDNR upon written or verbal request.

11. Beginning with the calendar quarter starting after the effective date of this Consent Order, and quarterly thereafter, the Company shall submit to MDNR a report identifying each day in which any emission limit, operational requirement, or recordkeeping requirement, as specified in Exhibit A, was not met. This report shall, for each instance, explain the reason that the emission limit, operational requirement, or recordkeeping requirement was not met, the duration of the event, the remedial action taken, and a description of the steps which were taken to prevent a recurrence. The reports shall be submitted within

30 days following the end of the calendar quarter in which the data were collected.

GENERAL PROVISIONS

12. Upon entry, this Consent Order, along with other supporting documentation required by the United States Environmental Protection Agency ("U.S.EPA"), shall be submitted to the U.S.EPA for approval as a revision to the Michigan SIP in accordance with Part D, Section 171 et seq., of the Federal Clean Air Act, as amended by Section 105 of the Clean Air Act Amendments of 1990. This Consent Order shall become effective immediately upon entry, except that this Consent Order shall have no effect on the federally-approved SIP unless and until the submitted SIP revision request is formally approved by the U.S.EPA.

13. Upon entry of this Consent Order, the Company may change it's processes, modify the fugitive dust control program contained in Exhibit A, or modify the particulate emission control program contained in Exhibit B ("Control Programs"), in accordance with the following:

A. Process Change

(1) The Company may change it's operations or processes which are sources of particulate and fugitive dust provided all of the following conditions are met:

(a) The provisions of the Control Programs continue to apply to the subject operation or process;

(b) The change does not result in an increase in the level of fugitive dust or particulate emissions;

(c) The change is approved.

(2) The Company shall submit to MDNR a written description of the proposed change and how it meets the requirements of 13(A)(1).

(3) The MDNR shall approve or disapprove the proposed change, in writing, within 45 days from receiving a proposed change which meets the requirements of 13(A)(1).

(4) Should the MDNR disapprove the proposed change, the disapproval must describe the specific reasons for the decision and must be forwarded to the Company.

B. Control Program Revision

(1) The Company may revise the Control Programs provided both of the following conditions are met:

(a) The Company demonstrates*, in writing, that the proposed revision does not result in an increase in the level of fugitive dust or particulate emissions and submits the demonstration to the MDNR for approval.

(b) The revision is approved.

(2) The MDNR shall approve or disapprove the proposed revision, in writing, within 45 days from receiving a proposed revision using an applicable U.S.EPA approved method to demonstrate the proposed revision meets the requirements of 13(B)(1).

(3) Should the MDNR disapprove the proposed revision, the disapproval must describe the specific reasons for the decision and must be forwarded to the Company.

C. U.S.EPA Notification

Upon approval of a change pursuant to subsection A above, or a substitution of a control measure pursuant to subsection B above, MDNR shall notify U.S.EPA, in writing, of the revised provisions which are enforceable for the facility.

D. Minor Modification

Upon adoption by the MDNR, and upon approval by U.S.EPA, of operating permit rules to implement the Permit Modification provisions recited at 40 CFR 70.7 (e), the Company may modify a fugitive dust or particulate emission source referred to in this Consent Order according to the terms and conditions contained in the operating permit rules.

E. Minor Modification Approval

Upon MDNR approval of a minor modification pursuant to subsection D above, the MDNR shall submit the approved minor modification to U.S.EPA as a proposed revision to the Michigan SIP.

F. Other Applicable Requirements

Any process change, control program revision, or minor modification made pursuant to this Paragraph does not affect the company's obligation to obtain a permit to install or operate required by Federal law or regulation, or contained in Part 2 of the Air Pollution Control ("APC") Rules and any other applicable requirement contained in the APC Rules or Act 348.

* - Demonstrations made pursuant to 13(B)(1)(a) involving chemical dust suppressant applications on unpaved roads shall be made using only petroleum resins, asphalt emulsions, or acrylic cements unless otherwise explicitly provided for by the applicable U.S.EPA approved SIP or U.S.EPA approved method.

14. This abatement program is not a variance subject to the 12 month limitation specified in Section 22 of the Air Pollution Act, being MCLA 336.32.

15. The provisions of this Consent Order shall be binding on the parties to this action, their officers, servants, employees, and attorneys, and on those persons in active concert or participation with them who receive actual notice of this Consent Order. In the event the Marblehead Lime Company sells or transfers the Brennan Plant, it shall advise any purchaser or transferee of the existence of this Consent Order in connection with such sale or transfer. Within 30 calendar days, the Marblehead Lime Company shall also notify MDNR Staff, in writing of such sale or transfer, the identity and address of any purchaser or transferee, and confirm the fact that notice of this Consent Order has been given to the purchaser or transferee. The purchaser must provide written agreement, to the Company, to assume the compliance responsibilities of the Consent Order and provide a copy of the agreement to the MDNR Staff.

16. Pursuant to the requirements of Section 5h of Act 348, the public was notified of a 30-day public comment period on this Consent Order which began on March 1, 1993 and a public hearing on this Consent Order which was held on March 30, 1993.

17. Section 16e of Act 348 may serve as a source of authority but not a limitation under which this Consent Order may be enforced. Further, the Michigan

Environmental Protection Act ("MEPA"), 1970 PA 127, MCLA 691.1201 et seq; MSA 14.528(201) et seq; and all other applicable laws may be used to enforce this Consent Order.

I, the undersigned, who is signing this Stipulation and Order for the Company, certify that I am fully authorized by the Company to enter into this Consent Order and to execute and legally bind the Company to it.

Approved as to Form and Content:

EUGENE J. PENMAN VICE PRESIDENT - OPERATIONS

MARBLEHEAD LIME COMPANY
BRENNAN PLANT

By: Eugene J. Penman

Dated: 10/10/94

The above signatory subscribed and sworn to before me this 11th day of October, 1994.

"OFFICIAL SEAL"
Joanne Raczkiewicz
Notary Public, State of Illinois
My Commission Expires 4/29/97

Joanne Raczkiewicz
Notary Public

Approved as to Content:

Dennis M. Drake, Acting Chief
AIR QUALITY DIVISION
DEPARTMENT OF NATURAL RESOURCES

Dated: 10/12/94

Approved as to Form:

A. Michael Leffler
Assistant Attorney General, In Charge
NATURAL RESOURCES DIVISION
DEPARTMENT OF ATTORNEY GENERAL

Dated: 10/11/94

FINAL ORDER

The Chief of the Air Quality Division having had opportunity to review the Consent Order and having been delegated authority to enter into Consent Orders by the Director of the Michigan Department of Natural Resources pursuant to the provisions of the Air Pollution Control Act;

IT IS ORDERED that this Consent Order is approved and shall be entered in the record of the MDNR as a Final Order.

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

Dennis M. Drake, Acting Chief
Air Quality Division

Dated: 10/12/94

EXHIBIT A
FUGITIVE DUST CONTROL PLAN
MARBLEHEAD LIME COMPANY--BRENNAN AVENUE

1. Facility Name and Address:

Marblehead Lime Company
Brennan Avenue Plant
9785 Brennan Avenue
Detroit, Michigan 48209

Mailing Address:

P.O. Box 11818
River Rouge, MI 48218

2. Name and Address of Responsible Person:

Frank M. Werderitsch
Director, Environmental Services
Marblehead Lime Company
4226 Lawndale Avenue
Lyons, Illinois 60534

3. Summary of Source Descriptions and Control Measures:

A. Loading or Unloading of Open Storage Piles:

1) Limestone - Limestone is crushed, sized and washed prior to shipment to the Brennan Avenue facility. Consequently, the amount of material less than 200 mesh is less than 1%. This factor in addition to the fact that the material is wet when it is received eliminates fugitive emissions during the unloading sequence. When the plant is operating the limestone is received in lake boats. The lake boats unload using adjustable height conveyors to minimize the drop distance of the material. Normal pile weathering further reduces the potential for fugitive emissions. Moisture causes aggregation and concentration of the less than 200 mesh material to the surfaces of the larger particles. Any significant rainfall soaks the interior of the stockpile, and the drying process is very slow. The material is moved by front-end loaders to a stone hopper which feeds a conveyor which carries the stone to enclosed bins in the plant. The limestone conveyors are completely enclosed from the stone hopper throughout the plant. During movement by the front-end loaders the material is wet.

(Note: Limestone moisture content 3%. Water applied to pile at 30 gallons per minute.)

2) Coal - When the plant is operating the inactive coal storage pile is treated with Rezosol 5411-B crusting agent. The crusting agent is applied at such a frequency (once per quarter) so as to maintain a crust over the inactive area of the pile. The application rate will be four (4) gallons per 100 square feet of pile area. The disturbed pile portion will be treated within two (2) weeks. The coal storage pile will be small in size, with a maximum of 8,000 tons at any one time and an average height of 18-20 feet.

(Note: Coal moisture 8%.)

B. Transporting of Bulk Materials:

Lime and Kiln By-Product - Both of these materials are transported from our facility in open bed haul trucks which are not the property of Marblehead Lime Company. These trucks are required to be equipped with tarpaulins to cover the bed of the truck. Covering of the truck is performed either prior to, during, or after weighing on the plant scales. The trucks are loaded in our loadout area which is equipped with telescoping hoods that are lowered over the truck bed. These devices have negative pressure pick-up ports vented to a dust collector which removes displaced air from the truck as material is loaded. The method used for cleaning the wheels and bodies of the trucks is water washing. The responsibility for this cleaning is the individual driver of the truck. It is also his responsibility to maintain the truck bodies in good condition to assure no leakage occurs during shipment. Truck wheel and body clean-up takes place in the designated wash area.

The loadout area housekeeping and maintenance is the responsibility of the individual operator for each shift. Spillage that occurs during loadout will be cleaned immediately. A sweeper/vacuum vehicle is located permanently at the plant for use in cleaning plant roadways. The supervisors of each department will assure the housekeeping procedures are followed. In addition to the open bodied trucks, there are some blower type trucks hauling lime and kiln by-product from the Brennan Avenue facility. These trucks are loaded using a telescoping hood vented to a dust collector which controls the dust laden displaced air. Since these trucks are completely enclosed, no tarpaulin covers are required, otherwise the same clean-up procedures are performed. The plant roadway speed limit is 5 mph. Stop signs have been installed at various locations in the plant to assure that the speed limit is not exceeded.

C. Outdoor Conveying - Enclosures:

1) Limestone - The material has a high moisture content during conveying from the storage pile to the large bins in the plant area. The conveyor is completely enclosed from the storage pile stone hopper to the plant storage bins. Venting of the transfer points to a dust collector is not necessary due to the moisture content of the limestone.

2) Lime - All conveying of the lime product is completely enclosed. Transfer points are under negative pressure and vented to fabric filter dust collectors.

3) Material Collected by Kiln Gas Filter - This material is pneumatically conveyed to a storage bin. From the collection point to the storage bin this conveying system is completely enclosed. The displaced air in the storage bin is vented to a fabric filter dust collector.

D. Roads and Lots:

1) Paved areas - The 0.4 mile plant roadway loop that is used by all vehicles coming into the property is completely paved. An Elgin, Model Pelican regenerative air with one gutter broom street sweeper/vacuum vehicle is located at the River Rouge plant and is used at least two (2) days per week to clean the plant roadway loop. In addition, the plant roadway loop is flushed with a high pressure water hose at least three (3) days per week. However, as per AP-42, on days when precipitation exceeds 0.01 inch, the roadway cleaning activities will not be performed unless they are deemed necessary. The parking lots on the premises which are used by plant employees are smaller in total size than the 500 square meter limitation requiring paving. Nevertheless the employee parking lots are paved and vacuum swept once per two (2) weeks.

2) Unpaved Roadways - The front-end loader is generally the only vehicle using the unpaved roadways in the stockpile area. They will be treated with a 38% solution of calcium chloride at a rate of .33 gallons per square yard once every six (6) weeks.

E. Housekeeping Procedures:

1) High pressure water clean-up - A clean-up program will be instituted where water under high pressure is used to clean inside walls and other appropriate areas. Points of accumulation of dust on the outside of the firing building will be cleaned using this method.

2) Product conveyors, transfer points, etc. - A daily inspection will be performed with points of accumulation of dust cleaned immediately.

3) Rotary kiln gas filter (Baghouse) - The kiln gas filter will be inspected daily. Points of accumulation of dust will be cleaned immediately. A clean-up program will be instituted where water under high pressure is used to clean inside walls and other appropriate areas. Points of accumulation of dust on the outside of the building will be cleaned using this method.

4) Screening and storage area - The screening and storage area will be inspected daily with points of accumulation of dust cleaned immediately.

5) Plant grounds - the roadways, scale area, and general grounds will be inspected daily. Points of accumulation of dust will be cleaned immediately.

(Note: See attached DNR required Recordkeeping for Fugitive Dust Sources Addendum for further information.)

ADDENDUM

RECORDKEEPING FOR FUGITIVE DUST SOURCES

REQUIRED RECORDS

UNPAVED ROADS/LOTS	1. DATE OF TREATMENT 2. CONTROL MEASURE USED 3. RESPONSIBLE PERSON'S INITIALS 4. NAME OF PRODUCT APPLIED 5. AMOUNT OF SOLUTION/WATER APPLIED 6. DILUTION RATIO 7. ROAD SEGMENT/LOT IDENTIFICATION
PAVED ROADS/LOTS	1. DATE OF TREATMENT 2. CONTROL MEASURE USED 3. RESPONSIBLE PERSON'S INITIALS 4. ROAD SEGMENT/LOT IDENTIFICATION
STORAGE PILES/MATERIAL HANDLING	1. DATE OF TREATMENT 2. CONTROL MEASURE USED 3. RESPONSIBLE PERSON'S INITIALS 4. DILUTION RATIO (IF APPLICABLE) 5. AMOUNT OF DUST SUPPRESSANT/WATER APPLIED 6. IDENTIFICATION OF PILE/MATERIAL HANDLING OPERATION TREATED 7. EQUIPMENT USED

OPTIONAL RECORDS

WEATHER CONDITIONS	1. PRECIPITATION 2. TEMPERATURE 3. WIND DIRECTION AND VELOCITY