

ILLINOIS POLLUTION CONTROL BOARD
September 12, 1991

IN THE MATTER OF:)
) R91-10
EXEMPTIONS FROM THE) (Identical in Substance Rules)
DEFINITION OF VOM)

ADOPTED RULES. FINAL ORDER.

OPINION AND ORDER OF THE BOARD (by J. Anderson):¹

The Board hereby amends its rules in response to USEPA additions to the list of chemicals exempted from the definition of volatile organic materials (VOMs).² At 56 Fed. Reg. 11418, March 18, 1991, USEPA added five compounds and four classes of compounds to the list of negligibly photoreactive compounds exempt from regulation under state implementation plans (SIPs). Those compounds constitute additions to those compounds exempted in R89-8, effective January 1, 1990. The Board directs attention to that prior docket for information relating to the original listing of exempted compounds.

The Board adopts this Opinion and Order pursuant to the identical-in-substance mandate under Section 9.1(e) of the Environmental Protection Act, Ill. Rev. Stat. 1989, ch. 111½, par. 1009.1(e). Section 9.1(e) provides for quick adoption of regulations that are "identical in substance" to certain published federal policy statements. It further provides that Title VII of the Act and Section 5 of the Administrative Procedure Act (APA) shall not apply. Because this rulemaking is not subject to Section 5 of the APA, it is not subject to first notice or to second notice review by the Joint Committee on Administrative Rules (JCAR). The Federal Register citation to the revision in the federal policy statement used in this Opinion and Order is as follows:

56 Fed. Reg. 11418

March 18, 1991

The Board will delay filing these adopted amendments until 14 days after the date of this Opinion and Order. This is to allow time for the filing of supplemental public comments by interested persons.

The revision to USEPA's "Recommended Policy on the Control

¹The Board appreciates the contribution of Michael J. McCambridge, Board attorney, in this matter.

² USEPA consistently designates these "volatile organic compounds" or "VOCs." Both designations refer to the same matter, and all references in this Opinion and Order to "VOM" refer to what USEPA calls "VOC."

of Volatile Organic Compounds" adds five compounds and four classes of compounds to the list of negligibly-photochemically-reactive compounds exempted from regulation as volatile organic compounds.

PUBLIC COMMENTS

The Board submitted its April 11, 1991 Proposed Opinion and Order for public comment. It appeared in the Illinois Register on May 3, 1991, at 15 Ill. Reg. 6385 (Part 211) and 15 Ill. Reg. 6414 (Part 215). The statutory public comment period would have ended on June 17, 1991, 45 days after the date of publication in the Illinois Register. However, the hearing officer extended the deadline for comments to July 8, 1991. The Board received six public comments in response to its requests:

PC#1.	5-20-91	Secretary of State, Administrative Code Division
PC#2.	5-22-91	Joint Committee on Administrative Rules
PC#3.	6-21-91	Illinois Department of Commerce and Community Affairs
PC#4.	7-5-91	Illinois Environmental Protection Agency (including supplement filed July 9, 1991)
PC#5.	7-6-91	Illinois Environmental Regulatory Group (by Barbara Collins, Attorney)
PC#6.	7-15-91	Allied-Signal Inc., Engineered Materials Sector (by Donn Hirschmann, Pollution Control Manager)

The Board hereby accepts all comments filed. The Board invited comment on several specific aspects of the Proposed Opinion and Order. The following discussion addresses each of the comments at the appropriate place.

By PC#3, the Illinois Department of Commerce and Community Affairs submitted its comments. DCCA submits that the present rulemaking will have no significant economic impact on small businesses in Illinois.

HISTORICAL SUMMARY

The Board adopted the original federal Recommended Policy statements and several subsequent revisions in October, 1989:

R89-8	104 PCB 505, October 18, 1989; 13 Ill. Reg. 17457, effective October 27, 1989.
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The Federal Register issues included in that docket are recited in that Opinion and Order.

DISCUSSION

At 56 Fed. Reg. 11418, March 18, 1991, USEPA announced a change in its "Recommended Policy on the Control of Volatile Organic Compounds," adding five halocarbon compounds and four classes of perfluorocarbon compounds to the list of negligibly photoreactive compounds exempt from regulation under state implementation plans. Those compounds are as follows:

1. 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124)
2. Pentafluoroethane (HFC-125)
3. 1,1,2,2-tetrafluoroethane (HFC-134)
4. 1,1,1-trifluoroethane (HFC-143a)
5. 1,1-difluoroethane (HFC-152a)

Those classes of compounds are as follows:

1. Cyclic, branched, or linear, completely fluorinated alkanes.
2. Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations.
3. Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations.
4. Sulphur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

Under this policy, states may not take credit for controlling these compounds in their ozone state implementation plans (SIPs). USEPA simultaneously proposed to amend the federal implementation plan (FIP) for Chicago and to amend 40 CFR 51 to add a general definition of VOM consistent with its policy revision. 56 Fed. Reg. 11387 (Mar. 18, 1991). USEPA stated that it would withdraw its policy revision as moot when it finally adopts such a definition of VOM as a regulation. 56 Fed. Reg. at 11388 & 11419.

USEPA effected part of the revision to its policy statement in response to a petition by the Alliance for Responsible CFC Policy. On January 18, 1989, at 54 Fed. Reg. 1987, USEPA partially responded to the petition by adding four non-fully-halogenated CFCs to the list of negligibly-reactive compounds. That was, in part, the subject of R89-8. The Alliance stated in

justification of its petition that these CFC substitutes are less photochemically reactive than others already on USEPA's list of negligibly-reactive compounds and that USEPA must remove barriers to the use of CFC substitutes if the U.S. is to meet its commitments under the Montreal Protocol on Substances that Deplete the Ozone Layer.

Minnesota Mining and Manufacturing Co. (3M) submitted a petition to USEPA requesting addition of the four classes of compounds included as the other part of the policy statement revision. 3M also requested that USEPA take action to include these classes as part of the Chicago FIP and act to assure that they become part of any future SIP. 3M justified its petition by asserting that these classes of compounds are not photochemically reactive in the troposphere, that they do not deplete stratospheric ozone, that they are generally non-toxic to humans and the environment, and that they can act as useful CFC substitutes.

In effecting the revision, USEPA stated that only one compound (HCFC-124) had any chlorine or bromine atoms which contribute to stratospheric ozone depletion. USEPA agreed that there is a need to remove barriers to the use of acceptable CFC substitutes like those in the petitions. On this basis, USEPA revised its policy and exempted the five compounds and four classes of compounds. Therefore, USEPA's policy is not to enforce or approve controls on these compounds, and it "will rely on the revised policy in considering all future approvals or promulgations of implementation plan provisions . . ." 56 Fed. Reg. at 11419.

Section 9.1(e) Mandate

The federal revision of its Recommended Policy raised an initial issue relating to whether the Board should proceed with adoption of the proposed rule pursuant to Section 9.1(e). As discussed in the Board's October 18, 1989 Opinion and Order in R89-8, the initial adoption of exemptions from the definition of VOM resulted from a specific legislative mandate. At that time, the legislative mandate arose out of a desire to include in Board rules the then-current list of chemicals exempted by USEPA under its Recommended Policy statements. The language of the authorizing legislation was open-ended, mandating future action in response to any future USEPA policy revisions:

The Board shall exempt from regulation under the State Implementation Plan for ozone the volatile organic compounds which have been determined by the U.S. Environmental Protection Agency to be exempt from regulation under state implementation plans for ozone due to negligible photochemical reactivity. In accordance with subsection (b) of Section 7.2, the Board shall adopt regulations identical in substance to the U.S.

Environmental Protection Agency exemptions or deletion of exemptions published in policy statements on the control of volatile organic compounds in the Federal Register by amending the list of exemptions to the Board's definition of volatile organic material found at 35 Ill. Adm. Code Part 211. . . . The Board may consolidate into a single rulemaking under this subsection all such federal policy statements published in the Federal Register within a period of time not to exceed 6 months.

Ill. Rev. Stat. 1989, ch. 111½, par. 1009.1(e).

USEPA effected the revision to its Recommended Policy statement and simultaneously proposed a general definition of "volatile organic compound" on the same date. See 56 Fed. Reg. 11387 & 11418 (Mar. 18, 1991). The proposed general definition would codify the substance of the Recommended Policy statement. In both the respective discussions of the policy revision and the proposed definition, USEPA stated that its intent is to withdraw the Recommended Policy statement as moot when it adopts the general definition.

Although withdrawal of the Recommended Policy after final adoption of the general definition would have no effect on the status of any of the exempted compounds in the federal scheme, the prospective withdrawal raised several issues, including whether the Board should proceed with adoption of this rulemaking. On its face, the mandate of Section 9.1(e) pertains to the recommended federal policy, not to federal rules. If USEPA withdraws its policy statements as moot, must the Board then repeal the exemptions from the definition of volatile organic materials? Further, if USEPA should add or delete exempt compounds by future rulemakings, do those actions fall within the scope of the Section 9.1(e) mandate? If not, should the Board seek a revision in the language of Section 9.1(e)? If the Board should pursue a legislative amendment, what statutory language should it pursue?

The Board invited comment on these issues. In PC#4, the Agency states "that the purpose underlying . . . § 9.1(e) is to address the problem which arises when USEPA fails to promulgate a rule yet expects the states to reflect its policy statements in their rules." The Agency states:

The Board could assume that since the intent of § 9.1(e) is that the Illinois rules properly reflect federal requirements, the fact that USEPA turns its policy statement into a rule has no effect on any identical in substance rules adopted by the Board pursuant to § 9.1(e).

. . .

The intent of § 9.1(e) is that Illinois' rules for the control of ozone precursors exactly reflect USEPA's exemptions from the definition of VOM. Whether the exemption is in a federal rule or a federal policy statement should make no difference. . . .

PC#4 at 3-4.

IERG states, by PC#5, that when it urged the General Assembly to adopt Section 9.1(e), "it expected that future exemptions to the definition of VOC would appear, as they had in the past, as amendments to Policy Statements on the control of VOC." PC#5 at 3. IERG continues:

While IERG is troubled by USEPA's change in procedural methods, IERG believes that the Board should, and indeed must, adopt the changes announced in the March 18, 1991 revision of USEPA's policy on the control of VOC. IERG further believes that it will not be necessary to delete the exemptions when and if a general definition of VOC is promulgated by USEPA in final form, even if the revised Policy Statement is eventually withdrawn as moot.

While the Board must adopt as [identical-in-substance] those regulations published in Policy Statements, the underlying mandate of Section 9.1(e) is simply that the Board exempt from regulation those compounds which have been determined by USEPA to be exempt from regulation due to negligible photochemical reactivity. Thus, in this case, IERG believes that at this juncture the Board must adopt the exemptions contained in the revised Policy Statement. However, if at some future date, the Policy Statement is withdrawn as moot, that will be because USEPA has, by regulation, exempted certain specific chemicals from the general definition of VOC. At that juncture, the Board would be required to exempt those chemicals from regulation pursuant to the first sentence of Section 9.1(e) of the Act. Thus, even though the policy statement is withdrawn as moot, the Board would not need to withdraw or delete the exemptions, as the Board would still be required to exempt those compounds because USEPA has determined they should be exempted because of negligible photochemical reactivity.

PC#5 at 4-5.

The Board agrees with the Agency and IERG assessments of the intent of the General Assembly. One interpretation of the actual

mandate of Section 9.1(e) is that it is fully substantively embodied as follows:

The Board shall exempt from regulation under the State Implementation Plan for ozone the volatile organic compounds which have been determined by the U.S. Environmental Protection Agency to be exempt from regulation under state implementation plans for ozone due to negligible photochemical reactivity.

Ill. Rev. Stat. 1989 ch. 111½, par. 1009.1(e).

In all other identical-in-substance mandates, the Board is to base the rules on federal regulations. See Ill. Rev. Stat. 1989 ch. 111½, par. 1013(c), 1013.3, 1017.5, 1022.4(a), and 1022.4(d) (mandates for UIC, pretreatment, SDWA, RCRA, and UST programs, respectively). With regard to the exemption of negligibly-reactive compounds, however, USEPA has not yet adopted regulations. Rather, USEPA has used its Recommended Policy Statement to implement their exemption. Therefore, it is likely that the Section 9.1(e) mandate continues to require the Board to adopt regulations based on "exemptions published in policy statements on the control of volatile organic compounds in the Federal Register" because the General Assembly recognized the unorthodox approach USEPA took to implementing these requirements for state implementation plans.

Under this analysis, the clear intent of the General Assembly is that the Board must adopt the federal exemptions by identical-in-substance rulemaking. The mandate that the Board apply federal policy statements to this end is further authorization to base those regulations on their presently-existing sole source: federal policy statements. If USEPA chooses to employ the more conventional regulatory approach of codifying the exemptions, the mandate remains that the Board must adopt those exemptions by identical-in-substance procedures.

The Board believes that this is the interpretation that will best implement the intent of the General Assembly as embodied in Section 9.1(e). If the Board errs in its assessment, the General Assembly is free to further clarify its intent by later legislative amendment. However, the Board believes that by proceeding with this rulemaking despite USEPA's prospective change in approach, we will achieve the benefits for Illinois industry that the General Assembly desires, and we will attain greater consistency with the federal scheme for ozone control.

Therefore, the Board is adopting the proposed amendments without regard to the possibility that USEPA will likely moot the federal policy statement upon which it is based. The possibility exists that the Board will face the prospect of basing future amendments on federal rules, rather than on the policy statements

referred to in Section 9.1(e). The Board will address that issue when it arises.

Other Parts Affected

The Agency further opines that the Board should ultimately embody the federal policy statement (rules) into the definitions of VOM in Parts 203, 218, and 219. PC#4 at 3-4. Most of this issue arose subsequent to the original Proposed Opinion and Order of April 11, 1991, when the Board adopted First Notices in R91-7: Chicago Area RACT Deficiencies and R91-8: Metro-East Area RACT Deficiencies on July 25, 1991. Those rulemakings, final as of August 16, 1991 (Parts 218 and 219) and August 19, 1991 (Part 215), see 15 Ill. Reg. 12217, 12231 & 12491 (Aug. 30, 1991), adopted new Parts 218 and 219, each of which include a separate definition of "volatile organic material"--just as proposed by the Agency in those proceedings. However, because the Board has not published a Notice of Proposed Amendments to Parts 203, 218, and 219, we cannot adopt amendments to the definitions in those Parts in this proceeding at this time. Thus, the Board has opened docket R91-24: Exemptions from the Definition of VOM in response to the Agency's comments, to amend the Part 218 and 219 definitions and maintain consistency between the Chicago and Metro-East RACT areas and the rest of the state. The Board will add the 35 Ill. Adm. Code 203.145 definition to that rulemaking to complete the amendments to the several definitions of VOM.

The Need for Delay

The Agency advocates that the Board delay action in this matter to allow USEPA an opportunity to further define the content of an identical-in-substance rule based on its policy by taking further rulemaking action, possibly by adopting the proposed 40 CFR 51 definition of "volatile organic material."³ At hearing, Chris Romaine, of the Agency, testified:

[T]he USEPA is undertaking an action at this point which is not as simple as listing certain exempt compounds which can be handled by the existing procedures for dealing with these compounds. The USEPA is also evaluating its procedures for handling exempt compounds. . . .

Because of the complexity of some of these issues, we believe it's appropriate to wait until we see the final outcome of USEPA's formal rule-making.

³ The Agency has submitted a public comment to USEPA in the federal rulemaking. In that comment, the Agency cites a number of ambiguities in the proposed federal rule and suggests changes to help alleviate those ambiguities. See PC#4, Attachment 1.

Tr. at 7-8.

He concludes:

[T]he final rules that the USEPA comes up with will be a much better basis for Illinois to take action on its definition of Volatile Organic Material otherwise we're sort of jumping the gun on a general policy statement.

Tr. at 10.

IERG, by PC#5, and Allied-Signal, by (PC#6), disagree with the Agency and urge the Board to proceed. IERG highlights the fact that USEPA simultaneously revised its policy statement and proposed the its definition of VOM that would codify the exemptions. IERG maintains that USEPA did so in order to avoid delay in implementing the exemptions. IERG argues that the Agency's assertions notwithstanding, USEPA has finalized the exemptions by revision of its Recommended Policy Statement. USEPA actually made the determination that the compounds and classes of compounds are negligibly photochemically-reactive in the policy statement of March 18, 1991, at 56 Fed. Reg. 11388. Allied-Signal urges that the Board not delay encouraging the use of the exempted compounds in place of more deleterious alternatives.

The Board agrees with IERG that the exemptions are final at the federal level as of March 18, 1991. Initially, the fact that USEPA has proposed codification of the exemptions for the first time indicates a change in USEPA's approach, not in its policy. Second, the exemptions are final and effective as of March 18, 1991, when USEPA revised its policy statement. As stated in the revised policy:

Pending final action on the general definition of VOC in 40 CFR 51 . . . , the EPA will rely on today's revised policy in considering all future approvals or promulgations of implementation plan provisions designated to attain or maintain the NAAQS for ozone. Based on this revised policy, EPA anticipates that such rulemaking actions will contain exemptions for these and previously listed negligibly-reactive [VOMs].

56 Fed. Reg. 11419 (Mar. 18, 1991).

As further stated in the discussion of the proposed definition, and addressing both these points:

It is important to emphasize that today's proposal does not address the general question of VOC reactivity; it is strictly limited to whether EPA should codify in regulatory form its current reactivity policy as re-

vised in a notice published elsewhere in today's Federal Register.

56 Fed. Reg. 11388 (Mar. 18, 1991) (emphasis added).

Thus, the third point is that Illinois must immediately begin to exempt these compounds because USEPA has given immediate effect to its revised policy. The exemptions became a necessary part of all implementation plans as of March 18, 1991 as a matter of federal law. Illinois "may not take credit for controlling these compounds in [its] ozone SIP control strateg[y]." 56 Fed. Reg. 11416 (Mar. 18, 1991).

The Board finds no reason for delay in the fact that USEPA has simultaneously proposed codification of its policy. Promptly proceeding with adoption of these exemptions will serve the public purpose of encouraging their use in favor of more deleterious alternatives. However, the Agency raises several other concerns, some of which are more troublesome. Among the other issues Mr. Romaine cited are related to those cited by the Board in its Proposed Opinion and Order of April 11, 1991: USEPA may condition the exemption of any compound from a particular source on that source monitoring emissions of the compound.

The Federal Monitoring Requirement

The USEPA policy revision raises important issues for the Board. These relate to the balance between the Board's identical-in-substance mandate on the one hand and USEPA's expressly-reserved flexibility to deviate from the policy on a case-by-case basis on the other. They also relate to the scope of the federal monitoring requirement and the role it plays in the federal exemption scheme and whether the occasional monitoring requirement falls within the Board's identical-in-substance mandate.

The Need for Codification in Illinois

USEPA is free to deviate from its policy, and to impose monitoring of emissions of the exempted compounds on a case-by-case basis, although USEPA has no present intent to deviate from its policy. USEPA stated:

Of course, because this revised policy statement is not a binding regulation, EPA remains free at this time to depart from it in evaluating the merits of any particular rule regarding control of tropospheric ozone. However, because EPA believes that such case-by-case consideration is unnecessary, in the proposal being published today, EPA is also proposing to codify in [40 CFR 51] a general definition of VOC for all SIP development purposes that would exempt all of the compounds

on the nonreactive list being revised by today's policy statement. Should EPA adopt that proposal as a final regulation, there would be no need to consider reactivity of the listed compounds on a case-by-case basis

USEPA further stated:

[I]t is important to note that the proposed [40 CFR 51] general definition of VOC includes a provision that allows EPA or the State to require a source owner or operator, as a precondition to excluding negligibly-reactive compounds for purposes of determining compliance, to provide monitoring methods and/or monitoring results demonstrating to the satisfaction of EPA or the State, the amount of negligibly-reactive compounds in the source's emissions. . . . As discussed in the preamble to the proposed rule, the situations where such information may be needed typically involve emissions from streams where (1) VOC's and negligibly-reactive compounds are mixed together, or (2) there are a large number of negligibly-reactive compounds or the chemical composition of some of the negligibly-reactive compounds is not known.

56 Fed. Reg. at 11419-20.

Proposed 40 CFR 51.100(s) states that volatile organic compounds include all compounds that participate in atmospheric photochemical reactions other than the several listed from the Recommended Policy statement. The definition goes on to state:

[A]n owner or operator may exclude these negligibly-reactive compounds when determining compliance with an emissions standard. However, [USEPA] or the State may require such owner or operator, as a precondition to excluding these compounds for purposes of determining compliance, to provide monitoring methods and monitoring results demonstrating . . . the amount of negligibly-reactive compounds in the source's emissions.

56 Fed. Reg. at 11390.

A USEPA footnote to this Federal Register passage states:

[I]n any situation where a State allows a source to exclude any of these negligibly-reactive compounds, EPA would retain independent authority to request a source to provide monitoring methods and/or monitoring results demonstrating, to the satisfaction of EPA, the amount of negligibly-reactive compounds in the source's emissions.

56 Fed. Reg. at 11419, note 1.

Thus, USEPA can require monitoring for exempted compounds as a permit condition despite the general exemption, and the states may reserve such authority in their rules. Whether or not a state reserves such authority, USEPA reserves the right to require monitoring that demonstrates the amount of exempt compounds in a source's emissions.

The existence of conditions in the revised federal policy and the proposed definition raises the issue as to whether Illinois should similarly condition exemptions. Illinois law requires the Board to codify its rules of general applicability. The Board risks appellate court invalidation of any policy the Agency attempts to apply without the formal process of codification. See Senn Park Nursing Center v. Miller, 118 Ill. App. 3d 504, 455 N.E.2d 153 (1st Dist. 1983), aff'd 104 Ill. 2d 169, 470 N.E.2d 1069 (1984). Therefore, application of any general policy on a case-by-case basis might require codification under Illinois law.

By its April 11, 1991 Opinion and Order, the Board raised these issues and proposed language expressly reserving the Agency's prerogative to require monitoring under the conditions discussed by USEPA. The Board proposed incorporating this language in a new Section 215.108, among the general provisions of the Part of the Board's rules that regulate volatile organic emissions. The Board further incorporated into the proposed amendments to Section 211.122 a Board note that referenced Section 215.108 and the Recommended Policy statement (or, alternatively, 40 CFR 51.100(s) if this rule is adopted by USEPA) wherein USEPA reserves the right in itself to require monitoring of exempted compounds as a precondition to exemption.

In raising the issue of including an express authorization for the Agency to require monitoring for the exempted compounds among the general provisions of Part 215 for the purposes of public comment, the Board raised issues relating to its identical-in-substance authority under Section 9.1(e). First, should the Board include the express USEPA reservations along with the general exemption that Section 9.1(e) requires the Board to adopt? Second, assuming the Board should include the express reservation, does the identical-in-substance authority of Section 9.1(e) extend to adoption of such a reservation, whether based on the text of the Recommended Policy statement, see 56 Fed. Reg. at 11419-20, or on the text of the proposed federal rule when adopted? Third, does Section 9.1(e) authorize the Board to adopt an amendment to Part 215 that would embody the USEPA reservations? Fourth, assuming the Board should include the express reservation, should that reservation take the form of the conditions outlined in USEPA's discussion of the situations in which it

might require monitoring?

The Board's approach in drafting that proposal for public comment was the use of limiting terms in Section 215.108, based on the USEPA discussion of the situations under which it might impose a requirement for monitoring. USEPA's discussion appears to use those situations as non-limiting examples, so other situations could cause USEPA to impose monitoring for the exempted compounds. Therefore, the Board also added a Board Note to the proposed Section 211.122 definition of "volatile organic material" to direct the attention of the regulated community to the potentially conditional nature of the exemptions. This raised the fifth question: is there an alternative the Board could use in drafting this Section that would use non-limiting terms that are acceptable under Illinois administrative law?

Public Comments

The Board invited comment on these issues and the comments of the Agency (PC#4), IERG (PC#5), and Allied-Signal (PC#6) addressed them. The Agency appears to generally support the approach proposed by the Board, and IERG and Allied-Signal strongly disfavours any type of condition to the exemption of any VOM. The issues raised by the monitoring requirement and public comments are complex.

The Agency shares the Board's concerns over how USEPA intends to implement this conditional monitoring requirement. The Agency's witness at hearing, Mr. Romaine, asserts that monitoring methods do not yet exist for some of the newly-exempted compounds. Further, the Agency desires USEPA clarification of whether certain particulate emissions fall within USEPA's definition of "volatile organic material." Tr. at 8-10.

As to the non-existent monitoring methods and the USEPA intent as to how it intends to implement the revised policy, the Board addresses these issues below. However, the Board believes that these issues should not delay action in this proceeding. That a monitoring method does not exist for a particular compound is a substantial impediment to gauging emissions of that material, but it does not address the main issue confronting the Board in this proceeding: What is the scope of USEPA's Recommended Policy on the Control of Volatile Organic Compounds, and how can the Board best fulfill the intent of the General Assembly by embodying that federal policy?

As to the underlying definition--i.e., what USEPA considers a "volatile organic material," the only part of that definition that is of any concern here is that pertaining to exemption of negligibly-reactive compounds. Whether USEPA considers certain particulates as VOMs is irrelevant to what Section 9.1(e) authorizes the Board to do. Section 9.1(e) mandates that the Board

adopt exemptions from the definition of VOM, not correct the underlying definition in ways unrelated to the exemptions. The balance of the 40 CFR 51.100 definition of "volatile organic compound" and the Section 211.122 definition of "volatile organic material" are more properly the subject of a Section 27 general rulemaking or a Section 28.2 federally-required rulemaking. There is no reason to delay final Board action for this reason.

As to USEPA's intent as to how it will implement the revised policy, that is not the real issue. The real issue is how must the Board implement the revised policy in Illinois. Of course USEPA's plans are instructive as to how Illinois should implement the policy because they indicate the bounds of the policy that the Board must adopt. What really matters here is whether and when Illinois should itself require monitoring for the exempted compounds as a precondition to their exemption. To the extent USEPA clarifies its intent as to when it wants the monitoring data, that guidance is useful to the Board in fashioning similar conditions. However, no matter what Illinois does, USEPA is free to disapprove any SIP revision and require monitoring whenever it wishes.

USEPA has shed some light in this regard in its discussion of the proposed policy revision and in its proposed new definition. However, nothing short of a full set of federal rules outlining exactly when and how USEPA will require monitoring would serve to constrain USEPA's future exercise of its discretion. The Board sees nothing but broad generalization by USEPA in this regard. Should future USEPA actions shed more light or indicate a change in approach, the identical-in-substance procedures of Section 7.2 are available to rapidly amend the Illinois rules as necessary pursuant to Section 9.1(e). In fact, the Board reads Section 9.1(e) to require such rapid amendment where the Board rules are inconsistent with the federally-intended exemptions from the universe of VOMs.

The Agency states that the proposed rule provided appropriate clarification and reinforcement of the general authority to monitor the exempted compounds because they are still organic material. The Agency further stated that "USEPA policy allows exemption only if certain criteria are met." PC#4 at 5-6 (emphasis in original). The Agency asserts that those conditions are as follows:

- (A)(1) the applicable test method as a technical matter also measures exempt compounds, and (2) the amount of such exempt compounds being measured can be quantified.
- (B) The second key element is that all test methods must be approved by USEPA.

PC#4 at 6.

The Agency then expresses its concern over the administration of these exemptions and over the meaning of "volatile organic compound,"⁴ which it submitted to USEPA by way of public comment.

IERG asserts that the Board proposed the monitoring requirement as a precondition to any exemption, in response to the Federal Register discussion. IERG maintains that nothing in Section 9.1(e) would authorize the Board to impose monitoring because that provision discusses exemption of negligibly-reactive compounds, and not monitoring. IERG further asserts that nothing in the March 18, 1991 Federal Register discussion of the revision to the Recommended Policy requires or authorizes monitoring. Rather, IERG states that the proposed monitoring requirement arises from USEPA's March 18, 1991 proposed definition of "volatile organic compound." IERG also points out that proposed Section 215.108 goes beyond authorizing the Agency to require monitoring for the five new exempt compounds and four classes of compounds, to allowing the Agency to require monitoring for all exempt compounds. PC#5 at 7-8. IERG concludes:

The Board would be totally unjustified in using that proposed rulemaking as a basis for finally adopting, as an identical-in-substance regulation, Section 215.108. . . .

IERG submits that at this point in time there is no reason for the Board to provide IEPA with the unlimited authority to require monitoring, and that should not be the price that industry pays in order to have these additional exemptions adopted by the Board.

[I]f IEPA believes that monitoring is necessary and/or appropriate, IEPA can initiate a Board proceeding to amend the definition of VOM similar to the amendment proposed in the Federal rulemaking

PC#5 at 8-9.

IERG cites USEPA's independent authority to require monitoring for justification of an individual exemption apart from the states authority to do so. PC#5 at 9.

Allied-Signal (PC#6) concurs in the assertions of IERG. Allied-Signal further points out the following with regard to a monitoring requirement structured as a precondition to exemption:

⁴ Illinois rules use "volatile organic material," see 35 Ill. Adm. Code 211.122 (definition of term) & generally 35 Ill. Adm. Code 215, USEPA uses "volatile organic compound." See 56 Fed. Reg. 11390 (Mar. 18, 1991) (proposed 40 CFR 51.100(s) definition of term); generally 40 CFR 60.

A universal requirement of this type would serve only as a(nother) disincentive to production of CFC alternatives. IEPA already has the authority to impose permit requirements for monitoring based on case-by-case merits.

PC#6 at 2.

However, Allied-Signal does not cite the authority by which it asserts the Agency could require monitoring for exempt compounds.

Authority to Adopt a Monitoring Requirement

The first issue confronting the Board is raised by IERG's dual contentions that the Board lacks authority to adopt a monitoring requirement and that the monitoring requirement is not actually part of USEPA's Recommended Policy. IERG is correct in its first contention: if the monitoring is not part of the Recommended Policy revision, the Board lacks authority to adopt such a requirement by the identical-in-substance mandate of Section 9.1(e). On the other hand, however, if the monitoring requirement is part of USEPA's Recommended Policy on the Control of Organic Compounds, the Board must adopt such a requirement pursuant to the mandate of this provision. Related to this issue is that of the scope of any such federal requirement: does the monitoring extend only to the five new compounds and four classes of compounds, or does it extend to all exempt compounds?

Initially, the Board disagrees with IERG's assertion that USEPA imposes the monitoring only as part of the proposed rule, rather than as part of the revised policy. USEPA stated in its discussion of the revised policy that it would impose monitoring to show compliance:

[W]here a state proposes to allow an individual source to use a test method for including negligibly-reactive compounds that is different from or not specified in the approved SIP, such change must be submitted to EPA for approval as a SIP revision.

56 Fed. Reg. 11419 (Mar. 18, 1991).

USEPA also ties this discussion with its discussion of monitoring under the proposed definition:

In addition to the above procedures for using new or modified test methods, it is also important to note that the proposed part 51 general definition of VOC includes a provision that allows EPA or the State to require a source owner or operator, as a precondition

to excluding negligibly-reactive compounds for purposes of determining compliance, to provide monitoring methods and/or monitoring results demonstrating . . . the amount of negligibly-reactive compounds in the source's emissions. In order to accurately determine compliance with emissions limitations under this revised policy statement, EPA will follow this procedure as a matter of policy pending final action on [the proposed definition of VOC].

56 Fed. Reg. 11419 (Mar. 18, 1991) (emphasis added).

USEPA then proceeds to outline that it anticipates the need to monitor only under limited circumstances. Those limited circumstances are identical to those outlined in the discussion of the proposed general definition. See 56 Fed. Reg. 11419-20 (Mar. 18, 1991).

Finally, the discussion of the proposed new 40 CFR 51.100(s) definition of "volatile organic compound" makes it clear that what USEPA intends to codify only its present policy. USEPA states in the summary:

[The notice of the revised policy] adds five halocarbon compounds and four classes of perfluorocarbons to the list of organic compounds which are negligibly reactive and thus may be exempted from State implementation plans This notice [of proposed rules] proposes to make regulatory changes to EPA's new source review rules . . . consistent with this revised policy. [The notice of the proposed new definition] would have the effect of exempting the five compounds and four classes of compounds from the new source review (NSR) requirements

56 Fed. Reg. 11387 (Mar. 18, 1991).

The historical discussion outlines how USEPA codified the Recommended Policy Statement exemptions from the definition of VOC at 40 CFR 51.165 and 51.166 in 1989, 56 Fed. Reg. 11419 (Mar. 18, 1991) (citing 54 Fed. Reg. 27286 (June 28, 1989)), and in 1990 adopted a federal implementation plan for Chicago that included the exemptions in the definition of VOC. 56 Fed. Reg. 11419 (Mar. 18, 1991) (citing 55 Fed. Reg. 26814 (June 28, 1989)). It cites that USEPA is actually adopting the exemptions as part of its Recommended Policy, 56 Fed. Reg. 11419 (Mar. 18, 1991) ("in the notices section of today's Federal Register"), and USEPA incorporates the discussion of the Recommended Policy revision into the discussion of the proposed rule by reference. USEPA states with regard to the proposed definition:

The definition, to be codified at 40 CFR 51.100(s),

tracks the definition of VOC currently promulgated in various sections of both parts 51 and 52 . . . by excluding the 15 chemicals EPA has previously determined to be negligibly reactive and by adding the chemicals listed in the [revised policy statement]. The definition of VOC in each of the above sections is replaced by a reference to the general definition at § 51.100(s)

It is important to note that today's proposal . . . is strictly limited to whether EPA should codify in regulatory form its current reactivity policy as revised elsewhere in today's Federal Register. . . .

56 Fed. Reg. 11419 (Mar. 18, 1991) (emphasis added).

Based on USEPA's discussion, the Board concludes that the Recommended Policy revision actually adopted all the USEPA requirements for exempted compounds. The proposed new definition does not attempt to revise that policy. Rather, the proposed definition merely reflects that policy. Therefore, the Board is justified in referring to portions of the discussion of the proposed new definition to shed light on that policy.

IERG's assertions are not correct that in proposing monitoring requirements the Board proposed something that is not a present part of the Recommended Policy on the Control of Volatile Organic Compounds. First, the context of both the Federal Register discussion of the proposed policy revision and the contemporaneous discussion of the proposed definition make it clear that the two actions are actually one. This disarms IERG's argument that the Board cannot proceed to adopt any monitoring requirement because it is only a proposed rule, and not part of the Recommended Policy. The proposed rule is a codification of the present policy. Second, as is evident by the above-cited portions of the discussions and others, USEPA has inextricably linked the two discussions by cross-reference on the issue of monitoring.

Intent of the Monitoring Requirement

Before considering the issues raised about the substance of the monitoring requirement, the Board feels that it is necessary to explain the context in which USEPA may require monitoring before further consideration of the merits of the public comments. That context sheds light on USEPA's intent and on the scope of the Recommended Policy. In that context, the Board disagrees with certain assertions in each of the Agency's, IERG's, and Allied-Signal's comments.

The impact of the exemptions from the definition of VOM is twofold: the exemption means a source cannot be charged with

emitting a VOM when it emits an exempt compound, and it means a source cannot take credit for control of an exempt compound. As USEPA states in the preamble summary to the March 18, 1991 revision of its Recommended Policy:

[T]his notice adds five halocarbon compounds and four classes of perfluorocarbons to the list of organic compounds which are negligibly-reactive and thus may be exempt from regulation under State implementation plans (SIP's) to attain the national ambient air quality standards (NAAQS) for ozone. States may not take credit for controlling these compounds in their ozone SIP control strategies.

56 Fed. Reg. 11418 (Mar. 18, 1991).

Monitoring is necessary to demonstrate compliance with the provisions of the Illinois and federal VOM regulations. If a compound is exempt from regulation, it is not desirable that methods used to measure VOM reductions or emissions also measure exempt compounds. The appendices to 40 CFR 60 provide the basic test methods USEPA authorizes to monitor VOM emissions. See, e.g., 40 CFR 60.316(a) (Method 24 for surface coating of furniture); 60.466(a)(1) (Method 24 for metal coil surface coating); 60.547 (Method 24 or 25 for rubber and tire manufacturing); 60.614 (Method 18 for synthetic organic chemical manufacturing). The Board has incorporated those methods by reference into Part 215 at 35 Ill. Adm. Code 215.105(g). These methods cannot always distinguish between exempt compounds and volatile organic materials. For example, the basic principle behind Method 24 and Method 24A is simple volatilization, and that behind Method 25 is oxidation to carbon dioxide. See 40 CFR 60, App. A, Methods 24, 24A & 25. The exempt compounds could undergo the same reactions in the course of these methods as do VOMs. They could thereby interfere with the results. For Method 18, the chemist must know the chemical identity of the compound before analysis is possible. See 40 CFR 60, App. A, Method 18.

For these reasons, USEPA states in its Federal Register discussion of the proposed 40 CFR 51.100(s) definition of VOC:

[USEPA's] normal test method for determining compliance with coating emission limits (Method 24 in 40 CFR part 60) does not include an approach to adjust the results to account for negligibly-reactive, exempt compounds. Method 24 does contain provisions to adjust the results to account for the mass of water in the volatile portion of a coating and while a specific methodology is not specified in Method 24, a similar adjustment for negligibly-reactive compounds is also acceptable. While an appropriate adjustment to the total VOC measured by Method 24 is possible if only a few specific-

ly-known exempt compounds are in the coating, this may not be possible, or may be much more difficult, if the coating contains a large number of exempt compounds (or the chemical species are not precisely known) As a result, the proposed part 51 general definition of VOC includes a provision that allows [USEPA] or the State to require a source . . . , as a precondition to excluding these compounds for purposes of determining compliance, to provide monitoring methods and/or monitoring results demonstrating . . . the amount of negligibly-reactive compounds in the source's emissions.

56 Fed. Reg. 11389 (Mar. 18, 1991)

USEPA continues in the Federal Register discussion of the Recommended Policy revision:

Pending final action on the general definition of VOC in 40 CFR 51 . . . , the EPA will rely on today's revised policy in considering all future approvals or promulgations of implementation plan provisions designed to attain or maintain the NAAQS for ozone. Based on this revised policy, EPA anticipates that such rulemaking actions will contain exemptions for these and previously listed negligibly-reactive VOC's. . . . [W]here a state proposes to allow an individual source to use a test method for including negligibly-reactive compounds that is different from or not specified in the approved SIP, such change must be submitted to EPA for approval as a SIP revision.

56 Fed. Reg. 11419 (Mar. 18, 1991).

Thus, not only must Illinois exempt the compounds in all future SIP submittals, but it also cannot take credit for reductions in their emissions, and it must be able to show that monitored emissions and emissions reductions do not include the exempted compounds. Therefore, the ability to require monitoring in limited instances is integral to the federal scheme of regulation.

In this context, the circumstances in which USEPA states it may decide to require monitoring have greater clarity:

1. when VOMs and exempt compounds are mixed together in the emissions;
2. when there is a large number--i.e., there is a complex mixture--of exempt compounds in the emissions; and
3. when the chemical composition of the exempt compounds in the emissions is not known.

There is a unity among these USEPA-cited circumstances that manifests USEPA's intent far more lucidly than did any single passage of the Federal Register discussions. Each of these situations is one where interference with chemical analysis for VOMs is possible using the USEPA-approved methods. The Method 24 example cited by USEPA bolsters this conclusion.

The importance the Agency places on the asserted lack of analytical methods for many of the exempt compounds is slightly misplaced. It is not a cause for further delay. Rather, it is cause to proceed. Use of current USEPA methods to measure VOM contents and emissions also measure exempt compounds. The flaw is in the USEPA methods, not in the lack of methods for analyzing exempt compounds. The search for methods to analyze exempt compounds is actually a quest for accurate measurement of emissions VOM contents. The Board does not desire to inaccurately quantify VOM emissions and thereby burden Illinois industry with unnecessary control of compounds that cannot be used for emissions netting, offsetting, or trading. See 56 Fed. Reg. 11388 (Mar. 18, 1991) (citations omitted).

Flaws also become apparent in part of IERG's position. Monitoring is not "the price that industry pays in order to have these additional exemptions adopted by the Board." If industry chooses to engage in operations that emit VOMs, it must accurately monitor emissions of those environmental contaminants. If industry chooses to use exempt compounds in such a way that quantification of VOM emissions is not readily possible, it must provide some way of demonstrating its actual VOM emissions. This is true even if the analytical method employed measures combined VOM and exempt compound emissions, and the owner or operator must demonstrate the quantity of emissions of exempt compounds in order to prove its VOM emissions. The Board emphasizes: the object of monitoring is quantification of VOM emissions, not quantification of exempt compounds.

The text of the adopted rule attempts to make this point more clearly than did that of the proposed rule. The Board has added limiting language that makes it clear that the Agency may require monitoring for exempt compounds only where necessary to quantify VOM emissions. The Board has further retained the three situations discussed by USEPA as examples of when it may require monitoring for exempt compounds. Thus, with the revised language, it is clear that the Agency does not have unfettered or "unlimited" authority to require monitoring for exempt compounds. The Board believes that this structure better embodies the revised federal policy.

Scope of the Monitoring Requirement

The question remains as to what is USEPA's intent as to the

extent of the monitoring. Does the USEPA revised policy include the previously-listed compounds in the monitoring, or will USEPA require monitoring only for the five newly-listed compounds and four newly-listed classes of compounds?

First, the Board notes the method USEPA used to revise its policy: it outlines only the changes, without reiterating the existing policy. USEPA published its "Policy Statement on Use of the Concept of Photochemical Reactivity of Organic Compounds in State Implementation Plans for Oxidant Control" on January 29, 1976. 41 Fed. Reg. 5350 (Feb. 5, 1976). USEPA published its Recommended Policy on Control of Volatile Organic Compounds on June 29, 1977, 42 Fed. Reg. 35314 (July 8, 1977). In this Recommended Policy, USEPA implemented the substitution-based-on-reactivity concept of the earlier policy statement, by expressly exempting four compounds from ozone SIP regulation based on their low photochemical reactivity. USEPA further clarified its policy as to one of the initially-listed compounds on May 25, 1979, 44 Fed. Reg. 32042 (June 4, 1979), and May 9, 1980. 45 Fed. Reg. 32424 (May 16, 1980). On July 16, 1980, USEPA expanded the list of exempt compounds and summarized the pre-existing policy. 45 Fed. Reg. 48941 (July 22, 1980). USEPA did the same on January 5, 1989, 54 Fed. Reg. 1987 (Jan. 18, 1989) and March 6, 1991, 56 Fed. Reg. 11418 (Mar. 18, 1991), both times broadly summarizing the entire policy and outlining the revisions. In each instance where USEPA initially implemented the Recommended Policy and every time it revised it, USEPA does not reiterate the Policy in its entirety. Rather, each discussion is limited to outlining the prior action and elaboration of the change.

In this latest instance of revision, now the subject of this proceeding, USEPA broadly introduced the concept of monitoring for exempt compounds where necessary to accurately gauge actual VOM emissions. The first mention of the possibility of monitoring immediately following this passage:

EPA interprets its prior control of SIP's that contain measures to control VOC's as not extending to the compounds listed today. . . . Based on this revised policy, EPA anticipates that [all state and federal SIP revision] rulemaking actions will contain exemptions for these and previously listed negligibly reactive VOC's. . . .

56 Fed. Reg. 11419 (Mar. 18, 1991).

Thus, when USEPA introduced the possibility of monitoring, it had already shifted from consideration of the newly-added compounds and classes of compounds to a general discussion of how it anticipates its policy to work as to all compounds and classes of compounds, both old and new. Further, in the initial elaboration on monitoring, USEPA introduced the full paragraph with the

words, "In addition to the above procedures . . .," 56 Fed. Reg. 11419 (Mar. 18, 1991), which indicate discussion independent of the prior addition of new exempt compounds.

Nowhere in the ensuing discussion of monitoring is there any mention of the new compounds or classes of compounds, let alone any limitation of monitoring only to them. The only limitations to monitoring that USEPA mentioned are those discussed above.

Based on the fact that monitoring on an as-needed basis is an integral part of the entire federal Recommended Policy, the Board must conclude that monitoring on an as-needed basis applies to all newly-listed compounds and those previously on the list. One other aspect of the purpose behind the monitoring bolsters this conclusion: the monitoring is intended only where necessary to quantify non-exempt VOMs, not to quantify exempt compounds per se. The previously-listed compounds can impose the same impediment to monitoring VOMs as can the newly-listed ones. It makes little sense to actuate this general purpose only as to the newly-listed compounds and classes of compounds.

Existing Authority to Require Monitoring

Addressing the Agency's and Allied-Signal's contentions that the Agency possesses authority to monitor the exempted compounds as "organic material," even if exempted from the Section 211.122 definition of "volatile organic material," the Board disagrees that any such authority would satisfy the USEPA Recommended Policy. 35 Ill. Adm. Code 215.301 prohibits excessive emissions of organic material⁵ (defined at Section 211.122 in such a way that it includes the exempt compounds). However, a proviso to that section states: "If no odor nuisance exists the limitation of this Subpart shall apply only to photochemically reactive material." 35 Ill. Adm. Code 215.301; see 35 Ill. Adm. Code 211.122 (definition of "photochemically reactive material"). There is no assurance that the exempted compounds are photochemically reactive materials. Therefore, any authority to monitor pursuant to provisions regarding the regulation of organic materials may not authorize monitoring exempt compounds in the way the

⁵ Most other substantive provisions of 35 Ill. Adm. Code 215 specify "volatile organic material" emissions. See 35 Ill. Adm. Code 215.Subparts E, F, N, P, Q, S, T, U, V, Y, Z, AA, BB, PP, QQ & RR; see also 35 Ill. Adm. Code 215.Subpart X (specifying emissions of "photo-chemically reactive material" from construction). 35 Ill. Adm. Code 215.Subpart K is a general provision that applies to the use of "organic material." See also 35 Ill. Adm. Code 215.101 (clean-up and disposal operations); 35 Ill. Adm. Code 215.Subpart B (storage and loading operations); 35 Ill. Adm. Code 215.Subpart C (miscellaneous equipment); 35 Ill. Adm. Code 215.Subpart R (petroleum refining and related industries)

USEPA Recommended Policy requires to determine VOM emissions. The subject of this rulemaking is codification of that Policy, nothing more and nothing less.

Conclusions re Monitoring

As discussed above, the Board interprets Section 9.1(e) as mandating that we adopt rules identical-in-substance to the USEPA policy that exempts negligibly-reactive compounds--in a manner that is identical in substance to the way USEPA chooses to implement that policy. The Board further interprets the provision referring to the 35 Ill. Adm. Code 211 definition of "volatile organic material" as directing the Board as to how it should implement that policy: by excluding those exempted compounds from definition as VOMs. Contrary to IERG's assertions, the Board does not believe that this segment of Section 9.1(e) precludes the Board from embodying portions of that policy in other locations in its rules--so long as those compounds are no longer considered VOMs on a basis that is identical-in-substance to that used by USEPA, and especially where restriction to amendment of the Section 211.122 definition renders the Board's basis for exclusion not identical-in-substance to that of USEPA.

Therefore, the Board will adopt the federal monitoring requirement. The Board will use a note to the general definition of VOM to alert the regulated community to the possibility of monitoring, whether by the Agency or, independently, by USEPA. However, Part 211 is not the most likely location for an actual rule that embodies the federal requirement and authorizes the Agency to require monitoring on a limited basis. The Board believes that the general provisions of Part 215 is the best location for such a rule. Part 215 imposes the substantive requirements for control of VOMs. That Part indicates the applicability of its own rules and imposes on the regulated community, among all else, monitoring and reporting requirements. The Board believes that a new Section 215.108 is the best choice for this new provision--even if it is part of a federal policy whose corpus lies at the Section 211.122 definition of "volatile organic material."

However, in light of the comments received from the Agency and IERG the Board believes it must more thoroughly outline the conditions under which the Agency may impose monitoring. The Board intends that the monitoring occur only where necessary to quantify actual VOM emissions. We have revised the text of proposed Section 215.108 to reflect this limitation.

Corrections to Text of the Proposed Rule

In the interest of cleaning up the present text of the definition, the Board notes that the names of compounds listed in the present definition appear in alphabetical order with one

exception: Dichloromethane. This compound is out of order because the Board amended the entry in R89-8 to use the IUPAC name for Methylene Chloride, the pre-existing entry. In the course of placing the instant five compounds in alphabetical order, the Board also places Dichloromethane in the proper order.

PC#6, from Allied Signal Inc. observed that the Board underlined six compounds in the text of the proposed rule, and only five new compounds are added to the list of those exempt. One of those cited by Allied-Signal as newly added is dichloromethane, which is only re-listed as explained above. The other compound, cited as erroneously underlined, was trichlorotrifluoroethane (CFC-113), when trifluoroethane (HFC-143a) should have appeared underlined instead. The Board corrects this error in response to this comment.

Corrections of Errors in Unrelated Definitions

In PC#1, the Secretary of State points out that under the definition of "major population area" the definition includes "Plato" Township. There is a Plano Township, but no township by the name of "Plato." This Opinion and Order makes this correction.

Similarly, JCAR points out in PC#2 that the text of certain definitions was missing. This raises a problem created in the R89-16(A): RACT Deficiencies proceeding, propagated in the R88-30(B): Gasoline Volatility proceeding, and improperly corrected in the R88-14: Pharmaceutical VOM Emissions proceeding. By this Opinion and Order, the Board makes the corrections cited by JCAR and a small number of others discovered upon detailed examination of the definitions in Section 211.122:

"Coating": Entire definition, erroneously deleted from the text of the rule filed in R88-30(B), is restored.

"Component": Format of citation to 35 Ill. Adm. Code 215. Subpart Q corrected.

"Enclose": Format of citation to 35 Ill. Adm. Code 215. Subpart T corrected.

"Excessive release": "and/or" changed to "or."

"Fabric coating": Partial text of definition, erroneously deleted from the text of the rule filed in R88-30(B), is restored.

"Miscellaneous metal parts and products": "-" changed to "through" in citation format for greater clarity.

"Miscellaneous organic chemical manufacturing process":

Format of citation to 35 Ill. Adm. Code 215. Appendix D corrected.

"Restricted area": Location of statutory citation changed.

"Sandblasting": "and/or" changed to "or."

"Shotblasting": "and/or" changed to "or."

"Vapor collection system": "and/or" changed to "or."

"Vinyl coating": Partial text of definition, erroneously deleted from the text of the rule filed in R88-30(B), is restored; spelling of "organosol" is corrected.

"Volatile organic material": Partial text of definition-- i.e., definition of "volatile organic material content," erroneously added as part of this definition in the text of the rule filed in R89-16(A), then subsequently improperly deleted from the text of the rule as filed in R88-30(B), is restored for proper deletion by strikeout in this docket.

ORDER

The Board hereby proposes the following amendments to its definition of volatile organic material at 35 Ill. Adm. Code 211.122 and new section 35 Ill. Adm. Code 215.108:

Section 211.122 Definitions

. . .

"Coating": For purposes of this Part, a coating includes a material applied to a substrate for decorative, protective or other functional purposes. Such material shall include but not be limited to paints, varnishes, sealers, adhesives, diluents and thinners.

. . .

"Component": Any piece of equipment which has the potential to leak volatile organic material including, but not limited to, pump seals, compressor seals, seal oil degassing vents, pipeline valves, pressure relief devices, process drains and open ended valves. This definition excludes valves which are not externally regulated, flanges, and equipment in heavy liquid service. For purposes of 35 Ill. Adm. Code 215.- Subpart Q, this definition also excludes bleed ports of gear pumps in polymer service.

. . .

"Enclose": with respect to 35 Ill. Adm. Code 215. Subpart T, to cover any volatile organic liquid surface that is exposed to the atmosphere.

. . .

"Excessive Release": A discharge of more than 295g (0.65 pounds) of mercaptans ~~and~~ or hydrogen sulfide into the atmosphere in any five minute period.

. . .

"Fabric Coating": The coating of a textile substrate including operations where the coating impregnates the substrate.

. . .

"Major Population Area (MPA)": Areas of major population concentration in Illinois, as described below:

The area within the counties of Cook; Lake; DuPage; Will; the townships of Burton, Richmond, McHenry, Greenwood, Nunda, Door, Algonquin, Grafton and the municipality of Woodstock, plus a zone extending two miles beyond the boundary of said municipality located in McHenry County; the townships of Dundee, Rutland, Elgin, Plano, St. Charles, Campton, Geneva, Blackberry, Batavia, Sugar Creek and Aurora located in Kane County; and the municipalities of Kankakee, Bradley and Bourbonnais, plus a zone extending two miles beyond the boundaries of said municipalities in Kankakee County.

The area within the municipalities of Rockford and Loves Park, plus a zone extending two miles beyond the boundaries of said municipalities.

The area within the municipalities of Rock Island, Moline, East Moline, Carbon Cliff, Milan, Oak Grove, Silvis, Hampton, Greenwood and Coal Valley, plus a zone extending two miles beyond the boundaries of said municipalities.

The area within the municipalities of Galesburg and East Galesburg, plus a zone extending two miles beyond the boundaries of said municipalities.

The area within the municipalities of Bartonville, Peoria and Peoria Heights, plus a zone extending two miles beyond the boundaries of said municipalities.

The area within the municipalities of Pekin, North Pekin, Marquette Heights, Creve Coeur and East Peoria, plus a zone extending two miles beyond the boundaries of said municipalities.

The area within the municipalities of Bloomington and Normal, plus a zone extending two miles beyond the boundaries of said municipalities.

The area within the municipalities of Champaign, Urbana and Savoy, plus a zone extending two miles beyond the boundaries of said municipalities.

The area within the municipalities of Decatur, Mt. Zion, Harristown and Forsyth, plus a zone extending two miles beyond the boundaries of said municipalities.

The area within the municipalities of Springfield, Leland Grove, Jerome, Southern View, Grandview, Sherman and Chatham, plus a zone extending two miles beyond the boundaries of said municipalities.

The area within the townships of Godfrey, Foster, Wood River, Fort Russell, Chouteau, Edwardsville, Venice, Nameoki, Alton, Granite City and Collinsville located in Madison County; and the townships of Stites, Canteen, Centreville, Caseyville, St. Clair, Sugar Loaf and Stookey located in St. Clair County.

. . .

"Miscellaneous Metal Parts and Products": For the purpose of 35 Ill. Adm. Code 215.204, miscellaneous metal parts and products shall include farm machinery, garden machinery, small appliances, commercial machinery, industrial machinery, fabricated metal products and any other industrial category which coats metal parts or products under the Standard Industrial Classification Code for Major Groups 33, 34, 35, 36, 37, 38 or 39 with the exception of the following: coating lines subject to 35 Ill. Adm. Code 215.204(a)-through (i) and (k), automobile or light-duty truck refinishing, the exterior of marine vessels and the customized top coating of automobiles and trucks if

production is less than thirty-five vehicles per day.

"Miscellaneous Organic Chemical Manufacturing Process":

A manufacturing process which produces by chemical reaction, one or more of the following organic compounds or mixtures of organic compounds and which is capable of emitting volatile organic materials:

Chemicals listed in 35 Ill. Adm. Code 215.
Appendix D.

Chlorinated and sulfonated compounds

Cosmetic, detergent, soap or surfactant
intermediaries or specialties and products

Disinfectants

Food additives

Oil and petroleum product additives

Plasticizers

Resins or polymers

Rubber additives

Sweeteners

Varnishes

The storage and handling of formulations
associated with the process described above.

The use and handling of organic liquids and other
substances for clean-up operations associated with
the process described above.

. . .

"Restricted Area": The area within the boundaries of
any "municipality" as defined in the Illinois Municipal
Code (ch. 24, par 1-1-1 et seq.), plus a zone extending
one mile beyond the boundaries of any such municipality
having a population of 1000 or more according to the
latest federal census. ~~(ch. 24, par 1-1-1 et seq.)~~

. . .

"Sandblasting": The use of a mixture of sand and air at high pressures for cleaning and/or polishing any type of surface.

. . .

"Shotblasting": The use of a mixture of any metallic or non-metallic substance and air at high pressures for cleaning and/or polishing any type of surface.

. . .

"Vapor Collection System": All piping, seals, hoses, connections, pressure-vacuum vents, and other possible sources between the gasoline delivery vessel and the vapor processing unit and/or the storage tanks and vapor holder.

. . .

"Vinyl Coating": The application of a topcoat or printing to vinyl coated fabric or vinyl sheets; provided, however, that the application of an organosol or plastisol is not vinyl coating.

. . .

~~"Volatile Organic Material" or "Volatile Organic Material Content (VOMC)": the emissions of volatile organic material which would result from the exposure of a coating, printing ink, fountain solution, tire spray, dry cleaning waste or other similar material to the air, including any drying or curing, in the absence of any control equipment. VOMC is typically expressed as kilogram (kg) VOM/liter (lb VOM/gallon) of coating or coating solids, or kg VOM/kg (lb VOM/lb) of coating material.~~

Any organic material which participates in atmospheric photochemical reactions unless specifically exempted from this definition. Volatile organic material emissions shall be measured by the reference methods specified under 40 CFR 60, Appendix A (1986) (no future amendments or editions are included), or, if no reference method is applicable, may be determined by mass balance calculations.

For purposes of this definition, the following are not volatile organic materials:

Chlorodifluoroethane (HCFC-142b)

Chlorodifluoromethane (CFC-22)
 Chloropentafluoroethane (CFC-115)
2-Chloro-1,1,1,2-tetrafluoroethane (HCFC-124)
 Dichlorodifluoromethane (CFC-12)
 Dichlorofluoroethane (HCFC-141b)
Dichloromethane (Methylene chloride)
 Dichlorotetrafluoroethane (CFC-114)
 Dichlorotrifluoroethane (HCFC-123)
1,1-Difluoroethane (HFC-152a)
 Ethane
 Methane
~~Dichloromethane (Methylene chloride)~~
Pentafluoroethane (HFC-125)
Tetrafluoroethane (HFC-134a)
1,1,2,2-Tetrafluoroethane (HFC-134a)
 Trichloroethane (Methyl chloroform)
 Trichlorofluoromethane (CFC-11)
 Trichlorotrifluoroethane (CFC-113)
1,1,1-Trifluoroethane (HFC-143a)
 Trifluoromethane (FC-23)

and the following classes of compounds:

Cyclic, branched, or linear, completely fluorinated alkanes.

Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations.

Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations.

Sulphur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

BOARD NOTE: USEPA or the Agency may require monitoring to demonstrate the amount of an exempted compound in a source's emissions on a case-by-case basis as a pre-condition to exemption of that compound under certain circumstances, such as where VOMs and exempted compounds are mixed together, there are a large number of exempted compounds, or the chemical composition of the exempted compounds is not known. See 35 Ill. Adm. Code 215.108; 56 Fed Reg. 11419-20.

. . .

Section 215.108 Monitoring for Negligibly-Reactive Compounds

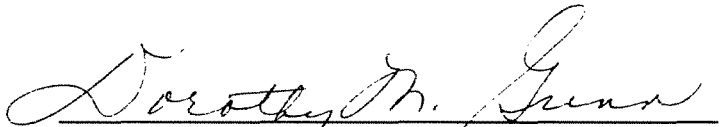
Any provision of 35 Ill. Adm. Code 211 notwithstanding, the Agency may require monitoring for any of the compounds listed at 35 Ill. Adm. Code 211.122 as exempted from the definition of "volatile organic material," as a precondition to such exemption where direct quantification of volatile organic material emissions is not possible due to any of the following circumstances which make it necessary to quantify the exempt compound emissions in order to quantify volatile organic material emissions:

- a) VOMs and exempted compounds are mixed together in the same emissions;
- b) There are a large number of exempted compounds in the same emissions; or
- c) The chemical composition of the exempted compounds in the emissions is not known.

The Board directs the Clerk of the Board to delay filing these adopted amendments until 14 days after the date of this Opinion and Order to allow time for the filing of supplemental public comments by interested persons.

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, do hereby certify that the above Opinion and Order was adopted on the 12th day of September, 1991, by a vote of 7-0.


Dorothy M. Gunn, Clerk
Illinois Pollution Control Board