

02/29/1984

VOC470229841

Category: 47 – Compliance Date Extension

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
AIR, NOISE AND RADIATION

February 29, 1984

Richard A. Lillquist, President
Flexible Packaging Association
1090 Vermont Avenue, N.W.
Washington, D.C. 20005

Dear Mr. Lillquist:

Thank you for your letter of January 24, 1984 summarizing our meeting of January 20th. I appreciated the chance to discuss with you and members of your Association EPA's program to assure source compliance with volatile organic compound emission limitations in State implementation plans.

I would like to take this opportunity to expand upon a few points in your letter. The policy considerations discussed below are based upon the principles set forth in a September 20, 1982 memorandum entitled "Enforcement Action Against Stationary Air Sources Which Will Not Be In Compliance by December 31, 1982," and a January 12, 1983 memorandum entitled "Guidance on Implementation of the 1982 Deadline Enforcement Policy Issued September 20, 1982." I have enclosed copies of these memorandum, and a subsequent memorandum modifying the procedures used to incorporate extended schedules in a judicial decree.

You are correct in noting that the issuance of a notice of violation (NOV) by EPA is not intended to pre-empt State efforts to resolve the violation. EPA's Regional Offices have been directed to issue NOVs to all sources which are subject to the 1982 Deadline Enforcement Policies referenced above. An NOV will be issued even if the State is proceeding with an enforcement action against the source so that EPA will be in a position to pursue its own enforcement action in the event federal action subsequently becomes necessary.

EPA will closely monitor the enforcement efforts made by a State. Depending upon the facts of each case, EPA may pursue its own enforcement action if a State is not adequately addressing a violation. The adequacy of State action to correct a violation is dependent upon its consistency with the Clean Air Act or Agency policy, as discussed below. Federal enforcement would also be pursued where, as a result of consultations with the State, EPA has been identified as the lead Agency to address a particular source.

The Clean Air Act sets out several potential mechanisms for establishing an enforceable schedule to bring a violating source into compliance with the SIP. Adequate State action may be in the form of any of these mechanisms.

One mechanism established by the Act for extending compliance deadlines is a federally-approved revision to the SIP under Section 110 of the Clean Air Act. However, as we have discussed, the requirements of Section 110 and Part D of the Clean Air Act limits this option for most VOC sources.

A second mechanism is a Delayed Compliance Order (DCO) under Section 113(d) of the Act, which can be issued to a source either by a State or EPA. In order to be effective under the Clean Air Act, State-issued DCOs to major sources must be approved by EPA. EPA regulations governing the issuance, approval, and disapproval of DCOs are located at 40 CFR Part 65. Section 113(d)(1) of the Clean Air Act sets out the necessary elements of a DCO, including a schedule requiring compliance as expeditiously as practicable, but no later than three years after the date the SIP required compliance. Most SIPs required compliance with VOC limitations by December 1982. Thus, DCOs for VOC sources must generally require final compliance with the SIP by no later than December 1985.

Where EPA is bringing the enforcement action (rather than acting on a State-issued DCO), the issuance of a DCO is a discretionary action. DCOs can reflect a compliance strategy contemplating the expeditious development and use of low solvent technology. In determining whether to issue a DCO reflecting low solvent technology as a compliance strategy, EPA considers whether the source has made, and is continuing to make, serious good faith efforts to develop complying low solvent technology. Because of the length of time that is generally required to develop this technology, and because VOC emission limitations have been in effect in most cases since at least 1979, DCOs are not appropriate for sources whose research and development efforts towards reformulation are just beginning.

Ultimately, it is the firm obligation of a source subject to a DCO to meet the order's final compliance requirement. To ensure that federally-issued DCOs in fact result in compliance by the date established in the order where low solvent technology is pursued, federal DCOs will establish a time to determine if effective technology has been developed. If low solvent technology for the particular source has not been developed by this point, the order will provide that the source pursue an alternative compliance strategy, in most cases add-on controls. The DCO will establish this decision point so that sufficient time remains to meet the final compliance date through the alternative compliance strategy.

EPA does not routinely seek penalties when it issues a DCO. While EPA must approve a State-issued DCO if it meets the criteria of Section 113(d) of the Clean Air Act, the Agency will pursue an action for penalties against a source subject to a State DCO if the compliance history of the source warrants this further action.

The adequacy of other types of State action to address a violation is determined by the Agency's Regional Offices. The 1982 Deadline Enforcement Policy referenced above is the current national guidance establishing the principles to be applied by the Regional Offices in determining whether the Agency should defer to the State's effort or pursue federal enforcement action. Under this Policy and implementing guidance, a State judicial order or administrative order (other than a DCO), must, at a minimum, include the following key elements to justify EPA deferral: 1) the source commits to an expeditious schedule to come into compliance with the SIP (or RACT if no Part D plan is in force), 2) the compliance schedule contains enforceable increments of progress, 3) the order includes reporting requirements, including reporting to the State and, if it is a judicial order, to the court, of completion of each increment, 4) the order treats limited life facilities consistent with Agency guidance, and 5) the order provides payment of a significant cash penalty.

Thus, the Agency will defer to timely State action to correct a violation if it is formally approved by the Agency as a SIP revision or DCO, or if the Regional Office determines that the State action satisfies the principles outlined above. If a source does not comply with an adequate State action to correct a violation, EPA will seriously consider the initiation of its own enforcement for penalties and necessary injunctive relief in the absence of comparable State action.

I hope these observations are useful. If you have any questions, please call me at (202) 382-2807.

Sincerely yours,

Edward E. Reich, Director
Stationary Source Compliance
Division

cc: FPA Executive Committee
Malcolm MacArthur, FPA Legal Counsel
Tom Dunn, Printpack, Inc.
Jim Stokes, Printpack, Counsel
John Calcagni, CPDD

Enclosures

APPENDIX IV

CLEAN AIR ACT PENALTY POLICY AS APPLIED TO
STATIONARY SOURCES OF VOLATILE ORGANIC COMPOUNDS
WHERE REFORMULATION TO LOW SOLVENT TECHNOLOGY
IS THE APPLICABLE METHOD OF COMPLIANCE

Introduction

This addendum provides guidance for calculating the civil penalties EPA will require in pre-trial settlement of district court enforcement actions, pursuant to Title I of the Clean Air Act (CAA), against sources of volatile organic compounds (VOC's) in violation of State Implementation Plan emission limitations, where low solvent technology (LST) is an acceptable control strategy for achieving compliance. If compliance using LST is the control strategy chosen by the source and if it can be implemented expeditiously, the penalty analysis methodology set forth in this appendix must be used. If compliance using LST is not the compliance strategy chosen by the source, or if LST cannot be accomplished expeditiously or is not available, the penalty must be calculated according to the general Clean Air Act Stationary Source Civil Penalty Policy, (hereinafter CAA Penalty Policy), based on the costs of add-on controls.

A separate policy for arriving at a penalty figure in VOC cases where LST is an acceptable control strategy is necessary because penalties calculated pursuant to the general CAA Penalty Policy in such instances are insufficient to deter violations.¹ The general CAA Penalty Policy focuses upon recapturing the economic savings of non-compliance based upon the typically substantial capital expenditures and operation and maintenance costs of the necessary pollution control equipment. The capital costs of implementing LST are by comparison relatively small, and in many cases LST actually results in a net economic savings.²

¹ Penalties must be high enough to have the desired specific and general deterrent effects. They must also be, to the extent possible, objective in order to ensure fairness. The general CAA Penalty Policy, relying on the cost of pollution control equipment, does not provide such penalties in the case of VOC sources using LST. Indeed VOC penalties have been much smaller than the penalties collected in other CAA cases. A sample of VOC sources, with total sales in the \$10,000,000 range, have had civil penalties ranging from \$2,000 to \$45,000. By comparison, a company cited for TSP violations, with sales in 1983 of \$4,656,000, will be asked to pay a minimum of \$75,000 in penalties.

² Although substantial capital expenditures are required for VOC sources using add-on technology to come into compliance, sources having the option of using low solvent or water-based technology derive economic savings by coming into compliance. For example, reformulation to LST generally involves only minor mechanical and process modifications costing less than \$10,000. (See note 4 infra.) These small outlays are recaptured by subsequent cost savings.

(continued...)

This guidance, therefore, sets forth an objective methodology for arriving at a substantial cash penalty figure in cases not requiring the expenses associated with add-on technology. Specifically, in all VOC cases including those where a source may choose to come into compliance using LST as a control option. Regions must base their pre-negotiation penalty calculations for the Economic Benefit Component on the cost of add-on controls. Once negotiations begin, the Region may recalculate the penalty figure using the alternative methodology in this Appendix where applicable based on information to be supplied by the source. The Economic Benefit component will be re-calculated based on the cost of LDT as a control option. An additional penalty component (hereinafter referred to as the Production Component) must thereafter be calculated by multiplying the dollar amount of sales on the non-complying lines as reported by the source, by the average return on sales for the industry, to be supplied by NEIC. The average return on sales is the norm for the industry for net profits after taxes divided by total sales. Industry-specific average return on sales multipliers are available from the Information Services Office at NEIC in Denver, FTS 776-5124 (contact Charlene Swibas). NEIC will require the following information from the Region to calculate the average return on sales multiplier for an individual source: (1) type of VOC source, (2) total assets or number of employees, and (3) dollar amount of sales produced on the non-complying lines by year. In this regard, EPA should advise sources that it is to their benefit to supply EPA with detailed information such as a plant specific breakdown of assets rather than company-wide reports, and line-by-line sales figures. This will help ensure that the penalty is limited to sales from production on their non-complying lines as opposed to their total sales. When verifiable line-by-line production information is not available, the Regions must base their estimates on source's total sales as reported in company books and annual reports. In addition, the Production Component figure may be adjusted to reflect the source's actual return on sales where this figure can be established from reliable information.

The total of the Production and Economic Benefit Components should be compared to the penalty that would have been imposed were the source coming into compliance using add-on controls. In no event should the total of the Economic Benefit and Production Components exceed the penalty amount based solely on the cost of add-on controls.

This policy may be used in all situations involving LST as an acceptable compliance option, including those where the source is granted an expeditious

² (...continued)

For example, water-based coatings are usually less expensive. Similarly, high solid emulsion-LSTs, although perhaps more expensive on a volume basis, are more efficient when properly applied, requiring fewer coatings. Reduced VOC emissions result in further indirect savings in the form of lower employee health problems and absenteeism, reduction in the cost and amount of OSHA-required ventilation, and lower fire insurance rates. Finally, the vast majority of VOC sources having LST as a readily available option for compliance make only small investments in R&D, expenditures which are, moreover, fully tax deductible.

schedule to continue development of LST, but may ultimately have to comply using add-on controls. In those situations where the source will comply through a combination of LST and add-on controls, the penalty may be adjusted in accordance with this Appendix only to the extent the two compliance options and the source's financial data are segregable on a line-by-line basis.

No other adjustments to the Economic Benefit and Production Components may be made other as contemplated in the general CAA Penalty Policy. These adjustments are described in Section II.A.3. of the general policy. In addition, in all cases the Gravity Component should be estimated in accordance with the general CAA Penalty Policy. This policy is based upon the principles established by the CAA Penalty Policy and general Agency policies.

The Production Component formula produces penalties which automatically account for the size of the source and correlate with the emissions volume from non-complying lines. Moreover, attaching a source's after tax net profits on noncomplying production helps to ensure a meaningful penalty without impinging on employee salaries, necessary operating costs, or tax deductions for good faith pollution control expenditures such as R & D on LST.

Removing the profitability of non-complying production is particularly appropriate in cases where LST is an acceptable control strategy due to the ease with which many such sources could have come into compliance, as well as the competitive advantage some VOC sources obtain from non-compliance. For example, many paper coating concerns have continued to use high solvent coatings due to the versatility such solutions afford in meeting customer preferences such as color brightness. Such VOC sources are, thus, probably able to capture a larger share of the market due to their noncompliance. Similarly, metal furniture coaters have had high solid emulsion-LSTs available for many years. Many sources have, however, delayed the minimal costs and process changes necessary to come into compliance, perhaps enabling these businesses, in the short run, to offer their products at a slightly reduced price.³

What follows is the specific methodology to be applied in calculating civil penalty settlement amounts in actions against sources of VOC where LST is an acceptable control strategy.

³ Use of high solid emulsion-LST requires installation of a \$5-7,000 emulsion heater, retraining of employees to apply the thicker emulsion, and installation of a larger or more efficient metal washing system to prevent pitting. As is noted above, however, these costs are in the long run recaptured by the economic savings associated with high solid emulsion-LST. (See note 2 supra.)

Alternative Methodology for Calculating VOC Penalties
Where LST is the Applicable Method of Compliance

ECONOMIC BENEFIT COMPONENT ^a

+

PRODUCTION COMPONENT

total sales from production on non-complying lines
x industry norm return on sales

Compare this figure to the penalty based on the cost
of add-on controls as the control option. Use the
lower of the two figures.

+

Settlement Adjustments to Production Component ^b

substitute the source's actual return on sales
for the average industry return on sales

+

GRAVITY COMPONENT ^a

+

Settlement Adjustments to Gravity Component ^a

ADJUSTED MINIMUM PENALTY FIGURE

^a See, *Clean Air Act Civil Penalty Policy for the procedures to follow in making these calculations. Note, however, that the CAA Penalty Policy permits Regions in their discretion not to seek to recover the Benefit Component when it is likely to be less than \$5,000. This Appendix contemplates including the Economic Benefit Component along with the Production Component even where the Economic Benefit is estimated to be less than \$5,000. If the combination of both the Economic Benefit and Production Components is estimated to be less than \$5,000, it is not necessary for the case development team to include either one in the minimum settlement penalty amount.*

^b Note that the considerations described in Section II.A.3 of the general policy may also be applied in adjusting the Production Component, as well as the Economic Benefit Component.

APPENDIX V

Air Civil Penalty Worksheet

A. Benefit Component: -----
(enter from computer calculation)

B. Gravity Component:

1. Actual or possible harm

a. Amount above standard: -----

b. Toxicity of pollutant: -----

c. Sensitivity of environment -----

d. Length of time of violation -----

2. Importance to regulatory scheme: -----

3. Size of violator: -----

Total gravity component: -----

Preliminary deterrence amount: -----
(sum of benefit and gravity components)

C. Flexibility-Adjustment Factors:

1. Degree of willfulness or negligence:

total gravity component x any mitigation
or augmentation percentage -----

2. Degree of cooperation/noncooperation:

total gravity component x any mitigation
or augmentation percentage -----

3. History of noncompliance:

total gravity component x any
augmentation percentage -----

4. Ability to pay:

any mitigation amount -----

5. Other unique features:

total gravity component x any mitigation
or augmentation percentage

All augmentation (+) and mitigation (-)
amounts added: (if negative, cannot
exceed total gravity component)

D. Initial Minimum Settlement Amount
Preliminary Deterrence Amount + or -
Sum of Flexibility Adjustment Factors:
