

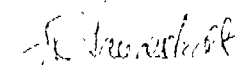
9 PS

INTER OFFICE MEMO **TEENECO CHEMICALS, INC.**

TO: W. P. Anderson	AT: Saddle Brook	DATE: July 25, 1978
FROM: J. P. Sandstedt	AT: Piscataway	COPY TO: W. Miringhoff P. Scheiner
SUBJECT: <u>FOIA Request</u>		

Mr. Marcus Kantz of EPA Region II called on July 25 relative to a Freedom of Information request from Mr. Henry J. Plog, Esq. of Cleary, Gottlieb, Steen and Hamilton. Information is being sought relative to any and all requests for approval of modifications or facility's expansion under NESHAPS regulations.

After much discussion with Mr. Kantz, I feel certain that little if any of the information we have submitted to the Agency will be released since we were smart enough in our cover letters to claim confidentiality treatment.


J. P. Sandstedt

JPS:cg

COLORITE 016988

Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

SUBJECT: Review of Vinyl Chloride Methods Submitted
by Tenneco Chemicals

DATE: AUG 16 1977

FROM: William Grimley *BWG*
Emission Measurement Branch

TO: Marcus E. Kantz
Chemical Engineer
Air Facilities Branch

In accordance with your request of June 28, 1977, and in collaboration with the Quality Assurance Branch of EHSI, we have reviewed the methods for analysis of vinyl chloride submitted by Tenneco Chemicals that correspond to EPA Methods 106 and 107. Consideration has only been given to the approval of each as an alternative method, since guidelines for determining the equivalency of methods have not yet been established. The basis of our review and our conclusions which I transmitted to you on the phone on August 15 are as follows.

The principal considerations of this review have been whether each method is written in sufficient detail to assure acceptable precision, and the likelihood of good comparability between results generated by each candidate method and the corresponding EPA method.

As Tenneco points out, their written methods only cover the analysis of samples. Thus, any alternative method approval would be limited to the analysis portion of the EPA Reference Method; the candidate methods would not be an alternative to the entire Reference Method.

More specific comments are as follows:

Item 1. Method No. GCF-3.0 for Vinyl Chloride in Air

Description of technique for obtaining representative samples, if different from Method 106, must be provided. The accuracy and reproducibility must both be within $\pm 5\%$ relative at 10 ppm (volume/volume), or a correction factor must be determined and applied. Provision should be made for resolution of interferences in analysis. If cylinder standards are used, they must be certified by an EPA approved procedure. (See clarifications to Methods 106 and 107 as published in the June 7, 1977, Federal Register, p. 29008.) Validated limitations must be placed on the life of samples and standards, and standards must be relevant concentrations. Quality of gases (helium, hydrogen, air) must be specified.

Items 2, 3, and 4. Methods No. GCF-1.0A, GCF 4.0 and GCF 5.0.

Descriptions of technique for obtaining representative samples must be provided. Preparation of sample containers must be included. Quality of gases (helium, hydrogen, air) must be specified. In view of our requirement of zero grade gases, this grade must be used unless comparative data is submitted that demonstrates no loss of precision. Sample handling must be further detailed, as careless handling will result in loss of vinyl chloride.

Item 5. Waiver Regarding Requirement That Analysis of Calibration Cylinders be Traceable to the National Bureau of Standards.

This requirement has been clarified in the Federal Register (see response to Item 1). Gravimetric techniques are not acceptable for cylinder certification.

Conclusion

In final summary, approval of these methods must be withheld until Tenneco can add the details previously described. The procedures are acceptable in principle, but to be eligible for approval as an alternate method, a candidate method must be equally rigorous to the reference method. The deficiencies cited are of particular concern since approval is not limited to one plant or even to Region II. For this reason, the methods must be written in sufficient detail and must involve procedures adequate enough to assure that the methods will produce accurate and precise results when used by any competent laboratory. For this reason also, any approval decision should be made by OAQPS in coordination with OE, ORD, and affected Regions. In addition a Federal Register package would be prepared by OAQPS to formally document such approval. Tenneco should be encouraged to pursue approval of their alternative procedures, but I would ask that you advise them that any further submittal should be to Don R. Goodwin. (See enclosed memorandum dated September 4, 1975, regarding approval of alternative methods.)

If you have any questions or need further information, please contact me.

Enclosure

cc: B. J. Steigerwald (MD 10)
John Clements (MD 77)
Joe Knoll (MD 77)
Richard Biondi (EN 341)
Myron Knudson, Region VI, Director, S&A Division

Tenneco Chemicals
A Tenneco Company



Turner Place, P.O. Box 365
Piscataway, New Jersey 08854
(201) 981-5000

January 12, 1978

Mr. Marcus Kantz
U. S. Environmental Protection Agency
26 Federal Plaza
New York, New York 10007

RE: EPA Compliance Schedule
-Letter of February 25, 1977: EPA to Tenneco
-Letter of October 25, 1977: EPA to Tenneco

Dear Mr. Kantz:

This is to confirm our discussion during the December inspection at Burlington with respect to the installation of double mechanical seals on our rotating pumps. To date we have completed the installations on all but seven pumps.

Six of these are SIHI pumps, imported from Europe, and unique to Tenneco's dispersion resin process. Standard seals were installed, but failed within 24 hours. The seal manufacturer is presently redesigning the seal assembly; however, we have been advised that delivery can not be made for six months.

The seventh unit is a Peerless Pump. The particular model is no longer being manufactured and, accordingly, conversion parts to allow this unit to accept a double mechanical seal are not available. We now plan to modify the unit at a local machine shop.

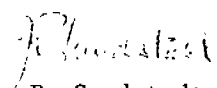
For the reasons detailed above we request that the date for the Completion of Construction and Compliance, under Paragraph 61.65(b)3 be extended until September 1, 1978.

We would also point out an inconsistency with regard to the Schedules pertaining to Paragraph 61.65(b)6-Equipment Opening, Paragraph 61.64(d)-Monomer Recovery, and Paragraph 61.65(b)9-Wastewater Stripper. Since techniques for meeting the opening requirement depend on the final control device (incinerator) and wastewater stripper, final compliance with Paragraph 61.65(b)6 cannot be achieved until these units are operational and in compliance. Therefore, we request that the date for Increment #4 [Paragraph 61.65(b)6] be changed to October 21, 1978.

Should you have any questions concerning these requests, please contact me.

Very truly yours,

TENNECO CHEMICALS, INC.


J. P. Sandstedt, Manager
Environmental Sciences

JPS:cg

COLORITE 016991

Tenneco Chemicals

A Tenneco Company



Turner Place, P.O. Box 365
Piscataway, New Jersey 08854
(201) 981-5000

December 21, 1977

Mr. Marcus Kantz
U. S. Environmental Protection Agency
26 Federal Plaza
New York, New York 10007

Dear Marcus:

Per our conversation on Tuesday, please find:

1. MCA - Workshop on Ramifications of Clean Air Act Amendments of 1977.

This is an easily readable copy of the amendments. In addition, MCA Staff Comments summarize some of the more "challenging" points.

2. Copy of Federal Register - Ambient Air Quality Standard for Lead.

You indicated that you might not receive your copy for several months.

3. Copy of D. J. Steigerwald's letter of September 4, 1975.

This is "a reasonably readable" copy.

Finally, I would appreciate it if you could send me a copy of the report on the Burlington Inspection. Thanks.

Very truly yours,

TENNECO CHEMICALS, INC.

J. P. Sandstedt
Manager, Environmental Engineering

JPS:cg

Enc.

Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

Approval of Alternative and Equivalent Source Test
Methods Applicable to Enforcement of National
Emission Standards

C. J. Steigerwald, Director Original signed by
Office of Air Quality Planning and Standards (HQ-10)

4 SEP 1975

Director, Enforcement Division, EPA Regions I - X
Director, Surveillance and Analysis Division, EPA Regions I - X

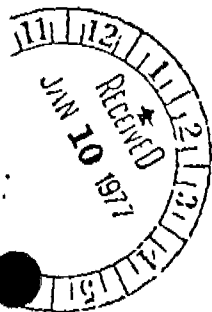
In the March 8, 1974, Federal Register, the definitions of "Equivalent Method" and "Alternative Method" were added to 40 CFR 60--Standards of Performance for New Stationary Sources. Similar provisions are contained in 40 CFR 61, pertaining to hazardous pollutant standards. These provisions provide a mechanism for approval of non-reference source test methods.

The purpose of this memorandum is to set forth procedures which clarify the responsibility for approval of alternative or equivalent methods. Under these procedures the Regional Offices retain that flexibility needed to meet EPA and State testing needs; OAQPS will serve as a point of coordination and will retain approval authority and provide technical assistance in cases where decisions could affect uniform application of standards. The establishment of OAQPS as a focal point for this authority, and the procedures outlined in this memorandum have been discussed with and received concurrence from the Division of Stationary Source Enforcement and the Office of Research and Development programs which are involved in source test activities.

Purpose of Alternative Methods

The primary intent of the alternative method provisions is to accommodate two situations:

- (1) The need to approve a method which would probably produce results equivalent to reference method results but which could not (due to lack of time, excessive cost, etc.) be demonstrated as an equivalent method. Examples would be substitute probe materials, differing sample train component configurations, and procedural deviations. Approval may be based on engineering evaluation or other relevant information.
- (2) The need to approve less complex methods which, based upon evaluation or test data, produce results sufficiently accurate to assure compliance in specific cases. One example would be the case where an additional filter or wet collector is added to the reference method sample train. Sub-isokinetic



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sampling would be a second such example. In either case, the results would not be equivalent to reference method results, but would nevertheless assure compliance.

Neither of these needs can be readily accommodated under the provisions allowing "equivalent method(s)," since these require demonstration of a "consistent and quantitatively known relationship to the reference method." In fact, demonstrating the equivalency of source test methods is complex and not, as yet, adequately resolved. This is discussed in further detail on page 3 of this memorandum.

Approval Authority

Approval of alternative methods may be desired in a number of instances. These range from the case where an engineer must decide in the field whether to approve use of less than the full number of required sample points in a traverse (as might be desired due to limited sample space), to the case where a State desires blanket approval for use of an alternative method in carrying out delegated authority for enforcement of federal standards.

The former case is one which would not seriously affect uniform application of standards and approval authority is in the Regional Offices. The latter case could result in a standard being applied differently in different areas. Therefore, to insure uniformity and technical quality in test methods used in the enforcement of national standards, OAQPS will retain approval authority for cases where an alternative method would effectively replace a reference method. While precisely defining all requests which may fall in this category is not possible, generally OAQPS approval will apply to all methods affecting more than one source. In such cases, requests for approval should be forwarded to the Director, Emission Standards and Engineering Division, OAQPS. When such a request is received, ESED will perform a technical review of the method.

This review will consider, for example, whether the method is written in sufficient detail to assure acceptable precision and the likely comparability of results between the candidate method and the reference method. The results of the review after appropriate consultation and coordination with the Division of Stationary Source Enforcement, will be provided to the respective Regional Office, along with a decision on approvability. The decision will constitute a strictly technical interpretation of the method and, thereby, of the applicable standard. This interpretation is outside the scope of, and is not intended to duplicate or supersede any Office of Enforcement decision which might otherwise be involved in an enforcement action.

Generally, any basis for a negative decision will be clear and will not likely be subject to serious dispute by the requesting agency. However, in the case of a State test method where the question of delegation of authority is involved, failure to approve an alternative method could present a potential problem. Here the need to assure that valid, supportable test methods necessary for enforcement of national standards may come in conflict with the desire for uniform intrastate methods, or for preservation of longstanding local test methods. When such cases occur, resolution will be needed on a case-by-case basis. In this event, OAQPS will be available to assist the Regional Offices in working with technical staff from the affected agencies. Through a close working level relationship, resolution of these problems should be possible.

Equivalency Criteria

As noted briefly above, the matter of equivalency is more complicated than determining adequacy of an "alternative method" and should be noted. Essentially, a determination of equivalency means that the candidate method and the reference method produce the same results under specified conditions. This assumes that the reference method can be characterized exactly in terms of accuracy and precision and that procedures are available which allow comparison of the two methods. In fact, such procedures and information are not available for field sampling aspects of source testing. Further these procedures may be prohibitively expensive to apply in the field. Thus, for particulate matter, which is not an absolute quantity, and where the field procedure constitutes the major portion of the method, equivalency may be a mute issue. On the other hand, the analytical portion of methods involving identification of specific compounds, such as fluoride or beryllium, are more amenable to determination of equivalency.

The Office of Research and Development is currently involved in standardizing reference methods and in considering equivalency criteria. These are not available yet; however, requests for equivalency determinations can be considered on a case-by-case basis. Such requests should also be directed to the Emission Standards and Engineering Division which will coordinate the evaluation with appropriate Office of Research and Development Laboratories. Generally, a determination of equivalency will require, as a minimum, a detailed written method, results of tests comparing the candidate method against the reference method, and results involving inter-comparison of the candidate method performed by different laboratories and/or personnel.

cc:

Aubrey P. Altshuller

Doyle Borchers

John S. Hader

S. David Shearer

Roger Strelow

Eduard F. Tuerk

Richard Wilson

Director, Air and Hazardous Materials Division, EPA Regions I - X