

STATE OF MICHIGAN
DEPARTMENT OF NATURAL RESOURCES
AIR POLLUTION CONTROL COMMISSION

)
In the matter of administrative proceedings)
involving the EDWARD C. LEVY COMPANY,)
DETROIT LIME COMPANY, a corporation)
organized under the laws of the State of)
Michigan and doing business at 125 South)
Dix Avenue in the City of Detroit, County)
of Wayne, State of Michigan.)

SIP No. 15-1993
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 Edward C. Levy Company ("Company") owns and operates the Detroit Lime Company ("Plant"), which is a lime processing plant, located at 125 Dix 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 and particulate 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, and the particulate emission control program, which are attached as Exhibit A and B, respectively, 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 and Exhibit B.

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 Exhibits A or B, 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 its 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 its 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 Edward C. Levy Company sells or transfers the Detroit Lime Company, 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 Edward C. Levy 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:

EDW. C LEVY Co./DETROIT LIME Co.

EDWARD C. LEVY COMPANY
DETROIT LIME COMPANY

By: James Braden

Dated: 9/22/94

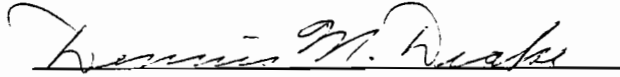
The above signatory subscribed and sworn to before me this 22nd day of September, 1994.

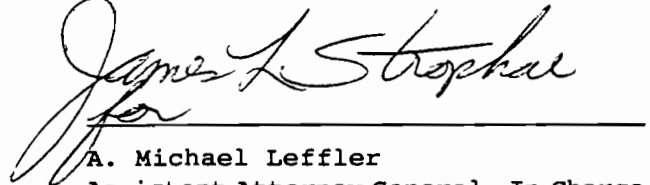
Nancy Ann Hughes
Notary Public

NANCY ANN HUGHES
NOTARY PUBLIC STATE OF MICHIGAN
WAYNE COUNTY
MY COMMISSION EXP. SEPT 3, 1996

Approved as to Content:

Approved as to Form:





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

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

Dated: 10/12/94

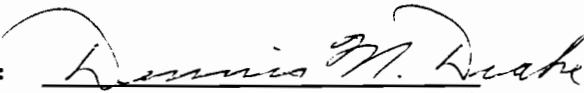
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FINAL ORDER

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

By: 
Dennis M. Drake, Acting Chief
Air Quality Division

Dated: 10/12/94

EXHIBIT A
FUGITIVE DUST CONTROL PLAN
DETROIT LIME COMPANY

1. Facility Name and Address:

Detroit Lime Company
125 South Dix Avenue
Detroit, Michigan 48217

2. Name and Address of Responsible Person:

Jim Bradner
Detroit Lime Company
125 S. Dix Ave
Detroit, Michigan 48217

3. Summary of Source Descriptions and Control Measures:

A. Process Description

Detroit Lime Company operates two coal fired preheater equipped rotary kilns, designed to produce a maximum of 1686 tons of high calcium lime per day. Lime is made by heating limestone to extremely high temperatures (1600 to 1700 degrees F) in order to force the disassociation of carbon dioxide from limestone, thus leaving CaO as product. The limestone is introduced into the system at the approximate rate of 288,000 pounds per hour. Coal for the process is fired at the approximate rate of 29,000 pounds per hour.

Both coal and limestone are delivered by self-unloading boats. A system transports the material to a stockpile area for future use. The rotary kiln draws limestone from storage through an underground tunnel to a covered belt system, then discharges the limestone into a storage bin located above the kiln preheater. The stone travels down through the preheater where it is fed into the kiln by internal push type feeders. The stone is heated as it progresses towards the discharge end of the kiln and is converted into lime. The heat for the process is provided by the combustion of pulverized coal and/or natural gas. The coal is loaded into a truck, by front endloader, to be transported to a coal hopper and then conveyed by means of an enclosed elevator and covered belt conveyor to a storage tank.

From the coal storage tank, the coal is continuously fed by a gravimetric feeder to a coal pulverizer, which is a part of the enclosed coal system. The coal pulverizer, or coal mill, grinds the coal into a fine powder and injects it into the kiln via a burner pipe at the discharge end. The hot gases in the rotary kiln travel in the opposite direction of the limestone. The hot, high calcium lime is collected at the discharge end of the kiln in a contact cooler.

A centrifugal fan forces air through the cooler in direct contact and opposite to the lime, thus cooling the lime to approximately 150

degrees F. The hot air from the cooler is drawn into the kiln by an induced draft fan and forms part of the combustion air. The cooler is a heat recuperative device, recovering over 90% of the heat from the lime, helping to conserve energy.

The lime is discharged from the cooler by a vibratory pan feeder to two enclosed belt conveyors which transport the lime to a surge bin that feeds into the storage system. The conveyor transfer points are all vented to a dust collection system.

The temperature of the gases leaving the rotary kiln is approximately 2000 degrees F. These gases are cooled as they pass through the preheater before entering the induced draft fan. The preheater is a conservation device that allows the incoming cold limestone to absorb approximately 75% of the energy from the waste gas stream. The gases are stripped of particles by a primary collector or multiclone and a final fabric filter. The filtered gases are exhausted to the atmosphere.

Flue dust, collected in the multiclone and baghouse, is transferred via screw conveyors to a surge tank. From the surge tank, the flue dust is pneumatically transferred to a storage tank and subsequently discharged by the flue dust load-out system into bulker trucks for removal from the plant. The flue dust handling system is equipped with a fabric filter dust collector to control particulate emissions.

The lime fines from the lime process are stored in a silo. A portion of the fines are conveyed by screw conveyors to the briquette building where they are pressed into briquettes for resale. The remaining portion of the fines are diverted to the granular screening operation, also by screw conveyors, to be screened into two different sized materials for resale. Both of these operations are vented to baghouses.

Waste lime generated throughout the plant is collected and mixed with water in the waste lime shed ("Chapel"). This mixed material is then loaded by front endloader into covered trucks for transport to an approved landfill. Emissions from the mixing operation in the Chapel will be controlled by a baghouse, when same is approved by the Division.

B. Process Emissions (crushing, screening, conveying, transfer, and packaging)

(1) Crushing and screening operations are enclosed.

(2) Limestone reclaim conveying and transferring is accomplished by enclosed conveyors.

(3) Lime conveying and transferring by enclosed conveyors and transfer points are vented to a baghouse.

- (4) Coal reclaim conveying and transferring by enclosed conveyor.
- (5) Packaging is enclosed and vented to a baghouse.
- (6) Shipping is enclosed.

C. Stockpile Areas - Coal and limestone are stockpiled on the property.

Limestone - The limestone is sprayed with water at the rate of 30 gallons per minute as it is off-loaded into the receiving hopper from the self-unloading delivery boats. It is then transferred to the stockpile area by conveyor. The stockpiled limestone is reclaimed for use in the plant by means of an underground tunnel to covered conveyors.

Coal - The coal is sprayed with water at a rate of 15 gallons per minute as it is off-loaded into the receiving hopper from the self-unloading delivery boats. It is then transferred to the stockpile area by covered conveyors. After stockpiling, each boatload of coal has an Wayne County Air Pollution Control Division approved dust suppressant applied at a rate of 0.12 gallons per square yard of surface area in order to maintain a minimum moisture content of three (3) percent. Load-out emissions are controlled by limiting the drop height of the front endloader bucket to a maximum of two (2) feet above the side of the Euclid (truck).

- D. Unpaved Roads - The unpaved roads will be treated with an approved dust suppressant, such as calcium chloride, once (1x) per month at an application rate of 0.45 gallons per square yard (with a 38% solution of calcium chloride). Speed limit on unpaved roads is posted and limited to 15 mph.
- E. Paved Roads - The paved roads will be wet-vacuum swept three (3) times per week with supplemental water flushing twice (2x) per week. Paved areas will be dry vacuumed five (5) times per week or more often if necessary. Track-out will be cleaned up daily when it occurs. Speed limit on paved roads is posted at 15 mph.

(Note: See attached DNR required Recordkeeping for Fugitive Dust Sources Addendum for additional 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

EXHIBIT B

DETROIT LIME COMPANY

PARTICULATE EMISSION CONTROL PROGRAM

1. The new rotary lime kiln (RK2) shall be limited to a maximum daily production rate of 1128 tons of lime per calendar day. A written log of the amount of lime produced per calendar day shall be kept on file for a period of at least 2 years.

2. The particulate emission rate from the new rotary lime kiln shall not exceed .15 lbs. of particulate per ton of limestone feed.

3. Monitoring and recording of emissions and operating information is required to comply with the Federal Standards of Performance for New Stationary Sources as specified in 40 CFR, Part 60, Subparts A and HH. All source emissions data and operating information shall be kept on file for a period of at least two years and made available to the Air Quality Division upon request.

4. Verification of the particulate emission rate from the new lime kiln by testing, at owner's expense, in accordance with 40 CFR, Part 60, Subparts A and HH may be required for operating approval. Verification of emission rates includes submittal of a complete report of the test results. Stack testing procedures and the location of stack testing ports shall be in accordance with the applicable federal Reference Methods, 40 CFR, Part 60, Appendix A. No less than 45 days prior to testing, a complete stack testing plan must be submitted to the Air Quality Division prior to testing. The results of the stack test shall be submitted within 120 days of the written requirement for such verification.

5. The new rotary kiln and the existing vertical kiln shall not operate simultaneously during any particular calendar day. Records shall be kept, on a daily basis, which identify the lime kiln operating that day.