

08/03/1983

VOC260803831

Category: 26 – Bubbling

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

MEMORANDUM

Subject: Georgia Bubble Rule "Strategy" and
"Modeling Procedure"

Date: August 3, 1983

From: Richard B. Ossias, Attorney
Air, Noise and Radiation Division (LE-132A)

Thru: Peter H. Wyckoff
Assistant General Counsel
Air, Noise and Radiation Division (LE-132A)

To: James T. Wilburn, Chief
Air Management Branch, Region IV

This responds to your request for our comments on the 1982 Georgia bubble submittal -- specifically, the 8/25/82 version of the Georgia "Rule" and the 10/27/82 version of the State's "Strategy" and modeling "Procedure". Our comments are listed below in two groups: 1) those relating to inconsistencies between the State submittal and the 1982 Emissions Trading Policy; and 2) those relating to issues raised by the policy itself. The comments also identify instances where, in our view, EPA's 1/25/83 draft revision of the Strategy and the Procedure fails to remedy problems raised by the Georgia materials. Finally, our comments generally do not deal with the issues of enforceability that the Office of Regional Counsel has raised. We are working with the office to address those issues separately.

I. Inconsistencies Between the State Submittal
and the 1982 Emissions Trading Policy

Broadly speaking, EPA may approve a generic bubble regulation only to the extent that the regulation certainly would produce bubbles that EPA certainly would approve individually. In more familiar terms, a generic regulation is approvable only to the extent that it assures the replicability and approvability of what it would generate.

The major problem with the Rule, Strategy, and Procedure, which we are treating together as a single unit, is that they are ambiguous at critical points. As a result, EPA could not say that the Director of the Georgia EPD, if he adhered to the submittal, certainly would produce new control requirements that EPA certainly would approve. The EPA revisions cure many of

these ambiguities, but not all of them.¹

These are our specific comments:

1. The submittal should define "emission bubbles" to make clear that they apply only to existing emission sources. That term is used frequently in the Rule; it also appears in the 3d paragraph, p. I of Strategy. The EPA revision does not define the term.

2. The submittal needs to explain precisely that compliance extensions would be permitted only: 1) in ozone or CO nonattainment areas with attainment date extensions past 1982, provided the extension would preserve the total amount of reductions required by the dates specified in the State's reasonable further progress (RFP) demonstration; and 2) in other areas for which it can be demonstrated that the SIP does not rely for timely attainment or maintenance on the source's adherence to the otherwise applicable compliance deadline. The relevant paragraphs are paragraph (2)(a)(8)(i)(1) of the Rule and the 5th paragraph, p. 2 of the Strategy. The EPA revision does not deal with this problem.

3. Paragraph (2)(a)(8)(i)(II) should explain in more detail the requirement that bubbles be "equivalent in pollution reduction" to otherwise applicable limits. The definition of "surplus" reductions in the 3d paragraph, p. 1 of the Strategy needs to be tied explicitly to that "equivalence" requirement. The EPA revision does not do this.

4. Paragraph (2)(a)(8)(i)(IV)'s statement that modeling used to evaluate bubbles "shall be done in accordance with procedures acceptable to the Division" is too discretionary. This provision is approvable only if, at a minimum, the modeling Procedure exclusively describes the methods that would be "acceptable to the Division". The EPA revision does not cure this problem.

5. Paragraph (2)(a)(8)(ii) needs to define the terms "different pollutants, types ..." and "hazardous" pollutants. Specifically, it should limit bubbles to the same Section 108 criteria pollutant and, within each such category, to bubbles that permit no increase in emissions of pollutants regulated under Section 112 as hazardous. The 3d paragraph, p.2 of the Strategy needs a similar change.

¹ The best solution to this problem is for Georgia to amend its submittal to include the necessary restrictions on the State's discretion to adopt bubbles. This is the approach we have recommended in the specific comments listed in text below. It is conceivable, however, that merely a partial change in the submittal, coupled with limitations on EPA's approval of the resulting package, would serve the same purpose and withstand a legal challenge. We have been open to that type of approach in our review of Region V's analysis of the Illinois generic bubble rule.

The references in Paragraph 10 of the EPA revision to "the same pollutant (TSP, SO₂ CO, HC, Nox)" and "hazardous pollutant as regulated under Section 112" improve on the Georgia language; however, the pollutant list should include lead and use the term "VOC" instead of "HC".

6. Paragraph (3)(a)(5) is unclear. Its first sentence appears to grant the Director extraordinary authority to change permit limits, which could run afoul of 40 CFR 51.18(j)(1)(v)(d)(5)-(6) and 51.24(b)(2)(iii)(e)-(f). Its second sentence seems then to circumscribe that authority so greatly that the provision's purpose is left clouded. What does the State intend here?

7. We have the following comments on the baseline provision (3d paragraph, p.1 of the Strategy):

a. The Georgia attainment area trading baseline is generally the actual emissions level on the PSD baseline date. This has several deficiencies, which the EPA revision does not fix:

- it does not require the use of a SIP- allowable baseline (i.e., maximum allowable emissions assumed in the SIP demonstration) when actuals on the PSD baseline date are higher than that allowable level (i.e., reductions to compliance levels should not be creditable);
- it does not provide a replicable method of calculating actual emissions;
- it does not account for the absence of PSD baseline dates for pollutants other than particulate matter and SO₂; and
- it does not account for the possibility that actual emissions from a source constructed or modified after January 1, 1975 will be so much higher on the area's PSD baseline date than that source's PSD maximum allowable emissions that those higher emissions will violate the PSD increments.

b. The Georgia version's nonattainment area trading baseline is inadequate because it fails to distinguish between areas with and areas without approved attainment demonstrations. Although paragraphs 3b and 3c of the EPA revision does make the proper distinction, it lacks:

- a replicable method for calculating actual emissions;
- a definition of the term "maximum allowable emissions" (especially as to averaging period); and

- a requirement that the RACT level used as the trading baseline in areas without an approved demonstration be EPA-approved.

8. The requirement that the use of emission reduction credits from uninventoried sources not "jeopardize" an area's attainment and RFP demonstrations (next-to-last paragraph, p.1 of the Strategy) is too vague. (See also comment #10.)

9 The Georgia submittal provides no special protection for Class I areas. Paragraph 7 of the EPA revision does. It requires that bubbles involving sources within 50 km of a Class I area be submitted to EPA as SIP revisions. We recommend, however, a greater distance cutoff, consistent with the practice in PSC permitting. See, e.g., Guideline on Air Quality Models, 3.2.2 (1978).

10. The provisions for assuring protection of PSD increments and RFP (1st paragraph, p.2 of the Strategy and paragraph 8 of the EPA revision) are too vague. The State's rules must include a replicable method for meeting these general requirements. In addition, the provisions here imply that actual emissions increases before the baseline date do not consume increment, even if the baseline has not been triggered.

The same paragraph permits Georgia to implement bubbles through permits and negotiated orders. Although it says that a final permit condition is as enforceable as a properly adopted State emission standard, we would like assurance that the State's laws allow permits and orders to supersede the underlying regulation. (Assuming that these permits and orders are enforceable at the State level, we are prepared to conclude that they would be federally enforceable if issued pursuant to an approved generic bubble rule.)

11. EPA must rely heavily on State public participation as a preventative check on improper implementation of generic bubble rules. The 1st full paragraph, p.3 of the Strategy exempts bubbles "involving less than 100 tons per year emission of a pollutant" from public participation requirements. The scope of this minor bubble exemption should be clarified to assure that it is narrow.

The EPA revision (paragraph 14) explains that minor bubbles are those with "total allowable emissions from all sources" less than 100 tpy. This appears consistent with the exemption in the New Jersey bubble rule EPA approved in 1981.

12. The last paragraph of the Strategy needs to explain the phrase "subject of a federal enforcement action"; Paragraph 11 of the EPA revision does this adequately.

13. The Georgia Modeling Procedure lacks precise limits on the kinds of bubbles that the State may process generically. The EPA revision includes several of these limits. We have the following comments on that draft:

a. We should specify some geographical area limit on NOx and VOC trades (the 1st general requirement).

b. The 2nd and 4th general requirements appear to say the same thing. Is there a difference between them?

c. It is unclear why *de minimis* trades and bubbles involving lead are omitted from the core generic bubble provision (3d general requirement).

d. It is unclear whether the "complex terrain" trades referred to in the 2d sentence of the 6th general requirement are all those not covered by the 1st sentence.

e. The 1st Level I requirement should incorporate explicitly the Strategy's surplus/baseline definition.

f. The 4th Level I requirement should require consistency with the requirements for calculating GEP in EPA's stack height regulations. The Office of Regional Counsel has informed us in this regard that Georgia has not yet adopted its own rules to implement EPA's GEP requirements.

g. The 3d and 4th Level I requirements suggest that only stack emissions can meet Level I? What about process fugitives?

h. The Level II limitation to sources that "can routinely be modeled in a prescribed manner" seems too vague to be considered replicable. Does the phrase have a clear and definite meaning to modelers?

i. Level II must be limited to trades with no net increase in baseline emissions.

j. We assume that the 4th Level II requirement is intended to exclude process fugitive emissions of SO2 and CO from Level II.

k. It is unclear why the 5th Level II requirement allows the meteorological data used in bubble analysis to contain only some of the input required for modeling. Also, this appears to allow the State substantial discretion.

l. The 6th Level II requirement should refer to a replicable "actuals" definition.

II. Issues Raised by the Policy Itself

1. EPA plans to solicit comment on when the Agency should permit the use of emission reduction credits for unit shutdown. EPA's responses to those comments will determine our office's reaction to provisions like that in the third-to-last paragraph, p.1 of the Georgia Strategy. Therefore, we reserve comment on that provision.

2. The Agency lacks adequate record support for its conclusion that the Level II significance cutoffs are capable of protecting the NAAQS and PSD increments. For this reason, any rule using those cutoffs without the necessary documentation is vulnerable to a challenge that they are without rational basis.

3. The policy permits the trading of process fugitive emissions against "similar sources" of these emissions or against point-source emissions if the process fugitives "can reasonably be represented by a point-source dispersion pattern." The Georgia Strategy uses similar terms (last paragraph, p.1). The terms need definition. The EPA revision appears to deal adequately with this (see 4th level II requirement).

Please let us know if we can be of further assistance on this matter.

cc: Rich Biondi
David Engle
Len Fleckenstein
Barry Gilbert
Brock Nicholson
Dick Shutt
Winston Smith
Regional Emissions
Trading Coordinators