UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

OCT 2 3 1979

MEMORANDUM

SUBJECT: B. F. Goodrich - PSD modification

From: Director
Division of Stationary Source Enforcement

TO: Stephen A. Dvorkin, Chief
General Enforcement Branch, Region II

This is in response to your memo of September 21, 1979, in which you requested a determination as to whether vinyl chloride and volatile organic compounds (VOC) should be considered as separate pollutants for purposes of PSD review. Specifically, you asked whether certain modifications proposed by B.F. Goodrich require PSD review for vinyl chloride emissions, even though they have already received a State permit which satisfies the requirements of the Offset Policy for VOC emissions.

I agree with your conclusion that PSD review will still be required for vinyl chloride emissions. Section 165(a)(4) of the Act applies the preconstruction requirements to "each pollutant subject to regulation under this Act". Although vinyl chloride is a component of VOC and is therefore regulated by the States under §110 of the Act, it is also regulated separately under §112. VOC is regulated for the purpose of attaining the ozone standards while vinyl chloride is regulated for the purpose of protecting the public from exposure to a carcinogen. Since the two pollutants are regulated for different purposes, it is possible that BACT for vinyl chloride and LAER for VOC would require two different levels of control. Even if it is found that the required levels of control are equivalent, a PSD permit must be issued with a statement to that effect.

Goodrich has argued that they are exempt under §52.21(i)(5) of the PSD regulations which states,

> "The requirements of paragraphs (j), (l), (n), and (p) of this section shall not apply to a major stationary source or major modification with respect to a particular

pollutant if the owner or operator demonstrates that -

(i) As to that pollutant, the source or modification is subject to the emission offset ruling ... and

(ii) The source or modification would impact no area attaining the national ambient air quality standards..."

In this case, Goodrich's vinyl chloride emissions are not eligible for the exemption in §52.21(i)(5) because vinyl chloride and VOC are different pollutants.

This determination was related to Goodrich representatives at a meeting in our office on September 26, 1979, at which Walter Mugdan of your office was in attendance.

If you wish to discuss this further, please contact Libby Scopino at 755-2564.

Edward E. Reich

cc: Eric Cohen, Region V

SUBJECT Pedricktown, New Jersey Plant Expansion
PSD Application

FROM Stephen A. Dvorkin, Chief
General Enforcement Branch

TO Edward Reich, Director
Division of Stationary Source Environment

FACTS

The B. F. GOQDRICH Company ("Goodrich" or "BFG") owns and operates a polyvinyl chloride plant in Pedricktown, New Jersey. By letter of March 4, 1979, BFG applied for a PSD permit to expand its production capabilities at the Pedricktown plant in three phases. Specifically, in Phase 1 the yearly capacity of an existing dispersion resin plant will be increased by 27 million pounds of polyvinyl chloride ("PVC") per year. In Phase 2, which will commence at the same time as Phase 1, BFG will construct a new suspension resin plant with a capacity of 200 million pounds of PVC per year. In Phase 3, an existing suspension resin plant will be converted into a 96 million pound per year dispersion resin plant. Construction of Phase 3 will commence about one year after commancement of Phases 1 and 2.

The increase in potential emissions, as defined in 40 CFR §52.21(b)(3), from each of the three phases will be in excess of 100 tons of vinyl Chloride ("VCM") per year. For purposes of this memorandum, it will be assumed that the increase in allowable emissions of VCM (calculated pursuant to the existing rules) will be in excess of 50 tons per year for all three phases.

Emissions Of volatile organic compounds, other than VCM will be insignificant.

Region II has concluded that BFG is subject to second tier PSD requireirements for the emission of VCM for the first two, if not all three, phases of the plant expansion.

Since the Pedricktown facility is in an area which is not attaining the primary national ambient air quality standard for volatile organic compound, ("VOC"), BFG must comply with the requirements of the Emission Offset Policy ("EOP") for its VOC emissions.

In order to construct the new expansions, BFG has obtained offsets[1] against the increases in VCM resulting from the expansion. Prior to issuing the State construlction permit, the New Jersey Department of Environmental Protection ("NJDEP") performed a LAER review for VOC emissions.

Relying on the NJDEP review for VOC, BFG has claimed that it is exempt from a second tier PSD review of its VCM emissions pursuant to 40 CFR §52.21(i)(5). Region II has taken the position that while the NJDEP may have conducted a LAER review for emissions of VOC, the PSD regulations also require a BACT review for VCM.

ISSUE

1. Is a proposed major source or major modification which will emit vinyl chloride ("VCM") and which will be located in a nonattainment area for volatile organic compound ("VOC"), subject to both an LAER review for VOC emission controls under the Emission Offset Policy and a BACT review for VCM emission controls under the PSD rules?

DISCUSSION

The question of whether BFG's plant expansion is exempt from a BACT review for VCM requires a close analysis of 40 CFR §52.21(i)(5) and the policies behind the exemption therein. 40 CFR §52.21(i)(5) provides:

> The requirements of Paragraphs (i), (l), (h), and (p) of this section shall not apply to a major stationary source or major modification with respect to a particular pollutant if the owner or operator demonstrates that -
>
> (i) As to that pollutant, the source or modification is subject to the emission offset ruling (41 FR 55524), as it may be amended, or promulgated,pursuant to Section 173 of the Act: and
>
> (ii) The source or modification would impact no area attaining the national ambient air quality standards (either internal or external to areas designated as nonattainment under Section 107 of the Act). Emphasis added.

The cited provision clearly limits the exemption from PSD requirements to that pollutant (and only that pollutant) which is subject to EOP.

---

[1]Region II is reviewing the validity of the offsets claimed by BFG. However, for purposes of this memorandum, it will be presumed that the offsets are valid.

VOC and VCM are two distinct pollutants under the Clean Air Act. VOC is regulated pursuant to Sections 109 and 110 and VCM is regulated under section 112. While VCM is within the class of pollutants known as VCM, the requirements imposed by Section 112 on the emission of VCM is substantially different (and more stringent) than the requirements imposed by SIP's promulgated under Section 110 on the emission of VOC. Within the regulatory scheme of the Clean Air Act , it is obvious that VCM and VOC are legally distinct pollutants to which different requirements apply.

The pollutant, which is subject to EOP in the BFG case, is VOC, not VCM. The scope of review required by EOP for VOC is not coextensive with the scope of review under PSD for VCM. EOP required BFG to achieve LAER.

LAER is defined in the EOP Interpretive Ruling as:

> for any source, that rate of emissions based on the following, whichever is more stringent:
> (i) The most stringent emission limitation which is contained in the implementation plan of any State for <u>such class or category of source</u>, unless the owner or operator of the proposed source demonstrates that such limitations are not achievable; or
> (ii) The most stringent emission limitation which is achieved in practice by <u>such class or category of source</u>.
> 44 <u>Federal Register</u> 3282, January 16, 1979. Empnasis added.

Under the PSD rules, BFG would be required to apply BACT to VCM emissions.

BACT is:

> an emission limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under the act which would be emitted from any proposed major stationary source or major modification which the Administrator, on a <u>case-by-case basis</u>, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR Part 60 and Part 61. Emphasis added. 40 CFR §52.21(b)(10).

The difference between LAER and BACT in the BFG case is, in short, that LAER requires a review by class or category of sources of VOC while BACT requires a specific (case by case) analysis of VCM controls. It is not only possible but probable that in some cases BACT for VCM could be more stringent than LAER for VOC. In order to assure that the more stringent of the standards is met, as required, EPA must conduct a BACT review for VCM.

BFG has claimed that the NJDEP's review for EOP is equivalent to EPA's proposed BACT review, since the NJDEP requirement of "state of the art" control equipment is not limited to a consideration of the generic pollutant (VOC), but considers the specific pollutant emitted (VCM). However, other than by means of the permit mechanism, the NJDEP does not limit the emission of VCM. No emission standards for VCM have been promulgated by the NJDEP and the PSD program has not yet been delegated by EPA. Consequently, Region II is not confident that the NJDEP, in fact, subjected the BFG proposal to the type of review required by the PSD rules.

While the foreqoing discussion has focused on provisions of the existing PSD rules, a similar issue will arise under the proposed PSD rules in their application to sources in non-attainment areas. See 44 Federal Register 51938 - 51941, 51953 (September 5, 1979).

Please provide us with guidance on the aforementioned issue at your earliest convenience.