

ILLINOIS POLLUTION CONTROL BOARD
September 2, 1971

DALE H. MOODY)
)
) #PCB70-36 and
 v.) #PCB71-67
)
 FLINTKOTE COMPANY)

DENNIS A. GROSS, ATTORNEY FOR PETITIONER
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OPINION OF THE BOARD (BY MR. KISSEL):

On November 12, 1970, Dale H. Moody filed a complaint against the Flintkote Company (Flintkote) alleging violation of Section 8 and 9(b) of the Environmental Protection Act. The alleged violations occurred as a result of the operation of an asphalt roofing materials manufacturing plant in Chicago Heights. He contended that on nearly every working day since April 15, 1968, and particularly on October 30, 1970, Flintkote has been and is emitting a pungent, asphalt-smelling smoke which is laden with limestone-like dust and tarry particulate droplets. Moody sought a cease and desist order from the Board, and the imposition of a monetary penalty for the violation. He asked that the Board impose a penalty for each day the violation shall be shown to have continued unless Flintkote could produce evidence that it has a meaningful program for reduction of emissions and is current in carrying out that program. On March 15, 1971, the Environmental Protection Agency, through its attorney, the Attorney General of the State of Illinois, intervened in the case by filing a complaint alleging the following:

1. Violation of Section 9(a) of the Environmental Protection Act;
2. Violation of Section 3 of the Air Pollution Control Act;
3. Violation of Sections 2-3.1 and 3-3.111 of the Rules and Regulations Governing the Control of Air Pollution;
4. Failure to obtain a permit for modification of equipment in accordance with Section 9(b) of the Environmental Protection Act and Section 3-2.110 of the Rules and Regulations Governing the Control of Air Pollution; and

5. Failure to file with the Technical Secretary of the Air Pollution Control Board an Air Contaminant Emission Reduction Program in accordance with the Sections 2-2.31(f) and 2-2.4 of the Rules and Regulations Governing the Control of Air Pollution.

In the course of the proceedings, the Agency amended its complaint to include the following alleged violation:

6. Failure to obtain a permit for the installation or construction of hood enclosures on its saturators in violation of Section 9(b) of the Environmental Protection Act and Section 2-3.110 of the Rules and Regulations Governing the Control of Air Pollution.

The Agency asks that this Board enter a cease and desist order and impose monetary penalties under the Environmental Protection Act and under the now-repealed Air Pollution Control Act. The petition for intervention was allowed.

On March 30, 1971, Flintkote requested a variance from this Board until June 30, 1972 to bring its saturators, oxidizing facilities, and limestone-loading operation into complete compliance with the applicable rules and regulations.¹ The Agency's evaluation of Flintkote's variance petition recommended denial. The enforcement and variance proceedings were ordered consolidated for hearing purposes.

[Flintkote's Operations and Facilities]

Flintkote's Chicago Heights plant manufactures asphalt roofing products, asbestos-cement siding, insulating siding, and asphalt emulsions and cutbacks. The Chicago Heights facility forms a part of the nation-wide building products operations of the Flintkote Company. Basically, three manufacturing operations at the Chicago Heights facility were the subject of the present proceeding: asphalt saturating, asphalt reducing (oxidation), and the limestone unloading. The asphalt saturator facilities include three operating lines, #2 - 4 roofing machines. Flintkote's basic production process for roofing materials is as follows: Flintkote purchases asphalt, a residue of petroleum, from a refinery, receives it in tank trucks, and then pumps it into one of several heated storage tanks on its premises.

¹ The variance application was subsequently amended to advance the compliance date to March 31, 1972.

Asphalt is kept heated to 350-400° F. in the storage tanks by the use of steam, emersion burners, or by a connection to the super-heater. When operations begin, the asphalt passes from the storage tanks into the saturators. Dry roofing felt is fed into the pre-saturators and saturator tanks where it is first sprayed and then coated with hot asphalt. The passage of the felt through the tanks creates continuous agitation. The moisture content of the felt, approximately 5 to 10%, flashes off during the spraying process. No control devices exist on the asphalt saturator tanks. The fumes generated by the saturation process are vented through natural draft vents directly to the atmosphere. For example, Saturator No. 3 has five vents of varying sizes. The emissions from the saturators contain the steam flashed off and particulate matter from the light ends of the oil; the steam-oil vapors carry a characteristic odor and are brownish-gray to white in color. After being impregnated with the asphalt, the saturated sheet passes to the drying-in section, a series of steam-heated rolls which serve to drive any surface saturant into the sheet. This process too occurs under natural draft conditions whereby asphalt fumes containing particulate matter may be emitted. The product then goes either to the cooling looper section or to the coating rolls.

The asphalt flux for the reduction department arrives at the Flintkote premises in tank cars or trucks and is placed in blow stills. The asphalt is agitated mechanically and by the circulation of air in the blow stills themselves. This blowing process increases the hardness of the asphalt for use in shingle saturant or as coating asphalt, by removing the light ends of the oil from the asphalt. The exhaust from the blowing process is manifolded through a fume condenser which operates as a control device. The fumes pass through an oil path, then through a coke condenser, where there is a water spray. The three blow stills operate with a forced draft of about 1000 cfm each. A white plume is emitted from the coke condenser; these vapors contain particulate matter and moisture due to the introduction of water from the water sprays, and carry the same characteristic asphaltic odor to the atmosphere.

In the coating section, an asphalt mixture containing 50% oxidized asphalt and 50% very finely ground limestone is applied to the saturated felt. This limestone is delivered to Flintkote by truck and discharged into a hopper enclosed on three sides and on the top. Two exhibits introduced into the record are photographs of the unloading process, and illustrate the dust generation that occurs at that time. (See Complainant's Exhibits 14 and 14a). After the felt has been treated with the fill coating, it is surfaced with granules and conveyed through a water-spray cooling section. A vapor, which Flintkote contends is steam having a pronounced white plume, emanates from this process and vents unrestricted into the atmosphere.

[Contaminant Control Methods]

As of the date of the hearing in this case, none of the three Flintkote processes which are the subject of this variance had adequate operating control devices for reducing air contaminant emissions. The oxidizing stills do vent to a coke condenser followed by a water spray; but Flintkote, in its variance petition, freely admitted that, though the control units collected substantial amounts of petroleum distillates, particulate matter having a characteristic odor was being emitted. The request for a variance filed by Flintkote called for elimination of these emissions from the asphalt conversion operation by the purchase of already-converted asphalt. Flintkote indicated that it had found and obtained a commitment from American Oil as a source of supply beginning July 1, 1971. Flintkote has no plans to continue asphalt conversion operations on its Chicago Heights premises after September 1, 1971.

As regards the limestone unloading operation, Flintkote presently has equipment to receive pneumatically-delivered limestone powder. By September 1, 1971, all limestone will be delivered in pneumatic-blower trucks. This delivery process, and several standard bag collectors presently installed on the limestone storage silos, are the intended control techniques for the limestone operation.

The abatement equipment to be employed on the saturators is a combination of a thermal oxidizer and an indirect heater. The thermal oxidizer will, in effect, incinerate the fine oil mists contained in the asphaltic fume. Control equipment has been installed and is presently operating on saturator No. 3 with debugging to be completed by September 30, 1971; Flintkote stated a deadline of March 31, 1971 for saturators Nos. 2 and 4.

[The Issues]

The issues presented in this case, the enforcement case, are as follows: whether Flintkote has an approved Air Contaminant Emission Reduction Program (ACERP) and, if so, whether this acts as a defense to the imposition of monetary penalties; whether Flintkote's operations violate Section 9(a) of the Environmental Protection Act; whether the particulate emissions from the three saturators and the oxidizing stills violate Rule 3-3.111 of the Rules and Regulations Governing the Control of Air Pollution; whether Flintkote has violated Section 9(b) of the Environmental Protection Act and Section 3-2.110 of the Rules and Regulations Governing the Control of Air Pollution by its failure to obtain a permit for the installation of hoods and enclosures on Saturator No. 3.

[The ACERP Question]

The Air Pollution Control Board, this Board's predecessor body, instituted the Air Contaminant Emission Reduction Program (ACERP) in 1967. (See Rule 2-2.4 of the Rules and Regulations Governing the Control of Air Pollution). This basically called for those operations and processes which were being conducted in violation of the applicable regulations to submit a plan detailing air pollution control activities and proposed installations, indicating dates of compliance. The ACERP program bore a great deal of similarity to the present allowance for variances under the Environmental Protection Act. (See Title IX). Just as the present grant of a variance acts as a "shield" to an enforcement action, so also an approved ACERP acted to protect the person receiving it from being found in violation of the Rules and Regulations Governing the Control of Air Pollution provided that the approved program was being implemented. In generic terms then, the Air Contaminant Emission Reduction Program was a variance under the Air Pollution Control Act and is a variance under the Environmental Protection Act. It should be noted, however, that such a variance under both Acts only continues in existence for a period of one year.

Flintkote and Asphalt Roofing Manufacturers Association (ARMA), of which Flintkote is a member, commenced their dealings and correspondence with the Air Pollution Control Board (APCB) in September, 1968. At that time the APCB was considering the adoption of a "no plume, no odor" regulation for asphalt roofing saturators. On September 18, 1968, Flintkote read a statement to the APCB stating Flintkote's opposition, as based on technical feasibility, to the proposed "no plume, no odor" standard. Subsequently, the APCB decided not to adopt such a standard, leaving the asphalt roofing manufacturing industry subject to the existing regulations already in force in 1967.

On December 30, 1968, the Environmental Control Committee of ARMA asked the requirement for submission of Air Contaminant Emission Reduction Programs be suspended until June 30, 1969. (Flintkote Ex. 23). On January 30, 1969, the APCB denied the request of ARMA for a time extension for the submission of ACERPs. The Board stated its belief that all time extensions should be dealt with on an individual, rather than a group basis. (Agency Ex. 37A). On February 26, 1969, Flintkote responded to the APCB's request and sought an extension to complete its studies regarding asphalt saturator emissions and promised to discuss its program by June 30, 1969. (Agency Ex. 37C). On March 3, 1969, the APCB wrote to Flintkote stating its understanding that the company intended to submit a formal request for an extension of time within which to submit an ACERP for the asphalt saturators. Such a request was to contain detailed information relating to Flintkote's contribution toward research activities and projects for controlling emissions. (Agency Ex. 37D). On March 21, 1969, Flintkote complied with that request

for control equipment information and again stated its willingness to discuss its program by June 30, 1969. (Flintkote Ex. 42A). On May 2, 1969, the APCB granted Flintkote an extension of time until August 15, 1969, to submit its reduction program pertaining to asphalt saturators. On September 23, 1969, the Chicago office of the APCB received the following letter, dated September 22, 1969, from Flintkote:

"Gentlemen:

In accordance with previous correspondence regarding Air Pollution Control, we wish to advise you that we are maintaining an active program of process and equipment evaluation to reduce and control asphalt saturator emissions.

Our preliminary engineering design of hoods and enclosures is presently being modified on the basis of studies and evaluations at our Los Angeles, California and Portland, Oregon installations. Our primary objective is the reduction and containing of our flow consistent with safe and efficient operations. We estimate completion of this project by December, 1971.

As indicated in our correspondence of March 21, 1969, we are continuing the evaluation of the air pollution control equipment in operation at our Los Angeles, California and Portland, Oregon plants. Our engineering and manufacturing personnel are continuing to develop the basic data required for the selection and design of the equipment components of these installations for utilization at Chicago Heights, Illinois. We estimate the program for selecting and installing control equipment will be completed by late 1972 or early 1973.

Very truly yours,

THE FLINTKOTE COMPANY

Though the letter is addressed to the Springfield office, there is apparently no record of receipt there. The Air Pollution Control Board never responded to the September 22 letter. The Air Pollution Control Act, Chapter 111 1/2, Section 240.12, in effect at that time, provides in part as follows:

"Upon the failure of the Technical Secretary to take action within 60 days after a request for installation permit, petition for variance or certificate of exemption, . . . the person seeking any of such actions shall be entitled to treat for all purposes such failure to act as a grant of the requested permit, variance or exemption . . . "

This hiatus in the administrative process has in effect awarded Flintkote an ACERP.

The Agency contends that the above letter does not constitute an Air Contaminant Emission Reduction Program because it does not contain certain information in accordance with Rule 2-2.41 of the Rules and Regulations Governing the Control of Air Pollution. That rule provides that the program filed "shall schedule over a reasonable period of time either an installation of gas cleaning devices and/or replacement and/or alteration of specified facilities such that emissions of air contaminants are reduced to the levels required" Though it is true that the Flintkote letter of September 22, 1969 did not contain specifics as to control devices or as to a phase-in, phase-out schedule, Flintkote was never informed by the Air Pollution Control Board or by any representative thereof that its submission did not fulfill the requirements of Rule 2-2.41. As a matter of fact, until the instant case arose, no representative of any State regulatory agency, neither the Air Pollution Control Board nor its successor body, the Environmental Protection Agency, had made any contact whatsoever with Flintkote either to question the existence of an ACERP or to inquire into the company's compliance therewith. The Agency further contends that the alleged ACERP was not "detailed" as to "each source operation in accordance with Rule 2-2.31(c)," but the same lack of response greeted this omission. In addition, we believe that Flintkote's year-long series of correspondence with the APCB justifiably led it to conclude that its submission in fact fulfilled the ACERP requirements. Numerous references were made by both parties throughout the correspondence regarding the submission of an ACERP for the asphalt saturators; when the extension was granted to August 15 for the submission, the APCB letter made specific reference to an "Air Contaminant Emission Reduction Program." Due to the lack of a response, Flintkote was entitled to rely on their program having been tacitly approved by the APCB and on their being able to proceed with an implementation plan geared to "late 1972 or early 1973."

The mere fact that the September 22 letter was definitely filed with the Chicago APCB and apparently not with the Springfield office is in no way determinative. The September 22, 1969 letter is stamped as received by the Chicago office - that is sufficient. We must view the company's month-late filing as also having been excused by the APCB.

In the case of EPA v. Commonwealth Edison (PCB70-4), this Board held that under Section 11 of the Air Pollution Control Act, the APCB could grant variances only for one year. Since Flintkote's ACERP was in effect approved on November 22, 1969, and never renewed,

it is therefore no defense to any enforcement action prosecuted subsequent to November 22, 1970, although, as the Board has stated previously, "it is clear that we would not be inclined to impose money penalties on anyone who in good faith had adhered to an approved program." (EPA v. Commonwealth Edison, PCB70-4). It should also be stressed at this point that the ACERP only acts as a defense to those contaminants which it presumed to abate and control in the ACERP itself. Thus, the instant case, Flintkote's "shield" against prosecution would only extend to asphalt saturator emissions as mentioned in the letter of September 22, 1969. Presumably this could cover fumes from the oxidizing stills, though it is doubtful it could be extended to cover dust from the limestone-unloading operations.

It is apparent from the testimony and the stated variance request that Flintkote will be in compliance at least one year ahead of its indicated ACERP deadline. Though it is true that installation of the hoods and enclosures was not completed until April, 1971, not December, 1970, as the ACERP stated, this delay will not result in any delay in the overall project. In addition, Flintkote has evidently changed the type of control equipment it intends to install, nor will this delay the completion date. While Flintkote should have notified the Agency of such changes, permits have recently been granted for all the equipment and the installations Flintkote sought. We believe that the stepped-up completion schedule and the Agency approval of the permits have overcome Flintkote's past missteps. And, though testimony and several exhibits from the Asphalt Roofing Manufacturer's Association (EPA Exs. No. 21, 22) established that fume incineration equipment such as Flintkote now intends to install, was available as early as 1968, the failure of the Technical Secretary to respond again exonerates Flintkote, for it cannot be blamed if the State gave approval to its lassitude. In summary, Flintkote has obtained the necessary ACERP and its compliance thereunder disallows the imposition of monetary penalties either under the Air Pollution Control Act or the Environmental Protection Act.²

² The Agency also asks that this Board find Flintkote in violation of Section 3 of the Air Pollution Control Act. (Chapter III 1/2, Section 240.3 Ill. Rev. Stat.) Since this Board views an ACERP as akin to a variance, Flintkote has in effect received a "shield" from prosecution under the Air Pollution Control Act under Section 2-2.41 of the Rules and Regulations Governing the Control of Air Pollution which states: when an emission reduction program has been approved, the person receiving the approval shall not be in violation of this Section provided the approved program is being implemented. Flintkote filed its ACERP in September of 1969; since the ACERP would continue in effect for one year, that would carry Flintkote's shield past the date of repeal for the Air Pollution Control Act.

[Violation of Section 9(a) of the Act]

Quite separate and distinct from the consideration of violation of the rules and regulations governing the operation of Flintkote's plant is the consideration whether Flintkote violated the Environmental Protection Act. It is entirely clear from a reading of the Act that a person can be guilty of a violation of the basic prohibitions set forth in the Act even though he is complying with the regulations which are applicable to his particular emission or discharge source. For the Act specifically provides that any person is prohibited from discharging contaminants into the atmosphere which "cause or tend to cause air pollution . . . or . . . violate the regulations or standards adopted by the Board under this Act". (Section 9(a) of the Act). While at first blush this may seem to impose a double standard on persons who discharge contaminants into the atmosphere the logic of it is abundantly clear. There are many situations where even though a person is complying with the regulations, he still could cause "air pollution", and we have so held in a case previously decided by the Board, EPA v. Southern Asphalt Company, Inc., PCB71-31, dated June 9, 1971. In that case we said:

"It is manifest from the testimony that Respondent's operation, even if conducted within the emission limits of the regulations, would constitute a severe nuisance and greatly interfere with the enjoyment of life and property of the residents in the immediate vicinity."

The Act itself further recognizes the possibility that a person may be subject to a complaint charging him with violation of the broad prohibitions of the Act, even though he is complying with the regulations, because it makes compliance with the regulations a "prima facie" defense. (Section 49(e) of the Act). Compliance with the regulations certainly is a legitimate defense in any action brought against any person but it is not a complete defense. Because if it was a complete defense, the Act would have said so.

The question to decide, then, is whether Flintkote is guilty in this case of violating Section 9(a) of the Act, notwithstanding the fact that there is compliance by most of the facility with the regulations governing their operation. Section 9(a) of the Act states as follows:

"No person shall cause or threaten or allow the discharge or emission of any contaminant into the environment in any State so as to cause or tend to cause air pollution in Illinois, either alone or in combination with contaminants from other sources, or so as to violate regulations or standards adopted by the Board under this Act."

Air Pollution is defined as follows:

"'Air Pollution' is the presence in the atmosphere of one or more contaminants in sufficient quantities and of such characteristics and duration as to be injurious to human, plant, or animal life, to health, or to property, or to unreasonably interfere with the enjoyment of life or property."

Numerous witnesses appeared at the hearing and testified to the odor which existed beyond the boundaries of the plant. Witness after witness talked about the "tarry" odor which made them nauseous, and caused their eyes to water. Two of the most descriptive witnesses on the subject were Elizabeth Blackwell and Dale Moody, the original complainant. Blackwell, who lives near the plant, described a "pungent, acrid, tarry" smell which made breathing difficult. She identified the odor as coming from the Flintkote plant because of the direction of the wind when she notices the odor. She also established property damage to roofs, shrubbery and automobiles as a result of the tarry emission from Flintkote. Dale Moody works near the Flintkote plant. He has noticed what he terms an unbearable asphalt type odor when the wind is coming from the direction of the Flintkote plant. Prolonged exposure to the odor has produced eye irritation and headaches, which has actually interfered with his work. He, like the other witnesses, has noticed smoke coming from the Flintkote plant. Moody has also identified a tarry particulate on his automobile as coming from the Flintkote plant. The tarry particulate accumulates on his windshield (and other parts of his car) and as a result his windshield wipers wear out more quickly. All of this testimony conclusively proves that the emissions from the Flintkote plant "interfere with the enjoyment of life or property" of the neighbors and those who come near the plant. The sole question remaining, then, is to determine whether such interference is "unreasonable" as required by the Act. It is the position of this Board that air contaminant emissions are "unreasonable" within the meaning of the Act when there is proof that there is an interference with life and property and that economically reasonable technology is available to control the contaminant emissions. We find that both elements were proved in this case. The interference has been previously documented in this opinion. And, in the instant case, the Agency firmly established that control technology for such odoriferous and particulate emissions has been available and in use since 1968. On September 22, 1968, Flintkote informed the APCCB that it had "just spent a considerable amount of money on an engineering study to enclose [its] saturators and, when enclosed, [Flintkote is] presently contemplating burning the fumes because of the inefficiency of the scrubbing and electrostatic systems now being offered." (Flintkote Ex. 32). Yet it was not

until two Chicago firms installed and operated with fume incineration in 1970 that Flintkote really commenced its own installation. Further, particulate controls have been available to Flintkote for at least 10 years using either of the methods adopted at its own facilities in Los Angeles or Portland, and Flintkote's own variance petition filed in this case admits Flintkote's ability and intent to control the odorous and harmful emissions. This control of particulates would have significantly contributed to the control of odors at Chicago Heights on the limestone operation. The pneumatic unloading equipment has been installed for some time but has not been fully used due to a lack of trucks with pneumatic devices. In this area, too, Flintkote could have moved ahead, for the equipment was available. Thus, Flintkote's interference with the life and property of its neighbors became unreasonable when its own laxity and dilatoriness stalled the installation of control equipment. A cease and desist order shall be issued against Flintkote which order shall require control devices to be installed as further outlined in this opinion. Flintkote shall be permitted to operate its facility as long as it complies with the timetable for the installation and operation of the control equipment as outlined.

[The Particulate Regulations - Violation]

Section 3-3.111 is applicable to asphalt roofing operations; it provides as follows:

"Particulate matter emissions from any process shall be limited by process weight in accordance with Table 1 of Chapter III . . . "

On pages 1 - 7 of the Rules and Regulations Governing the Control of Air Pollution the following definitions are given:

"Process Weight: The total weight of all materials introduced into any source operation. (emphasis supplied)

"Process Weight Rate: . . . (b) For a cyclical . . . operation, the total process weight for a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period. Where the nature of any process or operation or the design of any equipment is such as to permit more than one interpretation of this definition. The interpretation that results in the minimum value for allowable emissions shall apply."

Flintkote's operations are such that a continuous but varying amount of heated asphalt must be repeatedly injected into the saturator tanks in order that a certain temperature can be maintained during operations. The saturation process occurs as follows: The saturator is composed of two tanks, a south and north tank, which are interconnected by a pipe. Ahead of the south tank is a pre-saturator section consisting of a set of sprays; following the north tank is the soaker section. Asphalt is pumped into the south and north tanks, and from there is conveyed to the spray and soaker sections. The spray and the soaker sections are similar to trays whose overflow is drained back into the south and north saturator tanks respectively. The asphalt used in these four sections flows from a 50,000-gallon holding tank. The asphalt is pumped out of the holding tank and through the superheater. The discharge from the superheater can go three directions: it would normally flow into the south and north tanks, but when the temperature of the asphalt reaches above a certain set point, the automatic temperature control flow valve opens and discharges the asphalt back into the holding tank. Flintkote contends that this "recycle" factor should be taken into account in computing allowable emissions. It contends that the more asphalt recycled or "introduced" into the saturator operations, the greater the quantity of emissions. We believe that such an interpretation is in flat contradiction to the final sentence of the definition of "Process Weight Rate". If we were to allow Flintkote's interpretation to stand, that would mean that every time a product of an operation were removed from the production process, e.g. for weighing on a scale, then a recomputation of process weight would necessarily have to take place. As further illustration of the unreliability of such a standard, Flintkote itself admits that the recirculation rate in a machine may vary depending upon the amount of heated asphalt the "thermostat" determines is necessary to maintain the proper temperature. (R. 2924-26) Further, such a standard would be subject to the vagaries of a manufacturer's operation even if the same machine were being used and the same amount of end product turned out. The definition which Flintkote advocates would place an unreasonable burden on the regulatory enforcement process. Further, such a definition flies in the face of the regulation which calls for minimal, not maximum, emissions. In a simplistic form, process weight must be whatever is brought to the company's loading dock and then once introduced into a process. As Flintkote's own witness admitted on cross-examination, "In the case of saturators, I would think the controlling factor in emissions would be the open area of the tanks". (R. 2928) The controlling factor, therefore, is not recycle, but is the amount of asphalt introduced into the process.

In computing the process weight, the felt introduced must also be added in. Using the Compilation of Air Pollutant Emission Factors, dated April, 1971 (EPA Ex. 18), the Agency engineer concluded that only saturator No. 3 was in violation of the applicable regulations. Using both felt and asphalt, the allowable emissions on Saturator No. 3 are 35.4 pounds per hour; actual calculated emissions using the federal table are 50 pounds per hour. In an attempt to determine the actual emissions and thereby refute the computation made by the Agency, Flintkote obtained the services of a testing company. Its results, however, were so contaminated by improper testing methods that they are in effect worthless. We are then thrown back to the Compilation of Emission Factors data for a determination of actual emissions. Flintkote attempted to challenge the data in the federal document and differentiate the operations sampled therein from its Chicago Heights operations. The federal document bases its sampling on plants having forced draft ventilation, whereas Flintkote operates with thermal draft venting. In the case of EPA v. Norfolk and Western Railway, PCB70-41, the Board determined that the railroad had successfully differentiated its operations from those sampled in the federal document by introducing results of tests of equipment more nearly representative of the actual emissions in the case than the more generalized standard factors offered by the Agency. We see no such significant differentiation here. Flintkote repeatedly sought to establish that in the plant and on the premises, particulate deposits were significant, and possibly in the amounts as discharged to the outside vicinity of the plant, but was never able to so conclusively prove. Thus, Flintkote never showed why forced, as opposed to thermal, draft makes a difference. The similarity of operations therefore holds and, due to the failure of the conducted tests, Saturator No. 3 must be held in violation of the applicable regulation.

On the question of a violation of the regulations by the oxidizing stills, the record is not clear that a violation has been proved. Using the 1967 data and the Compilation of Emission Factors, the Agency could not determine whether a violation existed. The Agency environmental engineer testified that due to the presence of collectors on the stills, the efficiencies of which were neither known to him nor available using the Compilation of Air Pollutant Emission Factors, he could make no calculation of emissions. The test which Flintkote conducted on the oxidizing stills was similarly contaminated by the testing methods.

In summary, the Agency has shown that Saturator No. 3 was in violation of the Rules and Regulations Governing the Control of Air Pollution.

[Permit Violations]

The Agency has dropped Count 4 of its initial complaint. On Count 5, the Board has ruled herein that Flintkote did comply with the ACERP filing requirements.

Count 6 of the complaint, as amended during the course of the hearing, concerns Flintkote's failure to apply for an installation permit for the hoods and enclosures on the saturators. Flintkote concedes that the panels were installed as part of the ACERP and evidence the company's ongoing abatement program. Flintkote's failure to obtain an installation permit for these as yet non-functional devices must be viewed only as a de minimis transgression of Section 3-2.110 of the Rules and Regulations Governing the Control of Air Pollution. The permit has since been obtained and certainly no penalty can be imposed though a violation does exist.

[Flintkote's Variance]

Flintkote, as we previously indicated in this opinion, filed a petition for variance with the Board. The variance was amended by subsequent testimony in the course of the hearing. The date for final compliance, as amended, is March 31, 1972.

The issue then is whether the variance should be granted. The Environmental Protection Act states that a variance shall be granted to a petitioner if he proves that compliance with the Act, the rules and regulations promulgated thereunder, or an order of the Board creates an "arbitrary and unreasonable hardship". (Section 35, Environmental Protection Act). We have held on numerous occasions that in determining whether such a hardship exists, we will balance the benefits and detriments to the public against the benefits and detriments to the petitioner. We have further stated that this is not an equal balance. The Board will look to the benefits to be afforded to the public as being the strongest of factors. After a review of the evidence as presented, we feel that the variance should be granted in this case upon certain conditions, which will be dealt with separately.

First, the bulk of Flintkote's operations, Saturator No. 3, the oxidizing stills, and the limestone-unloading operation, will all be in compliance by the end of September, 1971. Flintkote has stated a deadline of March 31, 1972 for installation and operation of the thermal oxidation unit in Saturators No. 2 and No. 4. While there will be some discharge of contaminants to the atmosphere during the time when the project is being completed,

we feel that this is permissible since the alternative to not granting the variance would be a shutdown of the plant. The economic impact would be too great to allow for the little benefit to be gained if the discharges were to be continued for a short time - less than 3 weeks for the limestone-unloading and oxidizing stills, and 1 1/2 months for Saturator No. 3, with all three operations gradually being brought into compliance as the deadline date approaches. Flintkote employs 250 people and its shutdown would also affect operations in Mount Carmel, Illinois. This constitutes an annual payroll of over \$2,000,000 in the State of Illinois. Perhaps shutting down the plant until compliance is achieved would be a viable alternative if the pollution caused by the industry were so great and the prospect was that it would continue, unabated, for some time. Such is not the case here. As a matter of fact, the saturators on which compliance will be delayed the longest, Saturators No. 2 and No. 4, were not even found by the Agency to be in violation of the applicable regulations.

In the course of the proceeding, Flintkote indicated that it contemplated that tie-in of the control unit on Saturators No. 2 and No. 4 would begin a month later, December 1, 1971, than originally scheduled, but would be finished two months earlier, January 31, 1971, than scheduled. The month postponement was meant to push the tie-in closer to the time when the plant is not operating at full capacity. (R. 2827-30). The installation of such abatement equipment has waited long enough without additional postponements. Tie-in work shall begin as scheduled on the bar graph (Flintkote Ex. 65) and shall be completed by December 31, 1971. Flintkote shall have until January 31, 1972 for any further adjustments or revisions.

Testimony at the hearing also elicited the possibility that significant emissions may be emanating from the asphalt storage tanks. Each of these several tanks is equipped to keep asphalt in a heated state and operates without any control device, free-venting through a safety vent to the atmosphere. Flintkote shall conduct a study of these emissions, their quantity and quality and submit a report to the Environmental Protection Agency within six months indicating the company's evaluation of the need for particulate and odor control devices on the storage tanks.

Flintkote shall post a bond in the sum of \$245,000 as a condition of the variance; in all other respects, the variance shall be granted as requested.

[Procedural Matters]

Several procedural matters remain to be resolved. First, Flintkote sought to call William Blaser, the Director of the Environmental Protection Agency, as an adverse witness. We sustain the Hearing Officer's quashing that Notice to Appear in the absence of any showing by Flintkote that Blaser was possessed of any specific or relevant personal knowledge of the Flintkote case, complaint or situation.

The Hearing Officer also ordered the Complainants to pay the transportation expenses from New York City of one Monte Carpenter, the general Manager of the Building Products Group of the Flintkote Company. The Board believes that it has the authority to compel the appearance of an out-of-state representative of a business authorized and licensed to do business in the State of Illinois. In this case, the transportation costs were rightly assessed to the calling party since the request itself was only made on the first day of the proceedings. The company should not be put to the burden of assuming the expenses of a belatedly-called witness.

Both Moody and the Attorney General have sought Orders of Default issued for Flintkote's alleged failure to respond quickly and conclusively to the several sets of interrogatories each presented. We should mention that parties accustomed to trying cases in other forums will most likely find the expeditious trial proceedings of the Pollution Control Board a bit hurrisome. The crucial test on the entry of a default order is whether or not the parties so claiming were prejudiced. No showing of prejudice has been made by either of the affected parties. From the fourteen-day record of proceedings, it is apparent that both complainants were able to try their cases in full (and sometimes perhaps too fully). The motion for default is denied.

One further comment should be made. This is one of the first of the citizen complaints to be filed and tried before the Board under the Environmental Protection Act. As can be seen from the Board's findings, the standard of proof in such cases as these is not necessarily simple. Citizen complaints under the Act have the same status as governmental agencies; it follows then that they are put to the same burden of proof as any other party. Citizen participation in proceedings before this Board is encouraged by the Act and welcomed by this Board. In the end, Dale Moody, private citizen, can take heart that his complaint ultimately resulted in the filing of a variance by Flintkote. The hearing at least has caused pollution control equipment to be installed on

the Chicago Heights facilities by December 31, 1971, rather than "late 1972 or early 1973", as originally proposed.

The above constitutes the Board's findings of fact and conclusion of law.

This opinion is published in accordance with the Order of the Pollution Control Board, approved August 13, 1971.

I, Regina E. Ryan, Clerk of the Board, certify that the Board has approved the above Opinion this 2nd day of September, 1971.