# STATE OF MICHIGAN DEPARTMENT OF NATURAL RESOURCES OFFICE OF THE DIRECTOR

In the matter of administrative proceedings ) involving the ASPHALT PRODUCTS COMPANY, )
PLANT 5A, a corporation organized under the )
laws of the State of Michigan and doing )
business at 670 S. Dix in the City of )
Detroit, County of Wayne, State of Michigan.)

SIP No. 5-1993 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 Asphalt Products Company ("Company") owns and operates Asphalt Plant 5A ("Plant"), which is a drum-mix asphalt facility, located at 670 S. Dix, 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.
- 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 record keeping 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 record keeping 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. <u>Control Program Revision</u>

- (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>U.S.EPA Notification</u>

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 Asphalt Products Corporation sells or transfers Asphalt Plant 5A, 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, Asphalt Products Corporation 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:

ASPHALT PRODUCTS CORP. PLANT SA

ASPHALT PRODUCTS COMPANY, PLANT 5A

The above signatory subscribed and sworn to before me this 3 day of 1994.

Notary Public Country
Up! 5-/1/16

Approved as to Content:

Dennis M. Drake, Acting Chief

AIR QUALITY DIVISION

DEPARTMENT OF NATURAL RESOURCES

Approved as to Form:

A. Michael Leffler

Assistant Attorney General, In Charge

NATURAL RESOURCE DIVISION

DEPARTMENT OF ATTORNEY GENERAL

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

Air Quality Division

# EXHIBIT A FUGITIVE DUST CONTROL PLAN ASPHALT PRODUCTS CORPORATION - APCO 5A

1. Facility Name and Address:

Asphalt Products Corporation APCO 5A 670 South Dix Detroit, Michigan 48217

2. Name and Address of Responsible Person:

Denny West APCO 5A 670 S. Dix Detroit, Michigan 48217

3. Summary of Source Descriptions and Control Measures:

Fugitive Emission Sources or Activities Applicable to this Program:

- A. Process Fugitive Emissions
- B. Storage Pile Activity
- C. Paved Roadways
- D. Miscellaneous Activities
- A. Plant Process Description

APCO 5A is a 500 TPH, Drum-Mix Plant, which operates April through November annually. Annual production does not exceed 300,000 tons. The plant has a separate Air Use Permit which conforms to New Source Performance Standards. All emission points are vented to a fabric filter collector with a collection efficiency of 99%. The collected contaminants are recycled into the mix as a mineral filter.

In the drum-mix plant (Enclosure 1), the process starts with loading-in of coarse aggregate and sand to the aggregate storage bins. This is the only source of fugitive emissions. The aggregate and sand is proportioned onto a conveyor belt which feeds the material across a vibrating scalping screen. No emissions result in the screening process since the screen size permits smooth passage of the material. The material is conveyed into the flame end of the dryer-drum, heated to mix temperature, then mixed with asphalt cement which is introduced into the lower half of the drum. In re-cycle (RAP) production, the crushed RAP material is introduced at mid-drum prior to the addition of the asphalt cement. The product is then conveyed via a slat conveyor to storage silos.

B. Storage Pile Characteristics:

Storage piles maintained at the plant consist of crushed asphalt (RAP), sand, and coarse aggregates. Storage pile area at the plant is limited

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covering approximately 2.1 acres. Due to the constrained storage area, delivery of sand and aggregate is continuous and the quantities in storage subject to wind erosion are minimal. Following is a tabulation of the storage piles maintained, and the characteristics of the materials:

<u>Material</u>	As Received Moisture Content %	% Passing 200 Mesh	Avg. Pile Size (Tons)
3CS (sand)	4.5	1	1750
1/2" Down S.F.	5.5	5.5	1250
20AA (3/4" Down)	6	5.5	1750
31A B.F. (1/2" x 8)	4	2	500
25A B.F. (3/4" x 8)	4		1000
RAP (3/4" Down)	5	1.5	5000

The Asphalt Plant operates 5 days per week, April \_\_ through November \_\_, annually.

### C. Paved and Unpaved Roads

Traffic in the plant is restricted to one-way only, with defined entrance and exit gates. The maximum distance that a vehicle may travel is 0.10 miles. While the entire facility is paved, the storage pile area is considered and will be treated as an unpaved area.

Paved Roadway: The principal traffic using the paved areas of the plant are Flo-boy trucks (50 ton capacity) which transport the hot asphalt mix.

Unpaved Roadway: Gravel trains delivering sand and aggregate to the plant constitute the principle traffic using the unpaved roadway.

#### D. Miscellaneous Activities

Re-cycled asphalt (RAP) is 25% of the 285,000 tons of aggregate consumed in the plant, or 71,250 tons. Approximately half or 36,625 tons are chips that have been milled from road surfaces at paving sites. These milled chips are delivered directly to the plant with the remaining RAP crushed off-site. To prepare the mill chips for use, they are screened to remove oversize material employing a portable screen.

Description of Management Practices Employed to Control Fugitive Emissions:

#### A. Plant Process

The plant process fugitive emissions were identified as the load-in of sand and aggregate totaling 9.5 TPY of uncontrolled emissions. Of the 285,000 tons of material consumed in the plant, average storage amounts to 4% or 11,250 tons. A rapid turnover of material takes place, and with high as-received moisture content of 4.5% average, actual emissions from

loading-in of material is 0.0427 TPY. Moisture content of the material effects a better than 99% control of emissions.

#### B. Storage Piles

In accordance with Rule 373 (2) (a) (i), storage pile emissions are less than 50 TPY and are not subject to control. However, the following best management practices are employed, which result in a reduction of fugitive emissions:

- 1) The high as-delivered moisture content of the delivered sand and aggregate in conjunction with the rapid use of material (only 6% of total used is stored) assures that moisture in the stored material is retained.
- 2) 25% of the material stored on site is RAP. Because the material has up to 6% asphalt cement content (including the % passing 200 mesh), the temperature that would cause the surface of natural aggregates to dry out, softens the 6% AC content, causes the pile to encrust on the surface; thereby, eliminating fugitive emissions.
- 3) Precautions to minimize drop heights with the front endloader are taken, limiting the free-fall drop distance of material to 4 feet or less.

## C. Paved and Unpaved Roads

Paved Roads: The paved roadways in the plant will be vacuum swept twice weekly. Additionally, the speed limit within the plant is 5 MPH or less; and in the 0.10 mile that the vehicles travel, the vehicle stops and starts 3 distinct times.

Unpaved Roads: The area among the storage piles and access routes are all paved. The roads are vacuum swept once per week. 10 MPH would be the maximum speed a truck could achieve in the stockpile area.

#### D. Miscellaneous Activities

The 5.16 TPY estimated from the screening of the RAP mill chips were based on a dry product (less than 1.5% moisture). Actual moisture content of the RAP is 3 to 4%. Additionally, due to the 5% asphalt cement content which adheres the finer particles together, the percent passing a 200 mesh screen is 1.5%.

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

### ADDENDUM

### RECORD KEEPING 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.	
	7.	
	, •	ROAD SECRETAL AND SECRETARION
PAVED ROADS/LOTS	1.	DATE OF TREATMENT
,	2.	CONTROL MEASURE USED
	3.	RESPONSIBLE PERSON'S INITIALS
	4.	ROAD SEGMENT/LOT IDENTIFICATION
		,
STORAGE PILES/MATERIAL	1.	DATE OF TREATMENT
HANDLING	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. EO	UIPMENT USED
	- 2	

## OPTIONAL RECORDS

WEATHER CONDITIONS

- 1. PRECIPITATION
- 2. TEMPERATURE
- 3. WIND DIRECTION AND VELOCITY