# CLEAN AIR ACT STATIONARY SOURCE COMPLIANCE MONITORING STRATEGY April 2001

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Any questions concerning this policy may be directed to either Mamie Miller or Rob Lischinsky at 202-564-2300.

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## I INTRODUCTION

- The Clean Air Act Stationary Source Compliance Monitoring Strategy (CMS) was last revised in 1991. In the intervening years, the national policy was not consistently implemented across the country by the EPA Regions and their State/local agencies. Two major factors contributed to this situation: (1) The policy became dated as new Clean Air Act (CAA) programs were implemented, and the Environmental Protection Agency (EPA) planning process changed. (2) EPA Headquarters ceased to provide oversight of the policy on a national level when the Agency's enforcement program was reorganized, thus giving the impression that it was no longer necessary to implement the policy.
- A review by the EPA Office of the Inspector General (?Consolidated Report on OECA's Oversight of Regional and State Air Enforcement Programs," E1G-AE7-03-0045-8100244, September 25, 1998) identified this abandonment as a fundamental problem that adversely affected the effectiveness of the air enforcement program.
- In response to the Office of Inspector General report, the Office of Enforcement and Compliance Assurance (OECA) made a commitment to evaluate how the policy was being implemented, and to revise it as necessary. The Office of Compliance was given the responsibility for satisfying this commitment.
- Between October 1998 and May 1999, interviews were conducted with all of the EPA Regions and twenty-two States. The purpose of these interviews was to collect baseline information on implementation of the policy; obtain feedback on its strengths and weaknesses; and identify any appropriate alternatives. A report entitled ?A Review of the Compliance Monitoring Strategy" summarized the findings of these interviews, and was issued on July 26, 1999.
- A Workgroup with representatives from OECA Headquarters, the Regions and several States was formed to review these findings and develop a revised policy.
- The following policy is based on the recommendations of this Workgroup; comments received during the comment period on the draft proposals; and in-depth discussions with representatives of the State and Territorial Air Pollution Program Administrators and the Association of Local Air Pollution Control Officials

# (STAPPA/ALAPCO).

- The major differences between this policy and the 1991 version are as follows:
  - (1) Emphasis has been placed on Title V major sources and a limited subset of synthetic minor sources.
  - (2) Minimum frequencies have been recommended for determining the compliance status of facilities covered by this policy. Alternatives may be developed and negotiated with the Regions to enable States/locals to address important local compliance issues.
  - (3) The policy explicitly recognizes that a variety of tools ranging from self-certifications to traditional stack tests are available and should be used to evaluate compliance. It further recognizes that on-site visits may not be necessary to evaluate the compliance status of a facility given the wide range of self-reported information such as annual Title V compliance certifications, deviation reports, and semi-annual monitoring reports based on periodic monitoring and compliance assurance monitoring. However, to ensure a compliance presence in the field, a minimum frequency for on-site visits has been recommended.
  - (4) Three categories of compliance monitoring replace the current levels of inspection defined in the 1987 Clean Air Act Compliance/Enforcement Guidance Manual. The new compliance monitoring categories are: Full Compliance Evaluations, Partial Compliance Evaluations and Investigations.
  - (5) CMS plans are no longer required to be submitted every year, but may be submitted once every two years.

## II GOALS OF THE COMPLIANCE MONITORING STRATEGY

- 1. Provide national consistency in developing stationary source air compliance monitoring programs, while at the same time provide States/locals with flexibility to address local air pollution and compliance concerns.
- 2. Improve communication between States/locals and Regions on stationary

source air compliance monitoring programs, and enhance EPA oversight of these programs.

- 3. Provide a framework for developing stationary source air compliance monitoring programs that focuses on achieving measurable environmental results.
- Provide a mechanism for recognizing and utilizing the wide range of tools available for evaluating and determining compliance.

#### III OVERALL PROCESS

- 1. States/locals submit a CMS plan biennially for discussion with and approval by the Regions. Regions also prepare a plan biennially for discussion with their States/locals.
- 2. The plans are summarized, and incorporated into the annual Regional response to the OECA Memorandum of Agreement (MOA).
- 3. States/locals and Regions maintain records of their compliance monitoring activities, and enter facility-specific compliance data in the national air compliance data base (AIRS/AFS, or its successor).
- 4. States/locals and Regions review the results of the compliance monitoring activities annually, and prepare an annual update to the biennial plan as necessary. Major redirections are discussed as they arise.
- 5. Regions conduct in-depth evaluations of the overall State/local compliance monitoring program periodically. Headquarters conducts similar evaluations of the Regional programs as well.

# IV SCOPE OF POLICY

• EPA recognizes that State/local agencies perform additional compliance monitoring activities beyond those addressed by this policy. This policy is not designed to preclude those activities, but focuses on federally enforceable requirements for the following source categories: (1) Title V major sources; and (2) synthetic minor sources that emit or have the potential to emit at or above 80 per cent of the Title V major source threshold. For purposes of this policy,

potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable or legally and practicably enforceable by a state or local air pollution control agency.

The 80 per cent threshold was selected to ensure that those facilities that either have the potential to emit or actually emit pollutants close to the major source threshold are evaluated periodically. This enables States/locals to focus resources on those facilities that are most environmentally significant. In determining whether a synthetic minor source falls within the scope of this policy, all facilities with the potential to emit at or above the 80 per cent threshold are included regardless of whether their actual emissions are lower.

# V COMPLIANCE MONITORING CATEGORIES

- States/locals and Regions are encouraged to use a variety of techniques to determine compliance, and utilize the full range of self-monitoring information stemming from the 1990 CAA Amendments.
- Consistent with this approach, there are three categories of compliance monitoring: Full Compliance Evaluations, Partial Compliance Evaluations, and Investigations. Each of these categories is defined below:

# 1. Full Compliance Evaluations

A Full Compliance Evaluation is a comprehensive evaluation of the compliance status of a facility. (For the purposes of this policy, ?facility" is used in the broadest sense of the term incorporating all regulated emission units within the facility.) It addresses all regulated pollutants at all regulated emission units. Furthermore, it addresses the current compliance status of each emission unit, as well as the facility's continuing ability to maintain compliance at each emission unit.

A Full Compliance Evaluation should include the following:

• A review of all required reports, and to the extent necessary, the underlying records. This includes all monitored data reported to the regulatory agency (e.g., CEM and continuous parameter monitoring

reports, malfunction reports, excess emission reports). It also includes a review of Title V self-certifications, semi-annual monitoring and periodic monitoring reports, and any other reports required by permit.

- An assessment of control device and process operating conditions as appropriate. An on-site visit to make this assessment may not be necessary based upon factors such as the availability of continuous emission and periodic monitoring data, compliance certifications, and deviation reports. Examples of source categories that may not require an on-site visit to assess compliance include, but are not limited to, gas-fired compressor stations, boilers in large office and apartment buildings, peaking stations, and gas turbines.
- · A visible emission observation as needed.
- A review of facility records and operating logs.
- An assessment of process parameters such as feed rates, raw material compositions, and process rates.
- An assessment of control equipment performance parameters (e.g., water flow rates, pressure drop, temperature, and electrostatic precipitator power levels).
- A stack test where there is no other means for determining compliance with the emission limits. In determining whether a stack test is necessary, States/locals should consider factors such as: size of emission unit; time elapsed since last stack test; results of that test and margin of compliance; condition of control equipment; and availability and results of associated monitoring data.

In addition to conducting a stack test when there is no other means of determining compliance, States/locals should conduct a stack test whenever they deem appropriate.

A Full Compliance Evaluation should be completed within the fiscal year in which the commitment is made, except in the case of extremely large, complex facilities (hereafter referred to as mega-sites). Regulatory agencies may take up to three years to complete a Full Compliance Evaluation at a mega-site, provided the agency is conducting frequent onsite visits or Partial Compliance Evaluations throughout the entire evaluation period.

A Full Compliance Evaluation may be done piecemeal through a series of Partial Compliance Evaluations.

# 2. Partial Compliance Evaluations

A Partial Compliance Evaluation is a documented compliance assessment focusing on a subset of regulated pollutants, regulatory requirements, or emission units at a given facility. A Partial Compliance Evaluation should be more comprehensive than a cursory review of individual reports. It may be conducted solely for the purpose of evaluating a specific aspect of a facility, or combined over the course of a year (or up to three years at mega-sites) to satisfy the requirements of a Full Compliance Evaluation.

This type of evaluation could be used for example to effectively assess compliance with the HON MACT requirements if that is the primary area of concern at a chemical manufacturing facility. If at some point later in the year, the regulatory agency decided a Full Compliance Evaluation was necessary, the agency could combine the results of the MACT evaluation with subsequent evaluations focusing on the balance of other CAA requirements.

# 3. Investigations

An Investigation can be distinguished from the other two categories in that generally it is limited to a portion of a facility, is more resource intensive, and involves a more in-depth assessment of a particular issue. It usually is based on information discovered during a Full Compliance Evaluation, or as the result of a targeted industry, regulatory or statutory initiative. Also, an Investigation often requires the use and analysis of information not available in EPA data systems. It is best used when addressing issues that are difficult to evaluate during a routine Full Compliance Evaluation because of time constraints, the type of preliminary field work required, and/or the level of analytical expertise needed to determine compliance.

Examples of this category of compliance monitoring are the in-depth PSD/NSR and NSPS reviews conducted by EPA of the pulp, utility and petroleum refining industries. These investigations were initiated following analyses of publicly available information on growth within the industries, and a comparison of this information to data maintained by the regulatory

agencies on the number of PSD/NSR permits issued during the same timeframe. The analyses indicated that many facilities failed to obtain the necessary permits. As a result, the facilities had not controlled pollutant emissions as required, and thus realized significant economic benefits.

For a more complete definition of an Investigation, see ?MOA Guidance (Air Program)-Clarification and National Performance Measures Strategy (NPMS) Pilot" from Eric Schaeffer and Elaine Stanley to MOA Coordinators, Enforcement Coordinators, and RS&T Coordinators (October 26, 1998).

#### VI RECOMMENDED EVALUATION FREQUENCIES

- The following minimum frequencies are recommended:
  - (1) A Full Compliance Evaluation should be conducted, at a minimum, once every two years at all Title V major sources except those classified as mega-sites. For mega-sites, a Full Compliance Evaluation should be conducted, at a minimum, once every three years.

Each Region, in consultation with affected States/locals, has the flexibility to define and identify mega-sites as it deems appropriate within the Region. However, this universe of facilities is expected to be small. When identifying mega-sites, the Regions should consider the following factors: the number and types of emission units; the volume and character of pollutants emitted; the number and types of control and monitoring systems; the number of applicable regulatory requirements; the availability of monitoring data; the degree of difficulty in determining compliance at individual units and at the entire facility; and the footprint of the facility. Examples of industries that may have qualifying facilities are petroleum refining, integrated steel manufacturing, chemical manufacturing, and pharmaceutical production.

- (2) A Full Compliance Evaluation should be conducted, at a minimum, once every five years at synthetic minor sources that emit or have the potential to emit at or above 80 per cent of the Title V major source threshold.
- (3) An on-site visit should be conducted, at a minimum, once every five years at all Title V major sources to ensure a compliance presence in the

field, verify record reviews, observe modifications or new construction, and identify any major permit deviations.

• In those years when a Full Compliance Evaluation is not conducted, States/locals should continue to review annual compliance certifications, and the underlying reports supporting those certifications (e.g., semi-annual and periodic monitoring reports, continuous emission and continuous parametric monitoring reports, and malfunction and excess emission reports).

### VII ALTERNATIVES TO THE RECOMMENDED EVALUATION FREQUENCIES

- States/locals may develop with Regional approval alternatives to the recommended evaluation frequencies. Alternatives may be developed on a facility-by-facility basis, or for an entire source category. However, in determining whether an alternative frequency is appropriate, the following factors should be considered:
  - Compliance history,
  - Location of facility.
  - Potential environmental impact,
  - Operational practices (e.g., whether operation is steady state or seasonal),
  - Use of control equipment,
  - Participation in Agency-sponsored voluntary programs (e.g., Project XL, Performance Track),
  - Identified deficiencies in the overall State/local compliance monitoring program.

## VIII ELEMENTS OF THE CMS PLAN

- CMS plans should be submitted biennially, consistent with the current EPA twoyear MOA planning process. These plans are a building block in the MOA process, and should be finalized so that they can be summarized and incorporated into the Regional MOA submissions to EPA Headquarters. Therefore, they should be completed prior to the beginning of the Federal fiscal year. It is not necessary to duplicate the detailed information in the CMS plan when submitting the Regional MOA response. Rather, Regions should summarize and reference the CMS plans as appropriate.
- A separate CMS plan is not necessary if Regions and States/locals wish to continue using other formally negotiated documents (e.g., Selective Enforcement Agreements, Performance Partnership Agreements, and Grant Agreements),

provided these documents contain the same level of detail discussed below. If this approach is selected, the document should specifically state that it satisfies the CMS plan.

- The content of CMS plans will vary depending upon whether States/locals develop and negotiate alternatives to the minimum frequencies.
- In those instances where States/locals meet the recommended minimum frequencies and do not develop and negotiate alternative approaches, the plan should include the following elements:
  - (1) A facility-specific list (including the AFS identification numbers) of all Title V major sources. The list should identify by fiscal year those facilities for which a Full Compliance Evaluation will be conducted. It should also identify those for which an on-site visit will be conducted.
  - (2) A facility-specific list (including the AFS identification numbers) of all synthetic minor sources and a list of those facilities covered by the policy. It also should identify by fiscal year those facilities for which a Full Compliance Evaluation will be conducted.
  - (3) A description of how a State/local will address any identified program deficiencies in its compliance monitoring program. These deficiencies can stem from evaluations conducted internally, or by outside organizations such as the EPA Office of Inspector General.
- In those instances where the States/locals propose alternatives to the recommended minimum frequencies, States/locals should provide a more detailed plan. In addition to the above elements, States/locals should include a rationale describing: (1) why it is not necessary to evaluate specific facilities or source categories subject to the minimum frequencies; and (2) why it is appropriate to substitute other facilities.
- If at the end of the first year, States/locals anticipate or know that they will be unable to meet their two year commitments by the end of the second year, they should notify the Region and revise their CMS plan accordingly.
- The "Source Compliance and State Action Reporting Information Collection Request" (ICR), OMB Number 2060-0391, will be revised to incorporate the development and submission of this plan.

## IX COMPLIANCE MONITORING REPORTS

- States/locals may continue to format compliance monitoring reports as they deem appropriate; however, the following basic elements should be addressed in the reports.
  - (1) General information--date, compliance monitoring category (i.e., Full Compliance Evaluation, Partial Compliance Evaluation, or Investigation), and official submitting the report.
  - (2) Facility information--facility name, location, mailing address, facility contact and phone number, Title V designation and mega-site designation.
  - (3) Applicable requirements--all applicable requirements including regulatory requirements and permit conditions.
  - (4) Inventory and description of regulated emission units and processes.
  - (5) Information on previous enforcement actions.
  - (6) Compliance monitoring activities--processes and emission units evaluated; on-site observations; whether compliance assistance was provided and if so, nature of assistance; any action taken by facility to come back into compliance during on-site visit.
  - (7) Findings and recommendations relayed to the facility during the compliance evaluation. Please note, this does not apply to information traditionally reserved for enforcement case files.

In providing the above information, States/locals should reference or attach other relevant documents as appropriate to avoid duplication. For example, the relevant section of a Title V permit could be attached to the compliance monitoring report rather than rewriting all of the applicable requirements.

• Compliance monitoring reports should be maintained and made available to the Regions upon request. Regions shall maintain similar files of regional activities and provide Headquarters with access upon request.

## X REPORTING

• Changes will be made in the national air compliance data base (AIRS/AFS) to facilitate the reporting of information consistent with the revised structure of this policy. In addition, the ICR will be revised to incorporate the new data elements. In order to collect compliance information in a format that allows EPA to evaluate and compare compliance monitoring programs, Regions and States/locals will need to:

- Continue to maintain records of compliance monitoring activities, and report these activities and the results in AIRS/AFS, or its successor, on a routine basis.
- Continue to designate the High Priority Violator (HPV) status of violating facilities in accordance with the EPA HPV Policy dated December 22, 1998.
- Utilize the following compliance monitoring categories to report activities at the facility level in AIRS/AFS, or its successor:
  - Full Compliance Evaluations
  - Partial Compliance Evaluations
  - Investigations
- Report the following information for all Title V annual compliance certification reviews in AIRS/AFS, or its successor:
  - date due
  - date received
  - whether deviations were reported
  - date reviewed
  - compliance status

Please note: Regions shall enter the first three data elements for each Title V compliance certification unless otherwise negotiated with States/locals.

- Enter the date and results of all stack tests in AIRS/AFS, or its successor, and adjust the HPV status as appropriate.
- The compliance status of a facility will automatically revert from ?in compliance" to ?unknown" if a Full Compliance Evaluation is not completed:
  - within the recommended minimum evaluation frequencies, or
  - in accordance with negotiated alternatives that extend the recommended minimum evaluation frequencies.

# XI EVALUATION/OVERSIGHT

- At the end of each fiscal year, the Regions shall evaluate whether the States/locals met their commitments, and in those cases where they did not, determine why they did not and what adjustments need to be made for the following year. EPA Headquarters shall in turn conduct a similar analysis nationally. This information should be transmitted back to the appropriate officials in a timely manner so that they can make mid-course corrections in their program if necessary.
- Regions periodically shall conduct more in-depth analysis of the compliance monitoring program as a whole. They should look beyond how successful States/locals have been in meeting commitments, and evaluate for example whether adequate inspector training is available; quality monitoring evaluations are being conducted; violations are being found and are significant enough to warrant enforcement action; and data are accurately reported in a timely manner. They should also assess whether States/locals are using an appropriate mix of compliance monitoring techniques, and making full use of all available data. In addition, Regions should attempt to quantify the impact of the compliance monitoring program on parameters such as compliance rates; specific and general deterrence; and moving beyond compliance. To the extent possible, Regions should inform States/locals in advance of the criteria that will be used in the more in-depth analyses.

Regions shall prepare and submit to Headquarters a plan describing the approach and schedule they intend to use for conducting these more in-depth evaluations.

Headquarters shall conduct similar evaluations of each Region, and use the information to monitor implementation of the policy; identify program deficiencies and successes; establish national trends; compare programs; and develop new national priorities. To the extent possible, Headquarters should inform Regions in advance of the criteria that will be used in evaluating Regional programs.