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WORKBOOK

The Timely and Appropriate (T&A) Enforcement Response to High Priority Violations (HPVs)

TABLE OF CONTENTS

TABLE OF CONTENTS (cont.)

LIST OF TABLES/FIGURES

Tables Page

Figures

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SECTION 1: INTRODUCTION TO THE HPV POLICY

This Workbook presents the new High Priority Violation (HPV) Policy and is intended to assist in the identification and processing of those violations. The HPV Policy replaces the Guidance on the Timely and Appropriate Enforcement Response to Significant Air Pollution Violators and related guidance and provides a new method of prioritizing violations for enforcement purposes. The HPV Policy was developed by EPA in conjunction with representatives from STAPPA/ALAPCO and reflects priorities identified by those responsible for formulating the Policy.

Identification of violations that are covered by the new guidance is the most crucial element of the HPV Policy. The HPV Policy is designed to direct scrutiny to those violations that are most important. To that end, the extent of violations falling under the definition of an HPV is more limited than under the Significant Violator Policy. The HPV Policy contains ten General HPV Criteria and five HPV Matrix Criteria. Each of the General HPV Criteria addresses a specific type of violation -- for example, failure to obtain a PSD permit -- and no specific evaluation of the magnitude or duration of a violation is required. The HPV Matrix, in contrast, covers violations of emission limits and other parameter limits where the parameter is a direct surrogate for an emissions limit, and these violations generally involve a consideration of the duration and/or magnitude of the violation. This Workbook contains sections covering the identification of HPVs, using the General HPV Criteria and the HPV Matrix, and also presents case studies to aid in the analysis of emissions violations under the HPV Matrix.

Information on related issues, such as timelines for enforcement, penalties, and reporting and tracking of HPVs through AIRS is also presented in this Workbook, although issues that are not as directly related to the HPV Policy are presented in less detail than those that are actually impacted by the change in policy.

The HPV Policy will be implemented starting at the beginning of the third quarter of fiscal year 1999. Initial training by representatives from EPA Headquarters, STAPPA, and ALAPCO will take place in June, 1999. This will be followed by additional training offered in each Regional Office. It is important to recognize that this Policy is in the early stages of development. EPA expects that issues raised during training and initial application of the Policy will lead to clarifications in the Policy. Throughout the Workbook, questions and answers are presented for issues that have arisen at this point. Further questions and answers will be added as they arise.

Comments pertaining to previous drafts of this Workbook have been considered and addressed as appropriate. In certain cases commenters requested changes or interpretations of the HPV criteria that would modify the underlying Policy, and these proposed changes and interpretations are not included. Note that the guidance provided in this Workbook does not override the HPV Policy and does not create any rights or obligations other than those created in the HPV Policy itself.

Finally, EPA would like to emphasize that while the HPV Policy covers only a subset of violations, all violations are important, and EPA expects all violations to be addressed in an appropriate manner.

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SECTION 2: OVERVIEW OF THE HPV POLICY

This section contains a brief overview of subjects explained in greater detail in Sections 3 through 8, including information on the identification of HPVs, as well as information on related issues such as the Timely and Appropriate Enforcement guidelines, penalties, and HPV reporting and tracking in AIRS.

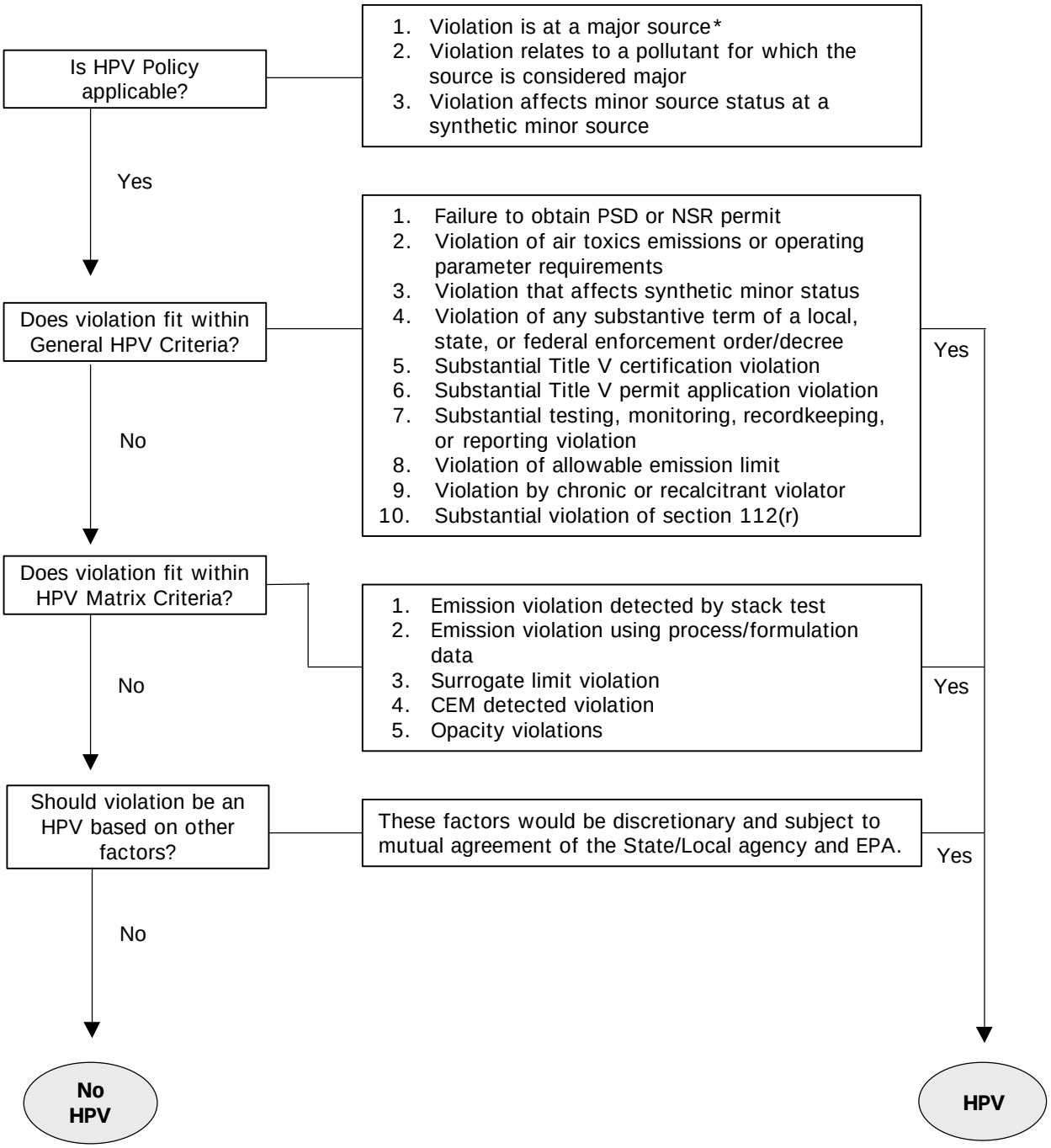
2.1 Identification of HPVs

There are three ways in which a particular violation can be identified as an HPV. First, the violation may fit within one of the ten General HPV Criteria. Second, the violation may lead to emissions or parameter violations that fit within the HPV Matrix Criteria. Finally, the violation may be categorized as an HPV on a discretionary basis subject to the mutual agreement of the State/Local agency and EPA. After a violation is identified by an agency via an inspection (or as the result of self-reporting), the agency should examine the facts of the violation in order to determine if it fits one of the General HPV Criteria or the HPV Matrix Criteria. The General HPV Criteria and the HPV Matrix Criteria are discussed in this section below and in Sections 3 and 4. Criteria for Discretionary HPV determinations are not specified in the Policy and are discussed only briefly in Section 5 of this Workbook.

Note that before an examination of the circumstances or magnitude of the violation occurs, a determination of whether the HPV Policy is applicable to the source must take place. The HPV Policy applies to major sources for violations where the pollutant at issue is a pollutant for which the source is categorized as major. Synthetic minor sources may also be subject to the Policy where expressly stated in the individual General HPV Criteria or HPV Matrix Criteria.

Below is a diagram of the HPV applicability criteria. For additional information on the topics presented, see the individual subsections throughout Sections 3 through 5.

Figure 2-1: HPV Applicability Determination Flowchart



* The Policy recognizes that a minor source may also be classified an HPV subject to the mutual agreement of the State/Local agency and EPA.

2.1.1 General HPV Criteria

The General HPV Criteria apply to ten different types of violations covering a broad range of issues. Some violations of General HPV Criteria are automatic, such as the failure to obtain a permit, and the relative severity of the violation is not a consideration. Other types of violations captured within the General HPV Criteria do require an examination of the severity of the violation but cover situations for which a numerical calculation of the severity is either not feasible or not effective -- for example, a reporting violation that "substantially" interferes with enforcement.

The General HPV Criteria and the HPV Matrix Criteria are not meant to overlap. However, there is overlap in one area. General HPV Criterion 8 covers violations of emission limits during a stack test, which would also be captured by HPV Matrix Criterion 1.

A list of the General HPV Criteria is presented below in Table 2-1. Where questions exist about whether a particular violation is substantive (under General Criterion 4) or substantial (under General Criteria 5, 6, 7 or 10), a consultation should occur between EPA and the State/Local agency to determine if the threshold is met. For more information on the General HPV Criteria, see Section 3.

Table 2-1: HPV Determinations Using General HPV Criteria

General Criterion 1:	Failure to obtain a PSD permit (and/or to install BACT), an NSR permit (and/or to install LAER or obtain offsets) and/or a permit for a major modification of either
General Criterion 2:	Violation of air toxics requirement (i.e, NESHAP, MACT) that either results in excess emissions OR violates operating parameter restrictions
General Criterion 3:	Violation by a synthetic minor of an emission limit or permit condition that affects the source's PSD, NSR, or Title V status
General Criterion 4:	Violation of any substantive term of any Local, State or Federal order, consent decree, or administrative order
General Criterion 5:	Substantial violation of the source's Title V certification obligations
General Criterion 6:	Substantial violation of the source's obligation to submit a Title V permit application
General Criterion 7:	Violations that involve testing, monitoring, recordkeeping, or reporting that substantially interfere with enforcement or determining the source's compliance with applicable emission limits
General Criterion 8:	Violation of an allowable emission limit detected during a reference method stack test
General Criterion 9:	CAA violations by chronic or recalcitrant violators
General Criterion 10:	Substantial violation of CAA Section 112(r) requirements

2.1.2 HPV Matrix Criteria

The HPV Matrix Criteria are designed to address situations for which it is possible to examine the severity of the excess emissions resulting from the violation. Therefore, the Matrix covers emissions violations (and parameter violations where the parameter is a direct surrogate for emissions) and is not intended to capture every situation, but merely the ones for which emissions or parameter monitoring may be performed.

The determination of whether one of the HPV Matrix Criteria is satisfied requires examination of the duration and magnitude of a violation. Information on excess emission levels is compared to the applicable standard for that pollutant. In some cases, any violation of the applicable standard will lead to a finding that the violation is an HPV. In other cases, the violation must rise to a certain level before the violation will be classified as an HPV. For some Matrix Criteria there are also supplemental significant threshold (SST) standards, written to capture the situation where a small percentage exceedance over the emission limit would nevertheless result in high levels of mass emissions.

For certain Matrix Criteria there is both a violation magnitude (percent over the standard or SST exceedance) and a violation duration (time in violation) requirement that must be met to classify the violation as an HPV. The time in violation requirement is based on the operating time of the facility in violation, and should usually be examined first -- if the time in violation requirement is not satisfied (where one exists), there will be no need to calculate the level of violation.

A list of HPV Matrix Criteria is presented below in Table 2-2. For more information on the HPV Matrix Criteria, see Section 4.

Table 2-2: HPV Determinations Using HPV Matrix

Matrix Criterion 1:	Violation of allowable emissions limitation, detected by stack testing
Matrix Criterion 2:	Violation of applicable emissions limitation, detected by coatings analysis, fuel samples, other process materials sampling, or raw/process materials usage reports
Matrix Criterion 3:	Violation of parameter limits where parameter is a direct surrogate for an emissions limitation, detected by continuous/periodic parameter monitoring
Matrix Criterion 4:	Exceedance of applicable non-opacity standard, detected by CEMS
Matrix Criterion 5:	Exceedance of applicable opacity standard (detected by COMS or by VE)

2.1.3 Discretionary HPV Determination

The HPV Policy recognizes that not every HPV will be covered by the criteria included in the Policy and therefore indicates that the EPA Region and State and/or Local agencies may, on a case-by-case basis, mutually decide to add a violation to the HPV list based on criteria and factors other than those contained in the Policy (see Appendix A, Page 1 of the Workbook). No specific guidance is provided in the Policy. Discretionary HPV determinations are discussed briefly in Section 5 of the Workbook.

2.2 Related Standards and Procedures

2.2.1 T&A

Information on changes to the Timely and Appropriate Enforcement guidance is included in this Workbook in Section 6. These changes focus on the scheduling of actions to be taken under the HPV Policy versus the deadlines for actions taken under the Significant Violator Policy. As described in Section 6, the timelines for actions taken during the course of enforcement have been extended to allow for adequate time to identify a violation, consult with other agencies as necessary, and bring a source into compliance.

2.2.2 Penalties

EPA intends that each enforcement case, whether initiated by EPA or a State or Local agency, obtain a penalty sum to compensate for the economic benefit of noncompliance as well as a gravity component relating to the seriousness of the violation. EPA uses the Clean Air Act Stationary Source Civil Penalty Policy for penalty calculation. Nothing in the HPV Policy alters the guidance presented in the Civil Penalty Policy. For that reason, the Civil Penalty Policy is covered only briefly in this Workbook (Section 7), but is included as Appendix B to this Workbook, and is discussed also in the HPV Policy (Appendix A to the Workbook).

2.2.3 Reporting

Because a major goal of the HPV Policy is to develop a more complete, overall picture of compliance and to enable effective EPA tracking of the enforcement response related to an HPV, correct reporting and tracking of HPVs is essential. All HPVs must be entered into AIRS so that information on compliance may be shared among agencies. The HPV Policy reiterates appropriate reporting goals (such as sharing of information among agencies) and sets forth the necessary changes to reporting procedures. The HPV Policy does not introduce significant changes to previous AIRS reporting requirements; however, AIRS data entry options have been modified to accept the changes needed to track HPVs under the new Policy. Section 8 contains more information on how reporting and tracking of High Priority Violations in AIRS differs from reporting and tracking of Significant Violators.

2.3 General HPV Policy Questions and Answers

.1 ***Where, if anywhere, would a source's failure to obtain a nonsynthetic minor source construction permit fall under the HPV Policy?***

General Criterion 1 applies if the source is major and fails to obtain the applicable PSD or NSR permit. If the source is minor, there are no specific provisions that apply,

except to the extent that a synthetic minor source violates conditions that were designed to maintain synthetic minor status (General Criterion 3). However, the Policy states (page 2) that "Additional violations, whether at major or minor sources, may rise to the level of a high priority violation at the mutual agreement of the region and the delegated agency on a case-by-case basis." Whether failure by a minor source to obtain a nonsynthetic minor source preconstruction permit should rise to HPV status would be subject to the discretion of one agency (Region or State/Local) with the mutual agreement of the other agency.

.2 ***How are O&M and work practice standards addressed in the HPV Policy?***

If toxic emissions standards are involved, O&M or work practice violations that result in excess toxic emissions or a violation of operating parameter restrictions would be classified as HPVs under General Criterion 2. Otherwise, they are not directly addressed. Indirectly, they may serve as further indication that the facility is a chronic violator (General Criterion 9) if other non-HPV violations have occurred. They may also serve as a basis for a discretionary application of the HPV Policy (see Section 5 of the Workbook).

.3 ***Does the Policy apply to minor MACT sources, for example chrome platers and degreasers that are being reported in AIRS if they have violations that are over 15% of the standard?***

The Policy states (page 2) that it applies to "major" sources, but it goes on to say that "Additional violations, whether at major or minor sources, may rise to the level of a high priority violation at the mutual agreement of the region and the delegated agency on a case-by-case basis." The duration and magnitude criteria used in these circumstances would be within the discretion of and subject to the mutual agreement of the Region and the State/Local agency.

.4 ***How would an affirmative defense be addressed under the Policy?***

Generally, the defense offered by a violator would not be a reason for excluding the violator from HPV status. If, as the enforcement case proceeds, the source is able to prove that no violation existed, this would be a reason to cease further action and, of course, to remove the violation from HPV status. In the case of an affirmative defense (where the source admits the violation, but argues that the violation was necessary or reasonable under the circumstances), and the violation otherwise meets the HPV criteria, the affirmative defense should be taken into consideration as part of the normal course of enforcement but, again, should not be a reason for excluding HPV status.

.5 ***If a facility repairs a violation within a short time after discovery (e.g., 1 to 7 days), when is that an HPV, and when is it an upset/breakdown that should be overlooked?***

There are no specific criteria in the HPV Policy related to malfunction abatement or the use of enforcement discretion when effective control practices are used to correct these conditions. If the regulation at issue provides for a federally approved malfunction exemption and addresses the subject (for example, if the regulation allows for a malfunction for up to 16 hours) then the malfunction would only be excused for the allowed period of time.

.6 ***How will Y2K issues be dealt with -- will some violations be classified as nonactionable malfunctions?***

The answer to this question is not within the scope of this Workbook. Whether a malfunction amounts to an enforceable violation is a separate issue from whether as a violation it amounts to an HPV under the HPV Policy. Only after a particular exceedance has been classified as a violation will the question of whether the violation is an HPV arise. Questions relating to whether certain exceedances or deviations from standards are violations should be raised in another forum. Note that EPA's Y2K Enforcement Policy recognizes that Y2K related violations during testing may in certain circumstances justify the exercise of enforcement discretion to waive civil penalties. However, the violation must still be listed as an HPV if it meets the HPV criteria under the HPV Policy.

.7 ***When applying the HPV Matrix Criteria, if there are several units emitting the same pollutant at a facility, and only one is in violation, should the plantwide emissions be evaluated altogether for potential HPV status, or should only the emissions from the violating unit be evaluated?***

Each unit with a separate emission limit should be evaluated separately. If certain units are subject to an emission limit as a group, or if there is an overall plantwide limit, these limits would also be subject to the HPV Policy for the combined units that are covered. Note that a plant's total emissions are the determining factor in establishing major source status.

.8 ***The length of the reporting period is not specified in the matrix duration criteria. Should an effort be made to normalize the period used for these calculations to avoid inconsistent treatment of facilities with different reporting period requirements?***

This is an issue that can be addressed by the Region and State/Local agency to ensure consistency in the application of HPV criteria if necessary. Generally, the HPV Matrix violation duration criteria were selected anticipating that there could be a range of reporting periods, and that the actual duration of violations triggering HPV status would vary appropriately based on the reporting period required by the agency.

.9 ***Is there any exception to the HPV Matrix reference limit percent exceedance criteria when the reference limits are unusually stringent? For example, if the reference limit is 10 ppm, a 1 ppm violation would exceed the 5% threshold in Matrix Criterion 3, and a 2 ppm violation would exceed the 15% threshold in Matrix Criterion 2.***

There are no exceptions. It is considered appropriate that the more stringent limits should have equally more stringent HPV thresholds. Emission limits should not be violated regardless of their stringency.

.10 ***Must every State/Local violation be compared against the HPV Matrix or only those likely to meet one of the Matrix conditions?***

Any violations that are not obviously excluded from the HPV Matrix should be examined to see if a Matrix Criterion is met.

.11 ***Should periods of time for which the unit is operating but the CEM or COM is not operating be counted as operating hours when calculating the percent of time in excess of the reference limit?***

No. Only periods where valid CEM or COM monitoring data exist should be included in the operating time when calculating the percent of time in excess of the reference limit. Agencies should review monitor downtime separately to determine whether an actionable offense has occurred.

.12 ***For duration calculations using the HPV Matrix, should all periods of violation during a reporting period be counted as part of the duration of violation?***

Where there is both a duration and a magnitude element for a Matrix Criterion, only those violations meeting the magnitude requirement should be counted toward the time in violation requirement.

SECTION 3: GENERAL HPV CRITERIA

3.1 Applicability

Before examining the General HPV Criteria to identify whether a violation is an HPV, determine whether the HPV Policy applies to the particular violation. The HPV Policy will only apply if the source is a major source and the pollutant at issue is one for which the source is considered major. If both of the conditions are not satisfied, the violation is not an HPV based on the General HPV Criteria.

3.2 General HPV Criterion 1: Failure to Obtain PSD or NSR Permit

Failure to obtain a PSD permit (and/or to install BACT), an NSR permit (and/or to install LAER or obtain offsets) and/or a permit for a major modification of either

3.2.1 Discussion

This is automatically an HPV, meaning that no further inquiry into the details or severity of the situation is necessary. Once a State/Local agency discovers that a PSD or NSR permit has not been obtained for a situation requiring one, the source must be placed on the High Priority Violation List (HPVL). This violation type also covers the failure to install BACT or LAER and the failure to obtain offsets where required.

3.2.2 Questions and Answers

[There are no questions relating to this section.]

3.3 General HPV Criterion 2: Violation of Air Toxics Requirements

Violation of air toxics requirement (i.e., NESHAP, MACT) that either results in excess emissions OR violates operating parameter restrictions

3.3.1 Discussion

This type of violation covers NESHAP and MACT requirements. The Policy gives equal status to emissions violations and violations of operating parameter restrictions. If operating parameter restrictions are violated, it is not necessary to demonstrate that actual excess emissions have occurred.

3.3.2 Questions and Answers

.1 ***Does the Policy apply to a violation of an air toxics requirement in a federally enforceable preconstruction or operating permit if a NESHAP or MACT is not applicable?***

No. The Policy applies only to air toxics requirements that are part of a NESHAP or MACT standard. Although a toxic pollutant condition may be federally enforceable when in a PSD permit or when covered by a State-imposed MACT requirement, a violation of these conditions is not subject to this HPV criterion.

.2 ***Does the "operating parameters restriction" apply to both process and control system parameters? Does it also apply to work practices?***

The Policy applies to any restriction related directly to the reduction of toxic pollutant emissions. For example, it applies to control system parameter limits such as required scrubber flow rates and pressure drop, or the minimum combustion zone temperature in an incineration system. It also applies to process related limits adopted for the purpose of controlling toxic pollutant emissions -- for example, restrictions on charging rates, or the composition of product feed material, or the use of certain waste as fuel. Finally, it applies to work practices directly related to preventing the escape of toxic emissions -- for example, failure to develop or implement a leak detection plan, failure to ensure that hoods or other fugitive control devices are in place or operative, failure to take required corrective action measures following a malfunction, etc. This criterion does not apply to testing, monitoring, recordkeeping, or reporting requirements -- however, a violation of these requirements may be classified as an HPV under General Criterion 7.

3.4 General HPV Criterion 3: Violation that Affects Synthetic Minor Status

Violation by a synthetic minor of an emission limit or permit condition that affects the source's PSD, NSR, or Title V status

3.4.1 Discussion

This violation type covers the situation in which a source fails to comply with permit restrictions that limit the source's potential emissions below the appropriate threshold. Note that it is not necessary to show that the actual emissions exceed the applicable thresholds. For example, if the permit contains a restriction on daily throughput or a daily production rate, and this restriction is exceeded, the violation would be classified as an HPV.

3.4.2 Questions and Answers

.1 ***If an inspection at midyear determines that a production restriction is exceeded, but there is sufficient time to make a production adjustment before the end of the year, should the agency wait until the end of the year to determine whether HPV status applies?***

As a general rule, no. However, it depends on the circumstances in a given case. On this issue EPA follows the decision in *United States v. Louisiana-Pacific*, 682 F. Supp. 1142 (D. Colo. 1988). When a source knowingly and

regularly violates limits that restrict the source's potential to emit below major source threshold levels, EPA considers that the violation affects synthetic minor status and therefore should be classified as an HPV.

3.5 General HPV Criterion 4: Enforcement Violation

Violation of any substantive term of any Local, State, or Federal order, consent decree, or administrative order

3.5.1 Discussion

This type of violation covers only those orders that may be federally enforced. Examples of substantive violations would include failure to meet an increment of progress, failure to follow through on an agreed-upon control plan, or failure to pay a penalty. An example of a non-substantive violation would be failure to submit a required compliance report on time. The determination of what specific terms are substantive should be made on a case-by-case basis by the EPA Regional Office and the State/Local agency.

3.5.2 Questions and Answers

.1 How will State/Local agencies be made aware of substantive terms within an EPA consent order?

EPA will continue to observe its practice of providing State/Local agencies with a copy of any final consent order. In general, a term of a consent order may be considered substantive if it requires any action by a party to the consent order that is directly related to the violations on which the order is based. For example, failure to meet a compliance deadline, or to meet an increment of progress under a compliance schedule, or to provide timely reporting relating to the increment of progress would violate a substantive term of the order. Failure to conform to signature or court filing requirements, or failure to submit a required report to the correct address would violate a nonsubstantive term of the order. Decisions relating to the substantive nature of a consent order's terms should be made on an individual case basis, and should include consultation with the Region as necessary.

3.6 General HPV Criterion 5: Title V Certification Violation

Substantial violation of the source's Title V certification obligations

3.6.1 Discussion

Title V certification requirements are found at 40 CFR § 70.5. Sources applying for Title V permits are required to submit certification statements with the permit applications and throughout the life of the permit. The compliance certification section of the permit application requires an assurance that all statements made are true, accurate, and complete, and also requires:

- Information on methods used to determine compliance at the source, including monitoring, recordkeeping, and reporting requirements and test methods; and

- A schedule for submission of future certifications of compliance with all requirements applicable to the source.

If a source fails to submit the certification statement, either in the original permit application, in a permit renewal, or as otherwise required, the source should be placed on the HPVL based on a violation of General Criterion 5.

3.6.2 Questions and Answers

.1 If a facility certifies compliance with all applicable requirements and overlooks an NOV that is unresolved, should the Agency immediately issue an NOV and treat the source as an HPV or should the facility be given a chance to revise its certification statement?

For this situation as for many others, good judgment should be used to determine the proper course of action. For example, if this is a simple oversight, and when informed, the facility immediately sends in a corrected compliance certification, the certification violation probably should not be classified as an HPV. (Whether an NOV should be issued would be subject to the discretion of the Agency.) The case would be different if the facility routinely overlooked pending NOV's or purposefully ignored any unresolved NOV.

3.7 General HPV Criterion 6: Title V Permit Application Violation

Substantial violation of the source's obligation to submit a Title V permit application

3.7.1 Discussion

Title V permit application requirements are detailed in 40 CFR § 70.5. Title V permit applications include information about the source, emission related information, and information on pollution control requirements. They also include compliance plans and schedules and certification information. General Criterion 6 covers the complete failure to submit a permit application where required. As for late permit applications, there is a 60 day grace period, after which, if the application has not been submitted, the failure is considered to be an HPV. Administrative permit amendments, minor permit modifications, and corrected applications are not covered by this Criterion.

3.7.2 Questions and Answers

[There are no questions relating to this section.]

3.8 General HPV Criterion 7: Testing, Monitoring, Recordkeeping, or Reporting Violation

Violations that involve testing, monitoring, recordkeeping, or reporting that substantially interfere with enforcement or determining the source's compliance with applicable emission limits

3.8.1 Discussion

The facts surrounding this type of violation must be examined to determine whether a particular violation has caused substantial interference with an enforcement or compliance determination. For example, potentially substantial violations would include failure to install a monitor where required, failure to certify the monitor or to conduct proper quality assurance procedures when the failure interferes with use of monitoring data for compliance determinations, failure to keep accurate or adequate coating formulation and usage data, failure to submit timely malfunction reports involving significant excess emission incidents, failure to repair promptly a broken monitor where excess emissions are likely to have been occurring, and failure to conduct a stack test on time. The definition of what is substantial interference should be made on a case-by-case basis by the EPA Regional Office and the State/Local agency.

3.8.2 Questions and Answers

.1 ***Must an HPV under one of the other criteria be likely in order to trigger this Criterion, or is it sufficient that there be simply the possibility of an enforceable violation? For example, would failure to operate a CEM during a significant excess emissions incident or failure to report the incident and corrective action be an HPV even though the duration of the incident (after taking into account the duration of other excess emissions during the reporting period) would not be sufficient to justify HPV status under other HPV criteria?***

No, it is not necessary to show that an HPV under other criteria would be likely. In any case that an HPV under other criteria would be possible, a monitoring or reporting violation preventing the determination would clearly be an HPV.

3.9 General HPV Criterion 8: Emission Violation

Violation of an allowable emission limit detected during a reference method stack test

3.9.1 Discussion

For sources that are required to determine compliance either by scheduled stack testing or at the direction of EPA or a State/Local agency, any failure to demonstrate compliance means that the source must be placed on the HPVL. See also Section 4.1 of this Workbook.

3.9.2 Questions and Answers

.1 In the case of a new control system where the initial test fails and adjustments are made immediately that enable the system to pass, would the initial failure be considered an HPV?

Yes. Any failure of a required stack test would be considered an HPV. Adjustments enabling a new source to comply with applicable emissions limits must be made prior to the required test.

3.10 General HPV Criterion 9: Chronic or Recalcitrant Violation

CAA violations by chronic or recalcitrant violators

3.10.1 Discussion

In certain circumstances, a source may not have violated applicable regulations to a degree that application of the General HPV Criteria or HPV Matrix Criteria leads to a determination that the source is an HPV. Nevertheless, EPA or a State/Local agency may determine that the source needs to be placed on the HPVL if the source has a consistent, long term trend of violations not meeting HPV thresholds, or if it has been on the HPVL in the past and continues to have the same or similar violations, but less frequently or at a lower magnitude. In addition, if the source fails to cooperate with enforcement personnel during the investigation of specific violations, or fails to make good faith efforts to rectify problems causing excess emissions, it may also be appropriate to place the source on the HPVL.

3.10.2 Questions and Answers

.1 How should the terms "chronic" and "recalcitrant" be defined for the purposes of the HPV Policy?

EPA intends for these terms to have a certain degree of flexibility and for good judgment to be used to decide whether a violator is chronic or recalcitrant. For that reason, a specific definition dealing with exact numbers of violations or frequency of violations has not been formulated. In cases where the determination is in question, a consultation with the EPA Region would be appropriate.

3.11 General HPV Criterion 10: Section 112(r) Violation

Substantial violation of CAA Section 112(r) requirements

3.11.1 Discussion

What amounts to a "substantial" violation of the Section 112(r) requirements pertaining to the prevention, detection and correction of accidental releases of substances regulated under that Section is purposefully not defined in the HPV Policy because of the limited implementation experience under Section 112(r) to date. The determination of an HPV under this General Criterion should be made on case-by-case basis by the EPA Regional Office and the State. If the

permitting authority is not an implementing agency under Section 112(r), the only Section 112(r) related violation that should be classified an HPV by the nondelegated agency would be the violation of a permit requirement to submit a Section 112(r) risk management plan. This violation might include submission of a plan that the permitting authority determines is so incomplete or inaccurate that the source has essentially failed to submit a plan.

3.11.2 Questions and Answers

[There are no questions relating to this section.]

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SECTION 4: HPV MATRIX CRITERIA

4.1 Matrix Criterion 1: Emission Violation Detected By Stack Test

Violation of allowable emissions limitations, detected by stack testing

Table 4-1, below, contains only the rows and footnotes from the complete HPV Policy Matrix Table that are applicable to Matrix Criterion 1.

Table 4-1: Matrix Criterion 1

VIOLATION	METHOD OF DETECTION	STANDARD	SUPPLEMENTAL SIGNIFICANT THRESHOLD	% IN EXCESS OF REFERENCE LIMIT/PARAMETER		% OF TIME IN EXCESS OF REFERENCE LIMIT
Violation of allowable emissions limitations	Stack testing	Any applicable requirement	N/A	Any violation of the applicable standard	N/A	N/A

4.1.1 Discussion

Determine whether the HPV Policy applies to the violation:

First, determine whether the HPV Policy applies to the particular violation. The HPV Policy will only apply if the source is a major source and the pollutant at issue is one for which the source is considered major. If the source is not a major source or is not a major source for the pollutant in question, the violation is not an HPV based on Matrix Criterion 1.

Examine the magnitude of the violation:

Any failure to demonstrate compliance through stack testing indicates an HPV. Figure 4-1, below, contains a diagram of the logic process for Matrix Criteria 1 and 2.

4.1.2 Questions and Answers

.1 ***How does this Criterion differ from General Criterion 8?***

There is no difference. It is included in the HPV Matrix Criteria to emphasize that the duration and magnitude factors applicable to other HPV Matrix Criteria do not apply when a stack test is conducted. They do not apply because stack testing tests the capability of the control system to operate in compliance during representative conditions, and usually with an adequate opportunity to prepare for the test. As a result, to fail the stack test during the typically short period of a test by even a small margin is an indication that the control system is inadequate.

.2 ***Does this Criterion apply to the use of continuous emission monitoring systems when they are used to determine compliance pursuant to the instrumental test methods in 40 CFR part 60, Appendix B?***

Yes. If a stack test is conducted using a gas CEMS pursuant to Reference Methods 6C and 7E (or a similar accepted instrumental method), any failure is an HPV. However, this would not be true for an ongoing, continuous compliance determination utilizing a CEMS. The latter determination would be subject to the CEMS related duration and magnitude HPV criteria included in Matrix Criterion 4.

.3 ***If opacity monitoring data are correlated to particulate measurements during Reference Method 5 testing, resulting in the development of an enforceable opacity limit, should subsequent opacity violations be treated as stack test violations under this criterion?***

No. However, they should be evaluated pursuant to the COMS related duration and magnitude HPV criteria included in Matrix Criterion 5.

4.1.3 Case Studies

There are no case studies presented for HPV Matrix Criterion 1.

4.2 Matrix Criterion 2: Emission Violation Using Process/Formulation Data

Violation of allowable emissions limitations, detected by coatings analysis, fuel samples, other process materials sampling, or raw/process materials usage reports

Table 4-2, below, contains only the rows and footnotes from the complete HPV Policy Matrix Table that are applicable to Matrix Criterion 2.

Table 4-2: Matrix Criterion 2

VIOLATION	METHOD OF DETECTION	STANDARD	SUPPLEMENTAL SIGNIFICANT THRESHOLD[1]	% IN EXCESS OF REFERENCE LIMIT/PARAMETER		% OF TIME IN EXCESS OF REFERENCE LIMIT
Violation of allowable emissions limitations	Coatings analysis, fuel samples, other process materials sampling or raw/process materials usage reports	Any applicable requirement	CO 23 lb/hr NO_x 9 lb/hr SO2 9 lb/hr VOC 9 lb/hr PM 6 lb/hr PM10 3 lb/hr	>15% of the applicable emission limitation or the supplemental significant threshold (whichever is more stringent)	N/A	N/A

Table Footnotes:

1. Supplemental Significant Threshold is based on PSD significant levels. The significant threshold value is the lb/hr emission rate at 8,760 hours which would result in PSD review.

4.2.1 Discussion

Determine whether the HPV Policy applies to the violation:

Before examining the magnitude of the violation, determine whether the HPV Policy applies to the particular violation. The HPV Policy will only apply if the source is a major source and the pollutant at issue is one for which the source is considered major. If the source is not a major source or is not a major source for the pollutant in question, the violation is not an HPV based on Matrix Criterion 2.

Examine the magnitude of the violation:

A particular violation will be considered an HPV if the magnitude of the violation is more than 15% in excess of the applicable limitation or if the magnitude of the violation exceeds the applicable limit plus the supplemental significant threshold (SST) for that pollutant.

If the magnitude of the violation is more than 15% in excess of the limitation, for any period of time during the reporting period, the source should be placed on the HPVL. If the magnitude is not at that level, the emission rate in pounds/hour should be examined to determine

whether the violation is an HPV based on an exceedance of the applicable limit plus the supplemental significant threshold for the pollutant. Supplemental significant threshold rates are:

Pollutant	SST
CO	23 lb/hr
NO_x	9 lb/hr
SO_2	9 lb/hr
VOC	9 lb/hr
PM	6 lb/hr
PM10	3 lb/hr

Calculations for the SST require information on the emission rate at the levels of emission control and production during the period of excess emissions. Once this information is known, calculate the pounds per hour of pollutant represented by the excess emissions during the period of violation. Then, compare the result to the SST for that pollutant. In some cases to calculate the SST operating level information may have to be obtained from the facility or estimated based on other process and control system information available to the agency.

It is not essential that this calculation reflect a high degree of accuracy, such as the degree of accuracy that would be expected during a compliance test, since the purpose is not to determine whether a violation exists (this has already been determined), but to determine whether the quantity of pollutants emitted during the violation is likely to exceed the specified threshold. The SST is most likely to be a factor where the violating unit produces high levels of allowable emissions (so that a small percentage over the allowable limit results in very high levels of unallowable emissions), or where the violating unit is not so large, but the emission limit itself is very high (so that high levels of emissions are still likely to occur when the exceedance percentage does not meet the HPV reference limit criteria).

Figure 4-1 below, contains a diagram of the logic process for Matrix Criteria 1 and 2.

4.2.2 Questions and Answers

.1 ***What methods should be used to evaluate whether the SST has been exceeded when a short term concentration standard applies and there are no reported data that will allow for determining the equivalent lb/hr?***

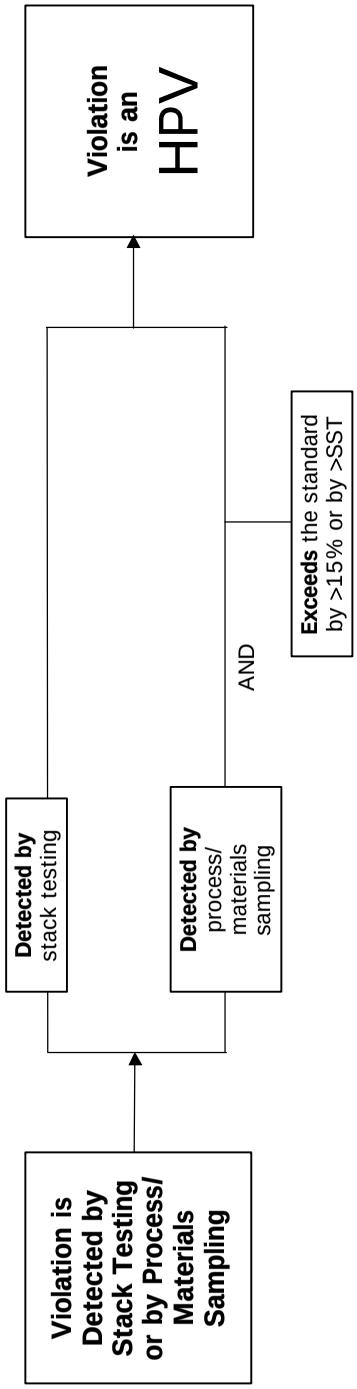
Generally, representative operating conditions included in the permit (or permit application) or in a recent stack test may be used to estimate the actual emissions in lb/hr for the noncomplying concentration. Emission factors from AP-42 (or from another generally accepted guideline), and good engineering judgment may also be used for this purpose. Example methods and calculations are included in Case Studies Nos. 2, 4, 10 and 13 included in this section.

.2 ***How would you determine whether the magnitude exceeded 15% of the standard or the SST if the violation involved a prohibition of the use of certain materials or fuels?***

Any violation of a prohibition would automatically be an HPV, and the actual pollutant emissions or the impact on other applicable emission limits from the unit would not be relevant. Also, in such a case, the limit associated with the specific prohibition would be zero, and the percent of the exceedance over the limit would be irrelevant.

Figure 4-1:

Violation of Allowable Emissions Limitation, Detected by Stack Testing or by Process/Materials Sampling



4.2.3 Case Studies

Process Details and Applicable Regulations:

An industrial plant with a coal fired boiler using a blend of low and high sulfur bituminous coal to comply with SO_2 limits has a SIP limit for SO_2 emissions of 1.05 lb SO_2/mmBtu (24 hr. average if compliance is determined by fuel analysis).

Facts of Violation:

Violation involves SO_2 excess emission detected by fuel sampling.

At the request of the inspector, following the inspection, a 24 hour composite coal sample was collected by facility personnel during normal operation of the source and analyzed in the facility lab. It revealed a sulfur content of 1.6% by weight. Based on the coal analysis, this converted to SO_2 emissions of 1.38 lb/mmBtu.

Time in Violation	Percent in Excess of Reference Limit	Supplemental Significant Threshold
N/A	Percent in Excess Calculation: [HPV Value = >15%] Magnitude of violation: Measured % sulfur = 1.6% 1.6% S converts to 1.38 lb SO_2/mmBtu Magnitude of violation percentage: 1.38 – 1.05 = .33 (.33 ÷ 1.05) × 100 = 31.4% 31.4% exceeds 15% **Place source on HPVL.**	N/A

Discussion:
These facts may be differentiated from a case where a percent sulfur in fuel limit involves daily coal sampling by the facility to monitor compliance. However, the single magnitude standard in Matrix Criterion 2 applies in either case.

Process Details and Applicable Regulations:

An industrial boiler using high sulfur bituminous coal is able to comply with the applicable SO_2 SIP limit without SO_2 controls. At normal load the boiler operates at a consistent heat input of 85 mmBtu/hr. The SO_2 SIP emission limit is 6.0 lb SO_2/mmBtu (24 hr. average if compliance is determined by fuel sampling).

Facts of Violation:

Violation involves SO_2 excess emissions detected by fuel sampling.

At the request of the inspector, following an inspection, a daily composite coal sample was collected by facility personnel during normal operation of the source, and analysis in the facility lab revealed a sulfur content of 2.4% by weight. Using the coal analysis results, this converted to SO_2 emissions of 6.2 lb/mmBtu. Information collected during the inspection indicated that the plant was in a normal production cycle and that the boiler was operating at a normal load.

Time in Violation	Percent in Excess of Reference Limit	Supplemental Significant Threshold
N/A	Percent in Excess Calculation: [HPV Value = >15%] Magnitude of violation: Measured % sulfur = 2.4% 2.4% S converts to 6.2 lb SO_2/mmBtu Magnitude of violation percentage: 6.2 – 6.0 = 0.2 lb SO_2/mmBtu (0.2 ÷ 6.0) x 100 = 3.3% **Violation is not an HPV based on this calculation.**	SST Calculation: [SO_2 SST Value = 9 lb/hr] SST Calculation: 6.2 – 6.0 = 0.2 lb SO_2/mmBtu 0.2 lb/mmBtu × 85 mmBtu/hr = 17 lb/hr **Place source on HPVL.**

Discussion:
This example demonstrates that a violation that is well below the 15% reference limit exceedance threshold may violate the SST threshold. This occurred in the current case because the SO_2 emission limit is high enough so that a relatively small percent exceedance over the standard can involve a much more significant amount of SO_2 emissions. An important factor in this determination can also be the actual operating load of the boiler during the period of the violation. A reduction in mmBtu/hr would result in a proportionate reduction in lb SO_2 emitted.

Process Details and Applicable Regulations:

A large electronics plant with significant solvent cleaning and coating operations is a major source for VOCs and is in an ozone attainment area. One coating line of specialty products paint booths has VOC SIP coating limits of 149 lb VOC/day and 19.4 tons VOC/year (any 12 month period).

These limits were established based on an assumed coating VOC content of 4.14 lb VOC/gallon of coating and a usage of 36 gal coating/day and 9,357 gal/year. The coating is preformulated and requires no on-site mixing. These usage limits are included in the source operating permit. The source is required to submit monthly coating usage reports.

Facts of Violation:

Violation involves VOC excess emissions detected by coating usage reports.

Coating usage reports indicate that a total 11,200 gallons of coating were applied during the past year. The excess usage occurred during the last reported month.

Time in Violation	Percent in Excess of Reference Limit	Supplemental Significant Threshold
N/A	Percent in Excess Calculation: [HPV Value = >15%] Magnitude of violation: (11,200 gal/yr × 4.14 lb/gal) ÷ 2000 lb/ton = 23.18 tons/yr 23.18 – 19.4 = 3.78 tons/yr Magnitude of violation percentage: (3.78 ÷ 19.4) x 100 = 19.5% **Place source on HPVL.**	N/A

Discussion:
This case recognizes that the agency identified the annual usage violation in the most recent monthly report. The daily usage standard was also undoubtedly violated during the month and could also have been the basis for an HPV determination. While all violations may be covered in the agency's enforcement action, it is not necessary to determine whether more than one violation triggers HPV status.

Process Details and Applicable Regulations:

A graphic arts facility has the following RACT permit limits for printing operations at one of its presses: for application of inks at the press, 2.9 lb VOC/gal (excluding water and exempt solvents); for ink usage limit of 96 gal/day at the press (the equivalent of 278.4 lb/day based on 2.9 lb VOC/gal). The press normally operates for a single 8 hour period each day.

Facts of Violation:

Violations involve ink VOC content and usage.

VOC Content:
Inspector has reviewed records stating that due to a shipment of inks from a supplier other than their usual supplier, inks used during the month of March contained 3.2 lb VOC/gal.

Ink Usage:
For a two week period in the reporting period, also during March, the press was operated at a slightly higher operating level and was using 110 gal/day.

Time in Violation	Percent in Excess of Reference Limit	Supplemental Significant Threshold
N/A	Percent in Excess Calculation: [HPV Value = >15%] Magnitude of violation: 3.2 lb/gal – 2.9 lb/gal = 0.3 lb/gal Magnitude of violation percentage: (0.3 ÷ 2.9) × 100 = 10.3% **15% level not exceeded.**	SST Violation Calculation: [VOC SST Value = >9.0 lb/hr] Maximum allowable VOC emissions: 278.4 lb/day ÷ 8 hr/day = 34.8 lb/hr. Actual VOC emissions: 110 gal/day × 3.2 lb/gal = 352 lb/day 352 lb/day ÷ 8 hr/day = 44 lb/hr. Magnitude of violation: 44 lb/hr – 34.8 lb/hr = 9.2 lb/hr **Place source on HPVL.**

Discussion:
In this case, the VOC content of the ink did not amount to an HPV. However, when the VOC content violation was examined in combination with the material usage violation there was an HPV based on the SST. Note that if the applicable permit had specifically linked the ink usage requirement to VOC content, resulting in a maximum lb VOC/day usage limit instead of a maximum gal/day usage limit, the ink usage violation would have exceeded the 15% HPV threshold: (352 – 278.4) ÷ 278.4 × 100 = 26.4%. Note, also, that if the press had actually operated for 9 hours each day during the period of violation (instead of the assumed 8 hours), the actual VOC emissions would be 39.1 lb/hr, not 44 lb/hr, and the violation would not have exceeded the 9.0 lb/hr SST threshold: 39.1 – 34.8 = 4.3 lb/hr.

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4.3 Matrix Criterion 3: Surrogate Limit Violation

Violation of parameter limits where parameter is a direct surrogate for an emissions limitation, detected by continuous/periodic parameter monitoring

Table 4-3, below, contains only the rows and footnotes from the complete HPV Policy Matrix table that are applicable to Matrix Criterion 3.

Table 4-3: Matrix Criterion 3

VIOLATION	METHOD OF DETECTION	STANDARD	SUPPLEMENTAL SIGNIFICANT THRESHOLD	% IN EXCESS OF REFERENCE LIMIT/PARAMETER		% OF TIME IN EXCESS OF REFERENCE LIMIT
Violation of parameter limits where the parameter is a direct surrogate for an emissions limitation	Continuous/ Periodic Parameter Monitoring (includes indicators of control device performance)	Any applicable requirement	N/A	>5% of the applicable parameter limit	FOR	>3% of the operating time during the reporting period
					OR	Any exceedance of the parameter limit for >50% of the operating time during the reporting period[3]

Table Footnotes:

3. For the first reporting period. If exceedances occur for more than 25% of the operating time during the first reporting period evaluated, and if such exceedances continue during the subsequent consecutive reporting period, the exceedances will be considered high priority violations for both reporting periods if the percent of time in excess exceeds 25% of the operating time during the second reporting period.

4.3.1 Discussion

Determine whether the HPV Policy applies to the violation:

Before examining the duration or magnitude of the violation, determine whether the HPV Policy applies to the particular violation. The HPV Policy will only apply if the source is a major source and the pollutant at issue is one for which the source is considered major. If the source is not a major source or is not a major source for the pollutant in question, the violation is not an HPV based on Matrix Criterion 3.

Establish the duration of the violation:

The duration of the violation will determine whether the magnitude of the violation needs to be examined. If the applicable standard is exceeded for more than 50% of the operating time during the reporting period, then the violation is an HPV, regardless of the magnitude of the violation. Also, if the applicable standard is exceeded for more than 25% of the operating time for each of two consecutive reporting periods, then the violation is an HPV, without regard to the magnitude of the violation. If the applicable standard is exceeded for more than 3% of the operating time during the reporting period, then the magnitude of the violation must be examined

to determine whether it is an HPV. If the percent of time in excess of the standard is equal to or less than 3%, the violation is not an HPV.

Examine the magnitude of the violation:

As stated above, if the applicable standard has been exceeded for more than 3% of the operating time, the magnitude of the violation must be examined. For a particular violation to be an HPV, the violation must be greater than 5% in excess of the applicable limit. The 5% level is a straightforward calculation of 5% above the standard, in whatever units the standard is expressed.

Connect the magnitude and duration of the violation:

Note that the time in violation and magnitude of the violation must be linked. If the source met the time in violation requirement but did not meet the magnitude requirement for the necessary amount of that time in violation, the violation would not be an HPV. For example, if a source was in violation for 20% of the reporting period but exceeded 5% over the standard for only 2% of the period, the violation would not be classified as an HPV under this criterion.

Figure 4-2, below, contains a diagram of the logic process for Matrix Criterion 3.

4.3.2 Questions and Answers

.1 ***What are the criteria for determining that a standard is a surrogate?***

A surrogate standard must be a clearly enforceable, independent limit for which a violation cannot be successfully challenged based on an argument that the primary pollutant emissions were not in violation. A typical example would be a temperature limit for a thermal incinerator which serves as a surrogate limit for a control efficiency requirement, or for a VOC mass emissions limit.

.2 ***If a source is required to perform combustion efficiency monitoring (CO/CO_2) as a surrogate for dioxin, should this be evaluated as a parameter or under the SST for CO?***

For a major source, any exceedance of a surrogate limit for dioxin that is part of a NESHAP/MACT standard would be an HPV under General Criterion 2 (pertaining to the violation of air toxics requirements), and the magnitude of the violation would not be relevant.

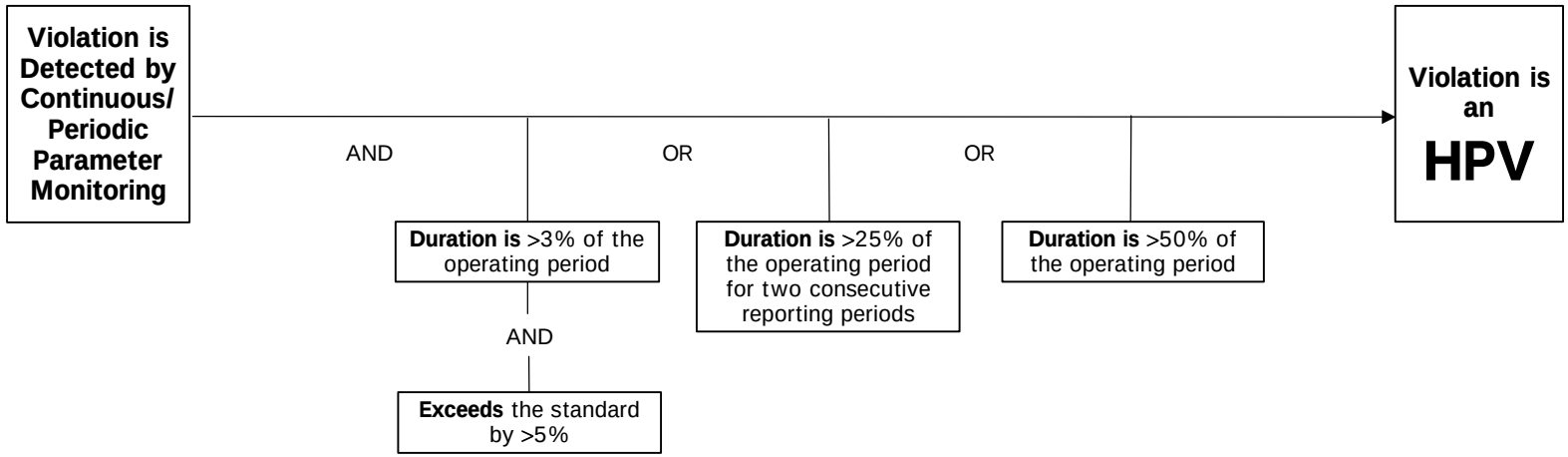
If, on the other hand, there is a specific CO/CO_2 emission limit that is a direct surrogate for a criteria pollutant (VOCs for example), and the CO limit is not also a separate, federally enforceable requirement, CEM detected exceedances would be subject to Matrix Criterion 3, which includes a reference limit magnitude factor (>5%) but no SST. If the CO limit is also part of a CO control strategy, the CEM detected exceedances would also be subject to Matrix Criterion 4, which includes both a reference limit magnitude factor (>15%) and an SST (23 lb/hr), and the agency must select one or both criteria to evaluate. The recommended approach would be to evaluate the most restrictive factor first, the >5% in Matrix Criterion 3; then, if it is not triggered, evaluate the SST in Matrix Criterion 4. There would be no need to evaluate the violation under both Matrix Criteria if the first evaluation shows the violation to be an HPV.

.3 ***If a surrogate parameter limit exists (e.g., a specific formulation or fuel content requirement) but no continuous or periodic parameter monitoring is required, what HPV criteria, if any, would apply to a single violation of the surrogate limit detected during an inspection?***

This violation would be subject to Matrix Criterion 2 relating to the violation of an allowable emission limitation which could be detected as the result of a sample taken during the inspection. It would not be subject to Matrix Criterion 3, which requires continuous or periodic monitoring to establish the duration of violations as a percentage of the operating time.

Figure 4-2:

Violation of Parameter Limits, Detected by Continuous/Periodic Parameter Monitoring



4.3.3 Case Studies

Process Details and Applicable Regulations:

A large specialized metal parts coating facility in an ozone nonattainment area is subject to RACT requirements that are met through the use of a thermal incinerator. A 90% capture efficiency and 95% destruction efficiency must be maintained. To meet the 95% destruction efficiency standard, the incinerator must always operate above 1,250°F in the combustion zone. Temperature must be measured and recorded each hour. These records must be available during agency inspections and a summary of excursions must be reported to the agency semiannually.

Facts of Violation:

Violation involves incinerator temperature excursions.

For the semiannual reporting period, the source reported hourly temperature excursions for 230 hours. Two hundred twenty of these excursions were at or below 1,187°F. The remainder were between 1,188°F and 1,250°F. The source was not required to report its period of operation; however, its operating permit application indicated a normal operating period of 8 hours/day, 6 days/week, 52 weeks/year.

Time in Violation	Percent in Excess of Reference Limit	Supplemental Significant Threshold
Time in Violation Calculation: [HPV Value = >3% (with consideration of magnitude) OR >50% for one reporting period or >25% for two consecutive reporting periods (without consideration of magnitude)] Time in violation duration: 230 hours Operating time: 1,248 hours Time in violation percentage: (230 hrs ÷ 1,248 hrs) × 100 = 18.4% **>3% threshold is met.**	Percent in Excess Calculation: [HPV Value = >5% for >3% of the operating time] 5% trigger value: 1,250°F – (.05 × 1,250°F) = 1,187.5°F Magnitude of violation: 220 hourly excursions = ≤1,187°F Magnitude duration percentage: (220 hrs ÷ 1,248 hrs) × 100 = 17.6% **3% duration and 5% magnitude criteria are met.** **Place source on HPVL.**	N/A

Discussion:
In this case to facilitate the review of reported temperature data, the 5% lower threshold limit was calculated as a trigger value, and every recorded hourly temperature at or below that value was added to determine the total hours of violations meeting the HPV criteria. Because no operating period data were reported, the agency relied on data in the permit application to determine an estimated operating period for the six month timeframe. Since it easily met the 3% duration threshold, any shorter operating period would also have met the 3% threshold. In the case presented, even if the source had operated 24 hours/day, 7 days/week the 3% threshold would still have been met (220 ÷ 4,380 = 5.0%).

Process Details and Applicable Regulations:

The facility information and applicable requirements are the same as in Case Study 5. A large specialized metal parts coating facility in an ozone nonattainment area is subject to RACT requirements that are met through the use of a thermal incinerator. A 90% capture efficiency and 95% destruction efficiency must be maintained. To meet the 95% destruction efficiency standard, the incinerator must always operate above 1,250°F in the combustion zone. Temperature must be measured and recorded each hour. These records must be available during agency inspections and a summary of excursions must be reported to the agency semiannually.

Facts of Violation:

The Facts of Violation are the same as in Case Study 5, except the summary of excursions for the semiannual reporting period showed there were 641 hours of excursion below 1,250°F. As in the previous case, the source is not required to report its operating time, and (based on the anticipated hours of operation included in the operating permit), the estimated operating time for the six month period is 1,248 hours.

Time in Violation	Percent in Excess of Reference Limit	Supplemental Significant Threshold
Time in Violation Calculation: [HPV Value = >3% (with consideration of magnitude) OR >50% for one reporting period or >25% for two consecutive reporting periods (without consideration of magnitude)] Time in violation duration: 641 hours Operating time: 1,248 hours Time in violation percentage: (641 hrs ÷ 1,248 hrs) × 100 = 51.4% **>50% threshold is met.** **Place source on HPVL.**	N/A	N/A

Discussion:
Because the time in violation was >50% of the estimated operating time during the reporting period, the magnitude of the violation is not considered. In this case the agency may want to confirm the actual operating time of the facility, rather than rely on an estimate based on the permit application. For example, if the facility had actually operated ten hours/day, the total duration of exceedances would be only 49.3%, and if almost all of these violations were above the 1,187°F trigger value for the HPV magnitude calculation (as shown in Case Study 5), the actual operating time could make the difference in whether the violations must be classified HPV.

Likewise, if the permit application based duration estimate approached but fell short of the >50% threshold, and the magnitude of most violations fell short of the >5% threshold, confirmation of the actual operating time might disclose that the facility did not in fact operate a full day on many occasions, and this might show that the duration of violations exceeded 50% of the actual operating time after all.

Process Details and Applicable Regulations:

The facility information and applicable requirements are the same as in Case Studies 5 and 6. A large specialized metal parts coating facility in an ozone nonattainment area is subject to RACT requirements that are met through the use of a thermal incinerator. A 90% capture efficiency and 95% destruction efficiency must be maintained. To meet the 95% destruction efficiency standard, the incinerator must always operate above 1,250°F in the combustion zone. Temperature must be measured and recorded each hour. These records must be available during agency inspections and a summary of excursions must be reported to the agency semiannually.

Facts of Violation:

The Facts of Violation are the same as in Case Study 5, except the summary of excursions for the current semiannual reporting period showed there were 362 hours of excursions below the 1,250°F, and there were 322 hours of excursions below 1,250°F during the previous semiannual reporting period. As in the previous case, the source is not required to report its operating time, and (based on information included in the permit application), the estimated source operating time for the current reporting period is 1,248 hours. Without a report of the actual operating hours, the estimated operating time for the previous six month period would be the same.

Time in Violation	Percent in Excess of Reference Limit	Supplemental Significant Threshold
Time in Violation Calculation: [HPV Value = >3% (with consideration of magnitude) OR >50% for one reporting period or >25% for two consecutive reporting periods (without consideration of magnitude)] ! CURRENT SEMIANNUAL PERIOD: Time in violation duration: 362 hours Operating time: 1,248 hours Time in violation percentage: (362 hrs ÷ 1,248 hrs) × 100 = 29.0% ! PREVIOUS SEMIANNUAL PERIOD: Time in violation duration: 322 hours Operating time: 1,248 hours Time in violation percentage: (322 hrs ÷ 1,248 hrs) × 100 = 25.8% **>25% threshold is met for two consecutive reporting periods.** **Place source on HPVL.**	N/A	N/A

Discussion:
Because the time in violation was >25% for each of two consecutive reporting periods, the magnitude of the violation does not need to be examined. Note that if the magnitude of the violation in the first semiannual period had exceeded 5% of the applicable parameter limit for >3% of the time, the source could have been placed on the HPVL based on the violations for that period alone (without considering the second period).

Process Details and Applicable Regulations:

A major coating facility located in an ozone nonattainment area must use thermal incinerators to comply with State RACT requirements. The facility operates four coating lines, and VOC emissions are captured and controlled by separate incinerators from three of these lines. The applicable control limit is specified at 90% capture and 95% destruction for a total control efficiency of 85.5%. To meet this requirement the facility's operating permit requires that the temperature in the combustion zone be maintained at 1,350°F at all times. Also, the temperature must be monitored and recorded using an automatic recording device every 15 minutes, and a monthly report must be submitted to the agency which includes all recorded temperature measurements and a summary of excursions below the 1,350°F level for each incinerator. All four lines are also subject to lb VOC/gal of coating limits and these limits along with the control efficiency on three lines are used as the basis for an overall lb VOC/day limit for the entire facility (870 lbs/day). The three controlled lines must use coatings that do not exceed 4.1 lb VOC/gal, and the uncontrolled line must use coatings that do not exceed 2.9 lb VOC/gal. The monthly report must include a daily summary of the coatings used on each line, and calculate the total daily VOC emissions from the plant. The plant typically operates 12 hours a day, but different lines operate different lengths of time, depending on the specific needs on a given day.

Facts of Violation:

Violation involves incinerator temperature and VOC formulation excursions, and possibly a total plant emissions violation. In the most recent monthly report, Incinerator No.1 experienced forty 15 minute excursions (10 hours) during one 24 hour period. The temperature was <1,250°F for 8 hours (thirty-two 15 minute periods) and was >1,300°F but <1,350°F for two hours (8 periods). The coating line operated for 262 hours during the reporting period and used 500 gallons of complying coatings on the day of the temperature excursions. There were no temperature excursions reported by the other two incinerators. However, Controlled Line No. 2 reported using 480 gallons of coating with an average VOC content of 4.5 lb/gal for 9 hours on the same day that Incinerator No. 1 experienced temperature excursions and used complying coating for the remainder of its 360 hour operating period. Controlled Line No. 3 reported no violations and using 400 gallons of complying coating on the day other lines experienced excursions. Uncontrolled Line No. 4 reported using 3.1 lb/gal for the 2 hours (35 gallons) on the same day and 3.0 lb/gal on four other days for a total of 20 hours of noncompliance in its 124 hour operating period.

Time in Violation	Percent in Excess of Reference Limit	Supplemental Significant Threshold
Time in Violation Calculation: [HPV Value = >3% (with consideration of magnitude) OR >50% for one reporting period or >25% for two consecutive reporting periods (without consideration of magnitude)] Time in violation percentage: LINE NO. 1: (10 hrs ÷ 262) × 100 = 3.8% LINE NO. 2*: (9 hrs ÷ 360) × 100 = 2.5% LINE NO. 4*: (20 hrs ÷ 124) × 100 = 16.1% *If evaluated under Matrix Criterion 2, the duration of these emissions would not be relevant. **>3% threshold is met by Lines 1 and 4.**	Percent in Excess Calculation: [HPV Value = >5% for >3.0% of the operating time] Magnitude and duration percentage: LINE NO. 1: 5% trigger value = 1,350°F × 95% = 1,282.5°F 8 hrs ≤1,250°F meets trigger value (8 hrs ÷ 262 hrs) × 100 = 3.1% of operating time >5% for 3.1% of operating time meets HPV criteria **Place source on HPVL for Line No. 1.** LINE NO. 2: If evaluated under Matrix Criterion 2 (0.4 lb/gal exceedance is 9.8% over the 4.1 lb/gal standard and does not meet the >15% HPV Criterion). LINE NO. 4: 2 hrs @ >5% ÷ 124 = 1.6%. Does not meet >3.0% duration criteria. If evaluated under Matrix Criterion 2, 0.2 lb/gal exceedance is 6.9% over the 2.9 lb/gal standard and does not meet the >15% HPV criteria. TOTAL PLANT: Not evaluated. Should be evaluated under Matrix Criterion 2.	N/A

Discussion:
This more complicated case is intended to show how the HPV matrix criteria overlap in a single case. Of the four possible emissions violations on one day at the facility, the violation at Line No. 1 is the only violation that qualifies as an HPV under Matrix Criterion 3. Violations that can be evaluated under Matrix Criterion 2 are straightforward, except for the total plant daily limit, which requires calculating the total lbs VOC emitted based on coating usage reports and the estimated capture and destruction efficiency of the three incinerators. The suggested facts indicate that this calculation would be made by the facility as part of its monthly report. However, this presupposes agreement between the facility and the agency on a protocol for estimating increased emissions due to decreased destruction efficiency at specified combustion temperatures below required levels.

4.4 Matrix Criterion 4: CEM Detected Violation

Exceedance of applicable non-opacity standard, detected by CEMS

Table 4-4, below, contains only the rows and footnotes from the complete HPV Policy Matrix table that are applicable to Matrix Criterion 4.

Table 4-4: Matrix Criterion 4

VIOLATION	METHOD OF DETECTION	STANDARD	SUPPLEMENTAL SIGNIFICANT THRESHOLD[1]	% IN EXCESS OF REFERENCE LIMIT/PARAMETER		% OF TIME IN EXCESS OF REFERENCE LIMIT
Violation of applicable non-opacity standard	Continuous Emissions Monitoring (where CEM is certified under federal performance specifications)	≤24 hour averaging period (for example, one hour or three hour blocks)	CO 23 lb/hr NO_x 9 lb/hr SO2 9 lb/hr VOC 9 lb/hr	15% of the applicable standard or, the supplemental significant threshold, (whichever is more stringent)	FOR	>5% of the operating time during the reporting period[4 6]
					OR	any exceedance of the reference limit for >50% of the operating time during the reporting period[3]
	Continuous Emissions Monitoring (where CEM is certified under federal performance specifications)	>24 hour averaging period		Any violation of the applicable standard		N/A

Table Footnotes:

1. Supplemental Significant Threshold is based on PSD significant levels. The significant threshold value is the lb/hr emission rate at 8760 hours which would result in PSD review.
3. For the first reporting period. If exceedances occur for more than 25% of the operating time during the first reporting period evaluated, and if such exceedances continue during the subsequent consecutive reporting period, the exceedances will be considered high priority violations for both reporting periods if the percent of time in excess exceeds 25% of the operating time during the second reporting period.
4. For the first reporting period. If exceedances occur for more than 3% of the operating time during the first reporting period evaluated, and if such exceedances continue during the subsequent consecutive reporting period, the exceedances will be considered high priority violations for both reporting periods if the percent of time in excess exceeds 3% of the operating time during the second reporting period.
6. This would not include any federally approved exempt period (e.g., startup/shutdown/malfunction 40 CFR 60.11), since these would not be violations.

4.4.1 Discussion

Matrix Criterion 4 covers violations of non-opacity standards detected by CEMS. The analysis used to determine whether a particular violation is an HPV depends on the averaging period, duration, and magnitude of the violation.

Determine whether the HPV Policy applies to the violation:

Before examining the averaging period, duration, or magnitude of the violation, determine whether the HPV Policy applies to the particular violation. The HPV Policy will only apply if the source is a major source and the pollutant at issue is one for which the source is considered major. If the source is not a major source or is not a major source for the pollutant in question, the violation is not an HPV based on Matrix Criterion 4.

Identify the averaging period for the standard:

First, determine whether the averaging period used for the applicable standard is more than 24 hours or less than/equal to 24 hours. Any violation of a standard for which the averaging period is more than 24 hours is an automatic HPV, without consideration of the level or duration of the violation. For cases in which the applicable averaging period for the standard is less than or equal to 24 hours, further analysis of the duration and possibly the magnitude of the violation must be completed.

Establish the duration of the violation:

The duration of the violation will determine whether the magnitude needs to be examined. If the applicable standard is exceeded for more than 50% of the operating time during the reporting period, then the violation is an HPV, regardless of the magnitude of the violation. If the applicable standard is exceeded for more than 25% of the operating time for each of two consecutive reporting periods, then the violation is an HPV, also without regard to the magnitude of the violation. If the applicable standard is exceeded for more than 5% of the operating time during the reporting period, then the magnitude of the violation must be examined to determine whether it is an HPV. Finally, if the applicable standard is exceeded for more than 3% but equal to or less than 5% of the operating time for each of two consecutive reporting periods, then the magnitude of the violation must be examined to determine whether it is an HPV. If the percent of time in excess of the standard is equal to or less than 3%, the violation is not an HPV.

Note that federally approved exempt periods of startup, shutdown, and malfunction (for example, exemptions under 40 CFR 60.11) would not be included in the duration of the violation calculation for the 3% and 5% duration thresholds, but they would be included in the 25% and 50% thresholds.

Examine the magnitude of the violation:

As stated above, if the applicable standard has been exceeded for more than 5% of the operating time (or more than 3% of the operating time for each of two consecutive reporting periods), the magnitude of the violation must be examined. For a particular violation to be an HPV, the violation must be at least 15% in excess of the applicable limit or be over the applicable limit plus the supplemental significant threshold (SST). The 15% level is a straightforward calculation of 15% above the standard, in whatever units the standard is expressed. If the source did not have excess emissions meeting the 15% level, a more complex calculation involving the emission rate in lbs/hour must be done to determine whether the source has exceeded the applicable limit plus the SST for the pollutant in question. SST rates are as follows:

Pollutant	SST
CO	23 lb/hr
NO_x	9 lb/hr
SO_2	9 lb/hr
VOC	9 lb/hr

Calculations for the SST require information on the emission rate at the levels of emission control and production during the period of excess emissions. Once this information is known, calculate the pounds per hour of pollutant represented by the excess emissions during the period of violation. Then, compare the result to the SST for that pollutant. In some cases to calculate the SST operating level information may have to be obtained from the facility or estimated based on other process and control system information available to the agency.

It is not essential that this calculation reflect a high degree of accuracy, such as the degree of accuracy that would be expected during a compliance test, since the purpose is not to determine whether a violation exists (this has already been determined), but to determine whether the quantity of pollutants emitted during the violation is likely to exceed the specified threshold. The SST is most likely to be a factor where the violating unit produces high levels of allowable emissions (so that a small percentage over the allowable limit results in very high levels of unallowable emissions), or where the violating unit is not so large, but the emission limit itself is very high (so that high levels of emissions are still likely to occur when the exceedance percentage does not meet the HPV reference limit criteria).

Connect the duration and magnitude of the violation:

Note that the time in violation and magnitude of the violation are linked. If a source met the time in violation requirement but did not meet the magnitude requirement for the necessary amount of that time in violation, the violation would not be an HPV. For example, if a source was in violation for 8% of the operating time during a reporting period, and during half of that time was in violation by a magnitude of 20% and the other half of the time was in violation by a magnitude of 14%, the violation would not be an HPV based on an exceedance of the standard, because the time in violation by a factor of >15% was only 4% (½ of 8%) of the operating time and would be under the HPV threshold of >5%. The same analysis would apply to exceedances of the SST.

Figure 4-3, below contains a diagram of the logic process for Matrix Criterion 4.

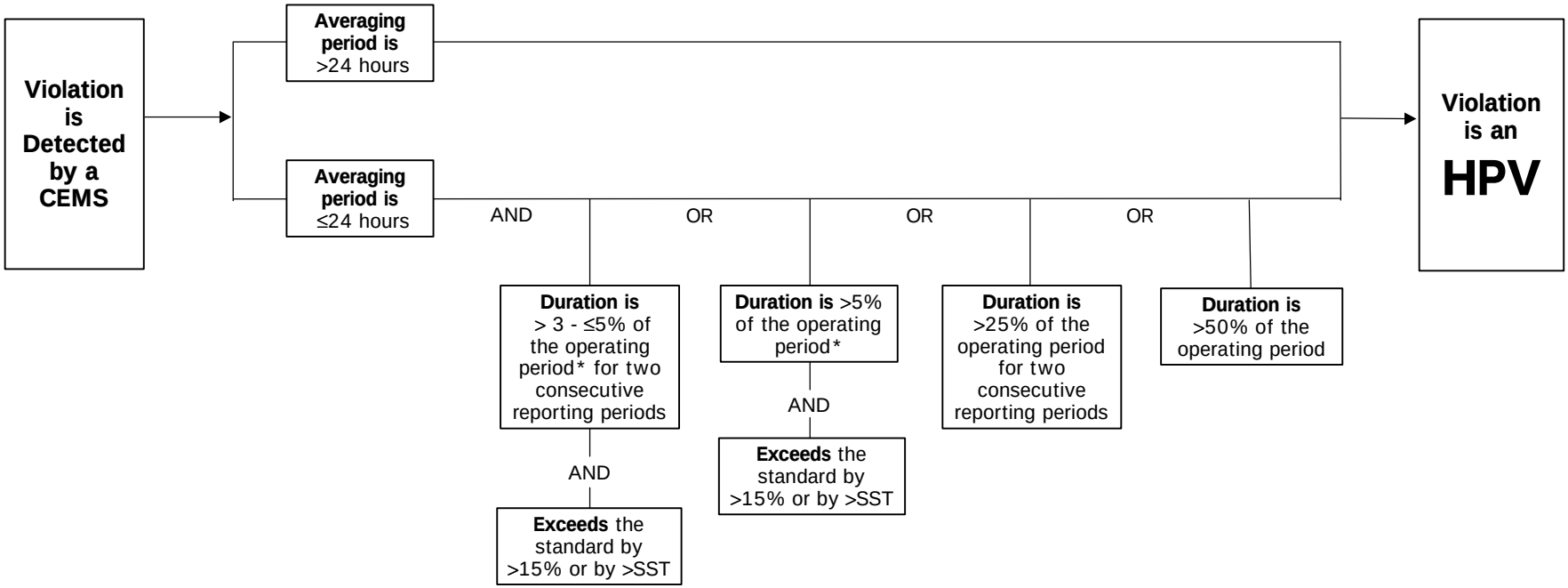
4.4.2 Questions and Answers

.1 How should CEMS detected violations involving pollutant parameters other than those listed in the above SST criteria be treated under this matrix criterion (e.g., TRS, H_2S, HC)?

Any federally enforceable emission limit that is enforceable by continuous emission monitoring is subject to the 15% exceedance criterion under this criterion of the HPV Policy. In the case of the specific pollutants noted in the above question, it is also possible with additional process and formulation information to apply the SST criteria by estimating the lb/hr of SO_2 (related to TRS and H_2S measurements) and lb/hr of VOC (related to total HC measurements). State and Local agencies are encouraged to consult with EPA Regional Offices regarding how CEMS data for other pollutant parameters should be used under this Policy.

Figure 4-3:

Violation of Applicable Non-Opacity Standard, Detected by CEMS



* Operating periods do not include any federally approved exempt period (e.g., 40 CFR 60.11), such as startup, shutdown and malfunction periods, since these would not be violations.

4.4.3 Case Studies

Process Details and Applicable Regulations:

An industrial facility with a coal fired process steam producing boiler rated at 260 mmBtu heat input and using a blend of low and high sulfur coal to comply with SO_2 limits has a SIP limit for SO_2 emissions of 2.0 lb SO_2/mmBtu (3 hr average)

Facts of Violation:

Violation involves CEMS detected SO_2 excess emissions.

During the first quarter, the source reported boiler related SO_2 emissions in excess of 2.0 lb/mmBtu for 460 hours. The boiler operated for 1,635 hours during that quarter, and the CEMS experienced no downtime. The excess emissions during this period were all between 2.01 lb/mmBtu and 2.05 lb/mmBtu and did not exceed any HPV magnitude trigger criteria for the period.

During the second quarter, the source reported similar SO_2 emissions for 550 hours. The source operated for 1,700 hours during that quarter, and the CEMS experienced no downtime.

Time in Violation	Percent in Excess of Reference Limit	Supplemental Significant Threshold
Time in Violation Calculation: [HPV Value = > 50% for the current period or >25% for two consecutive reporting periods (without consideration of magnitude) OR > 5% for the current period or >3% for two consecutive reporting periods (with consideration of magnitude)] ! FIRST QUARTER: Time in violation duration: 460 hours Operating time: 1,635 hours Time in violation percentage: (460 ÷ 1,635) x 100 = 28.1% ! SECOND QUARTER: Time in violation duration: 550 hours Operating time: 1,700 hrs Time in violation percentage: (550 ÷ 1,700) x 100 = 32.3% **>25% threshold met for 2 quarters.** **Place source on HPVL.**	N/A	N/A

Discussion:
In this case study, the time in violation was significant enough so that the magnitude of the violation was not a factor in determining HPV status. It is expected that the agency would check each quarter to determine whether HPV criteria are triggered. The facts assume that the reported duration of excess emissions in the first quarter (more than 5% of the operating time) resulted in a check of the magnitude, both as a percent in excess of the standard, and in lbs/hr to confirm that there was no violation of the SST. When the second quarter excess emissions also exceeded 25% of the operating time, it was not actually necessary to determine whether HPV magnitude criteria were also exceeded in order to confer HPV status. As a result, this case study does not include the HPV magnitude calculations. However, these calculations would normally be made in the context of characterizing the severity of the violation.

Process Details and Applicable Regulations:

A small base load utility coal fired boiler rated at 39 MW (or 400 mmBtu/hr heat input) using Eastern high sulfur coal and a combination of coal washing and FGD to meet NSPS limits is subject to the following emission limit: 1.2 lb SO_2/mmBtu (3 hour average, rolling hourly). Coal washing removes 12% of the sulfur and the FGD is rated at 75% control efficiency. The source is required by the State to submit excess emission reports quarterly (instead of semiannually as required by NSPS). Data are reported as 3 hour rolling averages.

Facts of Violation:

Violation involves CEM detected SO_2 excess emissions.

During the quarter, the NSPS affected source reported excess SO_2 emissions for 124 hours. The source operated for 2,184 hours. Exempt excess emissions (pursuant to 40 CFR 60.11) occurred for 8 hours during an FGD system malfunction (including shutdown of the boiler) and for 6 hours during the subsequent startup. The O_2 diluent monitor was out of service for one 20 hour period, due to a monitor malfunction, and the entire CEM system was down for 8 hours during the reporting period for a cylinder gas audit and DAHS maintenance. Non exempt SO_2 exceedances were between 1.51 lb/mmBtu and 1.75 lb/mmBtu for 106 hours, and from 1.23 to 1.31 lb/mmBtu for the remaining 4 hours.

Time in Violation	Percent in Excess of Reference Limit	Supplemental Significant Threshold
Time in Violation Calculation: [HPV Value = >5% of operating time for one period or >3% of operating time for two consecutive periods (with consideration of magnitude) OR >50% of operating time for one period or >25% of operating time for two consecutive periods (without consideration of magnitude)] Time in violation duration: 124 hrs – 14 hrs exempt = 110 hrs Operating time: 2,184 hrs – 28 hrs CEMS down – 14 hrs exempt = 2,142 hrs. Time in violation percentage: (110 hrs ÷ 2,142 hrs) × 100 = 5.1% **>5% threshold is met.**	Percent in Excess Calculation: [HPV Value = >15% for >5% of the operating period] Magnitude of violation: >15% trigger value = 1.15 × 1.2 lb/mmBtu = 1.38 lb/mmBtu Magnitude duration percentage: 106 hrs exceed 1.38 lb/mmBtu (106 hrs ÷ 2,142 hrs) × 100 = 4.9% **>15% threshold is not met for >5% of operating time.**	SST lb/hr Calculation: [SO_2 SST Value = >9 lb/hr] Maximum allowable SO_2 emissions: (400 mmBtu/hr x 1.2 lb/mmBtu = 480 lb/hr) SST Trigger Value: 480 lb/hr + > 9 lb/hr = >489 lb/hr >489 lb/hr = > 1.225 lb/mmBtu/hr ((>9 ÷ 480) x (1.2) + 1.2 = >1.225) Actual SO_2 emissions: 110 hrs exceed 1.225 lb/mmBtu (110 hrs ÷ 2,142 hrs) × 100 = 5.1% **> SST threshold is met for >5.0% of operating time.** **Place source on HPVL.**

Discussion:
This example illustrates how exempt excess emissions and CEM downtime are calculated to determine HPV applicability. It also provides a good illustration of how minor excess emission concentration levels can trigger the SST for a larger emission source. As in the case of other example applications of the SST, it is assumed that actual operating load data were not reported to the agency. In this case, the agency has decided to rely on the rated heat input capacity of the unit to calculate the likely emissions in lb/hr. However, more precise calculations may be available for utility boilers subject to EPA's Acid Rain Program (for any hourly period) by consulting EPA's Acid Rain Website.

Process Details and Applicable Regulations:

A new coal fired cogeneration plant rated at 140 MW (1,448 mmBtu/hr heat input) with a dry bottom, wall fired boiler uses low NO_x burner technology and selective catalytic reduction to achieve a PSD permit limit of 0.15 lb NO_x/mmBtu and a 70% SCR NO_x reduction efficiency requirement. Inlet and outlet NO_x monitors measure NO_x emissions and control efficiency. Hourly NO_x data are reported quarterly.

Facts of Violation:

Violation involves CEM detected NO_x excess emissions.

During the last quarterly reporting period, the source reported excess emissions from 0.151 to 0.170 lb/mmBtu for 1,204 hours. The source operated for 2,160 hours and the NO_x monitors were out of service for 4 hours related to maintenance and quality assurance activities.

Time in Violation	Percent in Excess of Reference Limit	Supplemental Significant Threshold
Time in Violation Calculation: [HPV Value = >5% of operating time for one period or >3% of operating time for two consecutive periods (with consideration of magnitude) OR >50% of operating time for one period or >25% of operating time for two consecutive periods (without consideration of magnitude)] Time in violation duration: 1,204 hours Operating time: 2,160 hrs – 4 hrs CEM down = 2,156 hrs Time in violation percentage: (1,204 hours ÷ 2,156 hours) × 100 = 55.8% **>50% threshold is met.** **Place source on HPVL.**	N/A	N/A

Discussion:

Because the time in violation was greater than 50%, the magnitude of the violation does not need to be examined for purposes of determining whether the violation is an HPV.

Process Details and Applicable Regulations:

An industrial coal fired steam generating unit with a mass feed stoker boiler has the following NSPS restrictions under Subpart Db: NO_x emission limitation of .50 lb/mmBtu; compliance is determined on a 30-day rolling average basis. Emission reports are submitted semiannually.

Facts of Violation:

Violation involves NO_x emissions. Emission report shows violations of the .50 lb/mmBtu limit for four of the 30 day averages over the course of the reporting period. In the report, the reason for the exceedances is explained -- there was a lengthy burner related malfunction that has been corrected.

Time in Violation	Percent in Excess of Reference Limit	Supplemental Significant Threshold
N/A	Percent in Excess Calculation: [HPV Value = any exceedance] Four 30 day violations are reported. **Place source on HPVL.**	N/A

Discussion:

This case study illustrates that any exceedance of a standard for which the applicable averaging period is more than 24 hours results in classification as an HPV. No calculation of excess percentages is necessary because any exceedance of the .50 lb/mmBtu standard is an HPV. Even though all of the exceedances are related to a malfunction, this is not considered in determining either the violation duration or the HPV status because periods of malfunction are not excused for NO_x exceedances under Subpart Db.

Process Details and Applicable Regulations:

A major metal structure fabrication plant with a significant number of paint booths in a series of four coating lines exhausts fumes through a common duct to a carbon bed adsorption system with six parallel adsorbers. The plant is a SIP source located in an ozone nonattainment area and is subject to LAER permit conditions which include VOC formulation limits (in lb VOC/gallon of solids applied), transfer efficiency limits, and control efficiency limits. The plant operates two eight hour shifts, six days a week. Separate hydrocarbon analyzers exist at the outlet of each absorber and record outlet concentrations in ppm. The permit requires the adsorbers to achieve an eight hour average 250 ppm outlet concentration. There are no exempt periods allowed in the permit. There are also other emission sources at the plant, including storage tanks, solvent cleaning and oil fired boilers. The plant submits monthly compliance reports pertaining to all emission sources.

Facts of Violation:

The current report shows that the plant operated 480 hours, and there were 6 shifts where the ppm rate averaged >250 to 280 ppm and 4 shifts where the ppm rate averaged from 280 to 285 ppm. The monitoring system experienced no downtime during the month.

Time in Violation	Percent in Excess of Reference Limit	Supplemental Significant Threshold
Time in Violation Calculation: [HPV Value = >5% of operating time for one period or >3% of operating time for two consecutive periods (with consideration of magnitude) or >50% of operating time for one period or >25% of operating time for two consecutive periods (without consideration of magnitude).] Time in violation duration: 10 shifts x 8 hrs/shift = 80 hrs Operating time: 480 hrs Time in violation percentage: (80 hrs ÷ 480 hrs) x 100 = 16% **5% threshold is met.**	Percent in Excess Calculation: [HPV Value = >15% for >5% operating time] HC trigger value: (250 ppm x 15%) + 250 ppm = 287.5 ppm Magnitude of violation: No 8 hour ppm averages exceeded 287.5 ppm **HPV threshold is not met.**	VOC SST Calculation: [VOC HPV Value = >9 lb/hr for >5% operating time] Magnitude of violation: 280 ppm – 250 ppm = 30 ppm VOC (assuming VOC is xylene) Weight of xylene $\frac{106.2 \text{ lb}}{\text{lb mole}}$ Volumetric flow rate through carbon absorber = 20,000 scfm = $\frac{9.92 \text{ lb xylene}}{\text{hr}}$ Magnitude duration percentage: 4 shifts >9.0 lb = 32 hrs > SST (32 hrs ÷ 480 hrs) x 100 = 6.7% **> SST is met for >5% of operating time** **Place on HPVL.**

Discussion:
This case illustrates how the SST might be applicable in a more complex case involving emission requirements designed to ensure that a BACT or LAER related control efficiency is achieved. The carbon absorber total hydrocarbon outlet exceedances, measured in ppm, must be converted to lb VOC/hr. This requires determining the ppm weight and flow, which can be estimated based on the paint usage reports provided by the plant and an assumed volumetric flow rate based on the measured flow during the most recent compliance test for the facility. Note that to determine whether the SST was exceeded, the lowest average exceedance in the reported 280 to 285 ppm range was used in the calculation. If the SST had not been exceeded using this average, the ppm equivalent to 9 lb/hr over the emission limit would be calculated as a trigger level, and all ppm levels over the trigger level would be totaled to determine whether they met the >5% duration criterion.

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4.5 Matrix Criterion 5: Opacity Violations

Exceedance of applicable opacity standard

Table 4-5, below, contains only the rows and footnotes from the complete HPV Policy Matrix Table that are applicable to Matrix Criterion 5.

Table 4-5: Matrix Criterion 5

VIOLATION	METHOD OF DETECTION	STANDARD	SUPPLEMENTAL SIGNIFICANT THRESHOLD	% IN EXCESS OF REFERENCE LIMIT/PARAMETER		% OF TIME IN EXCESS OF REFERENCE LIMIT
Violation of applicable opacity standard	Continuous Opacity Monitoring	0-20% opacity >20% opacity	N/A	>5% opacity over the limit >10% opacity over the limit	FOR	>5% of the operating time during the reporting period[4,6]
	Method 9 VE Readings	0-20% opacity >20% opacity	N/A	>50% over limit >25% over limit	AND	Any violation of SIP/NSPS limits[5]

Table Footnotes:

4. For the first reporting period. If exceedances occur for more than 3% of the operating time during the first reporting period evaluated, and if such exceedances continue during the subsequent consecutive reporting period, the exceedances will be considered high priority violations for both reporting periods if the percent of time in excess exceeds 3% of the operating time during the second reporting period.
5. Unless the State or Local agency concludes that 1) the cause of the violation has been corrected within 30 days and the source has returned to compliance, or 2) the source was in compliance with an applicable mass limit at the time the Method 9 visual reading was taken.
6. This would not include any federally approved exempt period (e.g., startup/shutdown/malfunction (40 CFR 60.11), since these would not be violations.

4.5.1 Discussion

Determine whether the HPV Policy applies to the violation:

Before examining the method of detection, duration, or magnitude of the violation, determine whether the HPV Policy applies to the specific violation. The HPV Policy will only apply if the source is a major source for particulates. If the source is not a major source for particulates, the violation is not an HPV based on Matrix Criterion 5.

Identify the method of detection:

There are potentially two methods of detecting opacity violations, Continuous Opacity Monitor (COM) readings and Visible Emission (VE) observations using EPA Reference Test Method 9 (or a similar VE compliance test method accepted by EPA for use in specific situations). The magnitude and duration calculations will depend on which detection method is used.

Identify the applicable standard:

The standard may be 0 - ≤20% or greater than 20% opacity.

Establish the duration of the violation:

Violations detected by COM:

For opacity violations detected by COM, examine the duration of the violation. If the applicable opacity standard is exceeded for more than 5% of the operating time during the reporting period, then the magnitude of the violation must be examined to determine whether it is an HPV. If the applicable standard is exceeded by more than 3% of the operating time for each of two consecutive reporting periods, then the magnitude of the violation must be examined to determine whether it is an HPV. If the percent of time in excess of the standard is equal to or less than 3%, the violation is not an HPV.

Note that federally approved exempt periods of startup, shutdown, and malfunction (for example, exempt periods pursuant to 40 CFR 60.11) would not be included in the duration of the violation calculation.

Violation detected by Method 9 VE readings:

For opacity violations detected by Method 9, there is no duration requirement.

Examine the magnitude of the violation:

For all opacity violations, regardless of the method of detection, the magnitude of the violation must be considered. However, the analysis will vary depending on whether the method of detection was COM or Method 9.

Violations detected by COM:

For violations detected by COM, the magnitude at which a violation will be considered an HPV varies depending on the standard. For opacity standards of 0 - ≤20%, a violation will be an HPV if the magnitude of the violation is >5% opacity over the limit (for example, if the applicable opacity standard is 10%, a violation would be an HPV if >15% opacity). For opacity standards of >20%, a violation will be considered an HPV if the magnitude of the violation is >10% opacity over the standard (for example, if the opacity standard is 40%, a violation would be an HPV if > 50% opacity).

Violation detected by Method 9 VE readings:

For violations detected by Method 9, the magnitude at which a violation will be considered an HPV varies depending on the standard. For opacity standards of 0 - ≤20%, a violation will be an HPV if the magnitude of the violation is >50% over the limit (for example, if the applicable opacity standard is 10%, a violation would be an HPV if >15% opacity). For opacity standards of >20%, a violation will be considered an HPV if the magnitude of the violation is >25% over the standard (for example, if the opacity standard is 40%, a violation would be an HPV if >50% opacity).

How to measure magnitude:

For opacity violations measured by COM, the reference limit is measured in percent opacity above the standard. For example, if the source is subject to an opacity standard of 40%, the percent in excess of the reference parameter that triggers a violation is 10% opacity, so periods of readings in excess of 50% opacity would be counted as violations for the purposes of the HPVL.

In contrast, readings obtained by Method 9 are calculated using a percentage of the limit, not percent opacity. If an inspector observes opacity at the same facility in the example above, by Method 9, the percent in excess of the reference parameter that triggers a violation is 25% of the limit. Therefore, since 25% of the 40% standard is 10%, periods of readings in excess of 50% opacity would again be counted as violations for the purpose of the HPVL.

However, the results would not be comparable for all opacity limits. For example, the HPV threshold for a 30% opacity limit measured by COM would be >40% (30% + 10% opacity), while the HPV threshold for the same limit measured by Method 9 VE would be >37.5% (30% + (30% × 25%) = (30% + 7.5%)).

Connect the duration and magnitude of the violation:

Note that for COM detected violations, the time in violation and magnitude of the violation are linked. If a source met the time in violation requirement but did not meet the magnitude requirement for the necessary amount of that time in violation, the violation would not be an HPV. For example, if a source is subject to a standard of >20% opacity and is in violation for 8% of the operating time during a reporting period, and during half of that time is in violation by a magnitude of +15% opacity, and the other half of the time is in violation by a magnitude of +10% opacity, the violation would not be an HPV because the time in violation by a factor of >10% was only 4% (½ of 8%) of the operating time, and the HPV threshold is >10% opacity for >5% of the opacity time.

Determine whether mitigating factors are present:

For opacity violations detected by Method 9 VE readings only, mitigating factors exist if the cause of the violation is corrected within 30 days of the violation and the source returns to compliance OR if the source is in compliance with the applicable mass limit at the time the Method 9 visual reading is taken. The existence of mitigating factors means that the source should not be placed on the HPVL based on this Matrix Criterion.

Figures 4-4 and 4-5, below, contain diagrams of the logic process for Matrix Criterion 5.

4.5.2 Questions and Answers

.1 ***The matrix specifically includes "any violation of SIP/NSPS limits" when only Method 9 VE readings are involved. Is this meant to differentiate between the limits applicable to VEs and the other Matrix Criteria?***

No. The HPV Policy is applicable to all federally enforceable violations. All of the matrix categories apply only to SIP and NSPS limits (which also include federally enforceable permit related limits, such as PSD, NSR, and Title V limits). NESHAP/MACT limits are covered under General Criterion 2. "SIP/NSPS" is used

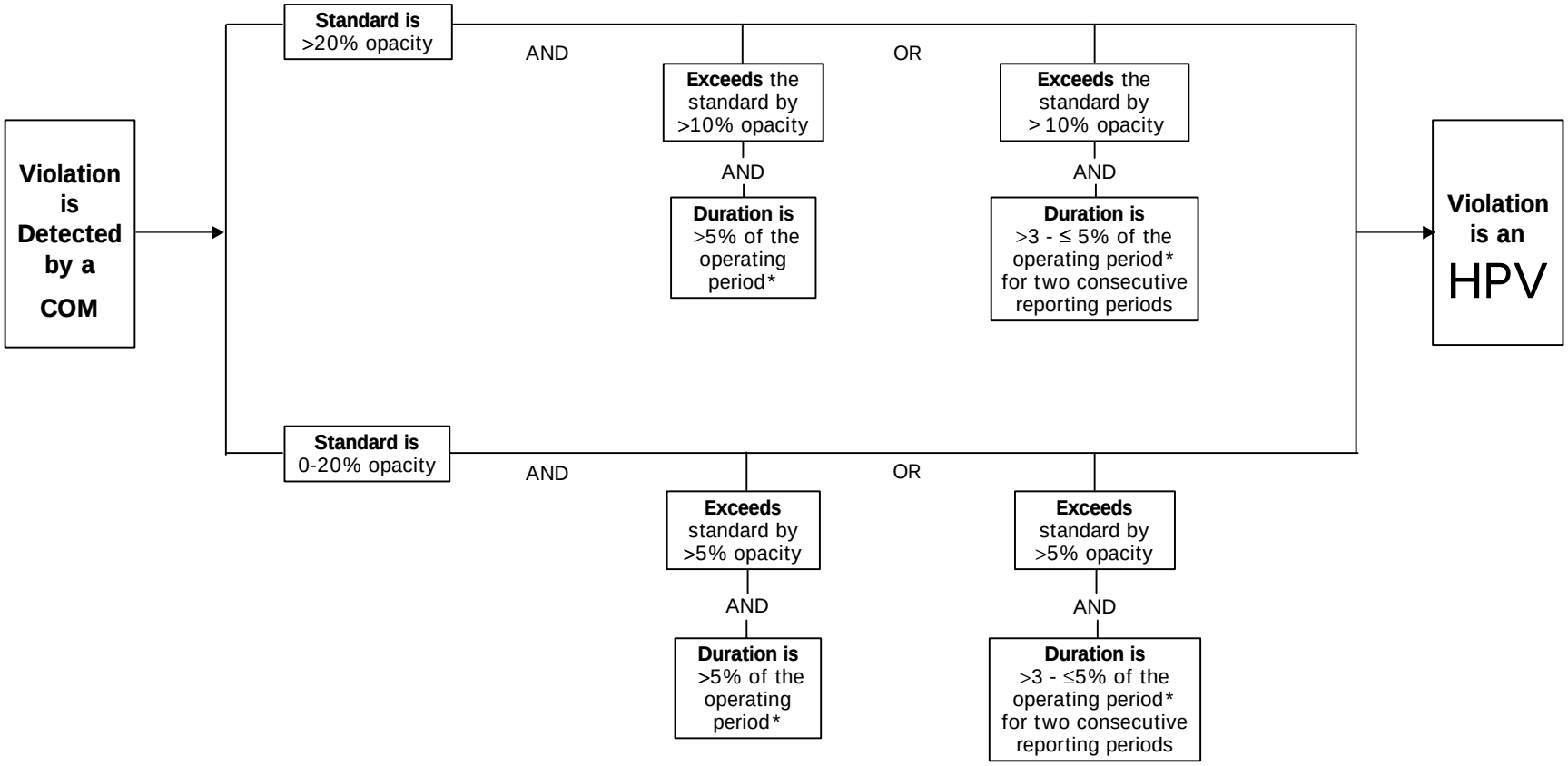
to ensure that the phrase "Any Violation" is not mistakenly interpreted to include other limits such as NESHAP/MACT limits or non federally enforceable limits.

.2 ***If the applicable opacity standard is 0% opacity, how should the Matrix Criteria for VE readings (50% over the limit) be applied?***

If the opacity standard is 0%, any visible emissions would be an HPV.

Figure 4-4:

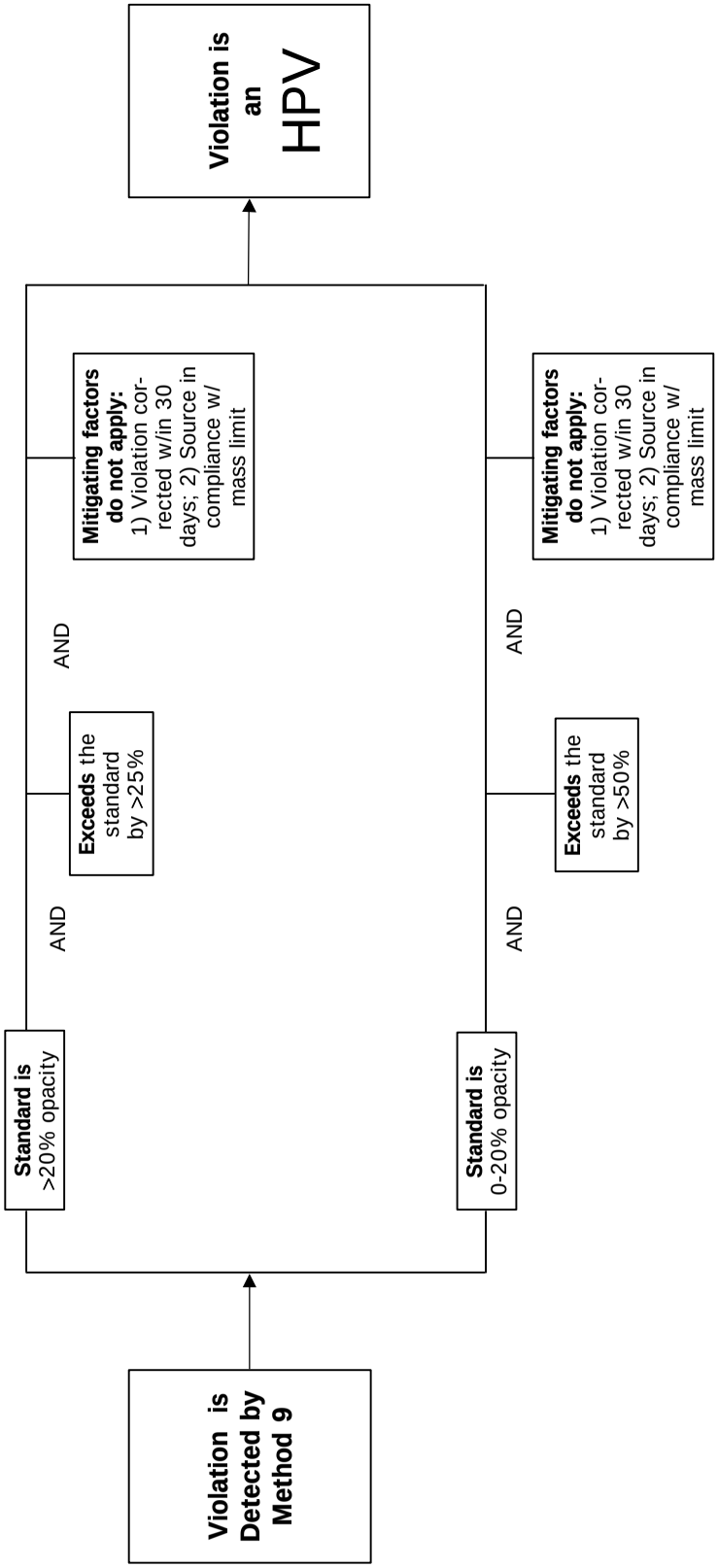
Violation of Applicable Opacity Standard, Detected by a Continuous Opacity Monitor (COM)



* Operating periods do not include any federally approved exempt period (e.g., 40 CFR 60.11), such as startup, shutdown and malfunction periods, since these would not be violations.

Figure 4-5:

Violation of Applicable Opacity Standard, Detected by Method 9



4.5.3 Case Studies

Process Details and Applicable Regulations:

A gray iron foundry is subject among other SIP regulations to a general 20% opacity limit for cupola emissions that are controlled by a mechanical collector (multiclone). Continuous opacity monitoring is required and the foundry submits a quarterly summary report of the total duration of exceedances by reason category but is not required to report the magnitude of the exceedances. The foundry typically operates 2 shifts a day, 6 days a week.

Facts of Violation:

Violation involves COM detected opacity excess emissions.

The source reported excess opacity emissions for 120 hours during the quarter. The source operated for 1,248 hours during the quarter. The opacity monitor was out of service for maintenance and quality assurance activities for 6 hours.

Time in Violation	Percent in Excess of Reference Limit	Supplemental Significant Threshold
Time in Violation Calculation: [HPV Value = >5% of the operating time for one reporting period or >3% of the operating time for two consecutive reporting periods] Time in violation duration: 120 hrs Operating time: 1,248 hrs – 6 hrs COM down = 1,242 hrs Time in violation percentage: (120 hrs ÷ 1,242 hrs) × 100 = 9.7% **>5% threshold is met.**	Percent in Excess Calculation: [HPV Value = >5% opacity for >5% of operating time] HPV opacity threshold: 20% opacity limit + >5% opacity = >25% opacity The agency requested opacity magnitude data and of the 120 hours of exceedances there were 347 six minute averages exceeding 25% opacity. Magnitude of violation: 347 six min. incidents ÷ 10/hr = 34.7 hrs. >25% opacity Magnitude duration percentage: (34.7 hrs ÷ 1,242 hrs) × 100 = 2.8% **Does not meet the >25% opacity threshold for >5% of operating time.** **Do not place on HPVL.**	N/A

Discussion:
This case raises the problem of reporting the duration (or number of 6 minute incidents) of opacity violations without magnitude data. It is not possible in this case to make any assumption about the magnitude of the excess emissions, and the agency has no recourse but to request the additional data. However, it is not necessary to do so unless the >5% (or >3%, if applicable) duration threshold is met -- in this case >5% duration threshold was met, and the case example indicates that the additional data were requested but did not meet the HPV criteria. This type of data request, where the agency is evaluating the magnitude of excess emissions in an enforcement case, is considered a reasonable part of the enforcement effort justified for violations that may be HPV.

Process Details and Applicable Regulations:

A large combined No. 6 oil and wood waste boiler at a major wood furniture manufacturing facility uses a cyclone to control particulate emissions and is subject to a SIP limit of 30% opacity. The boiler is operated intermittently during the normal work week, which is 6 days/week. Quarterly reports summarize the number of 6 minute excess opacity incidents in 5% opacity intervals over the 30% opacity standard. A separate breakout of incidents by reason category is provided in the report.

Facts of Violation:

Violation involves COM detected opacity excess emissions. For the current quarter, the source reported 652 six minute opacity exceedances and operated for 468 hours. The COM experienced no downtime. Of the 652 six minute exceedances, 306 were ≤35%, 170 were >35% but ≤40%, 102 were >40% but ≤45%, 60 were >45% but ≤50%, and 14 were >50%. In the previous quarter there were only 112 six minute incidents during an operating period of 452 hours.

Time in Violation	Percent in Excess of Reference Limit	Supplemental Significant Threshold
Time in Violation Calculation: [HPV Value = >5% of the operating time for one reporting period or >3% of the operating time for two consecutive reporting periods] Time in violation duration: 652 six min incidents ÷ 10/hr = 65.2 hrs Operating time: 468 hrs Time in violation percentage: (65.2 hrs ÷ 468) × 100 = 13.9% **>3% and >5% thresholds are met.**	Percent in Excess Calculation: [HPV Value = >10% opacity for >5% of current operating time or for >3% of operating time for current and previous reporting periods] HPV opacity threshold: 30% opacity limit + >10% opacity = >40% opacity 1. CURRENT PERIOD Magnitude of violation: 176 six min incidents were >40% opacity 176 six min incidents ÷10/hr = 17.6 hrs >40% opacity Magnitude duration percentage: (17.6 hrs ÷ 468 hrs) x 100 = 3.8% **>40% opacity for 3.8% of operating time does not meet >5% duration threshold but it meets >3% duration threshold.** 2. PREVIOUS PERIOD Magnitude of violation: Previous (all exceedances): 112 six min incidents ÷ 10/hr = 11.2 hrs Magnitude duration percentage: Operating time = 452 hrs (11.2 hrs ÷ 452 hrs) x 100 = 2.5% >30% opacity **Violations do not exist for >3% of operating time for each of two consecutive reporting periods.** **Do not place on HPVL.**	N/A

Discussion:
In this case the magnitude calculation for the current period does not meet the combined >10% opacity for >5% of the operating period threshold, but it does meet the >10% opacity for >3% of the operating period threshold. This requires a review of the excess emissions report for the previous quarter. A cursory review, without considering the magnitude of the violation over the 30% standard, indicates a probability that the total excess emissions do not exceed the >3% duration threshold, regardless of the magnitude. A quick calculation confirms this. If in the next quarter, the source reports opacity exceedances at >40% opacity for >3% of the source operating time, it would meet the HPV >3% duration and >10% opacity criteria for each of two consecutive reporting periods.

Process Details and Applicable Regulations:

A large asphalt concrete plant subject to SIP requirements controls its particulate emissions with a venturi scrubber rated at 98% control efficiency. The plant must meet a process weight rate limit that establishes a maximum allowable lb/hr based on the tons/hr of materials charged, and the State's general 20% opacity standard (with one 6 minute period/hr not to exceed 60% opacity).

Facts of Violation:

During an annual inspection of the facility, the inspector observed excess opacity emissions ranging from 50% to 60% opacity exiting the scrubber stack during the entire pavement production cycle. An explanation could not be provided. The inspector cited the plant for being in violation and 30 days later inspected the plant to find similar levels of exceedances.

Time in Violation	Percent in Excess of Reference Limit	Supplemental Significant Threshold
N/A	Percent in Excess Calculation: [HPV Value = >50% of the opacity limit] HPV opacity threshold: 20% opacity limit + (>50% x 20% opacity) = >30% opacity Magnitude of violation: VE readings of 50% to 60% opacity exceed >30% opacity threshold Mitigating Factors: Corrective action resulting in compliance not taken within 30 days; source does not show that mass limits are met. **HPV criteria are met.** **Place source on HPVL.**	N/A

Discussion:
Note that if a reading does indicate that the violation is an HPV, the agency may decide not to list the source as an HPV if it concludes within 30 days that the violation is not continuing or if the source demonstrates that it was in compliance with the applicable mass emissions limit at the time of the elevated opacity. In the current case the high levels of opacity far exceed the applicable mass particulate emission limit which may correlate to an opacity limit higher than 20% but not as high as the 50% to 60% opacity that was observed. Note that the HPV Policy does not require the inspector to return to confirm that a source continues to be, or is no longer in violation.

Process Details and Applicable Regulations:

A steelmaking facility has an electric arc furnace (EAF) building enclosure that is subject to a 40% opacity SIP limit that applies to the roof monitors during tapping (other lower opacity limits apply at other stages of the process).

Facts of Violation:

Violation involves opacity excess emissions detected by Method 9 readings of the EAF building roof line during an inspection of the plant. The inspector observed opacity exceedances ranging from 60% to 70% for a 20 minute period during a tap. When investigating the likely cause, the inspector determined that during the tap, significant emissions were not captured due to a duct system pluggage and these emissions were drawn out through the roof monitors by the building evacuation system. This unusual occurrence of high opacity had not been documented in previous inspections. The inspector cited the source for being in violation of the 40% opacity limit and requested that the facility provide a corrective action report relating to the pluggage within 15 days. The report was submitted and indicated that the pluggage was related to a defective damper, which was replaced. A reinspection within 30 days of the original inspection indicated no building or control system exceedances during any of the normal EAF activities.

Time in Violation	Percent in Excess of Reference Limit	Supplemental Significant Threshold
N/A	Percent in Excess Calculation: [HPV Value = >25% of the opacity limit] HPV opacity threshold: 40% opacity limit + (>25% x 40% opacity) = >50% opacity Magnitude of violation: VE reading of 60% to 70% exceed >50% opacity threshold Mitigating Factors: Effective corrective action is taken within 30 days. **HPV criteria are not met.** **Do not place on the HPVL.**	N/A

Discussion:
Note that if a reading does indicate that the violation is an HPV, the agency may decide not to list the source as an HPV if it concludes within 30 days that the violation is not continuing or the source demonstrates that it was in compliance with the applicable mass emissions limit at the time of the elevated opacity. In the current case the source would not be able to demonstrate that it is meeting a particulate mass emission limit, since the opacity limit is the only limit that applies.

Process Details and Applicable Regulations:

A Kraft pulp mill has an NSPS covered chemical recovery furnace controlled by an electrostatic precipitator with the following NSPS related permit conditions: Opacity limit of 35%; opacity is calculated and recorded as 6 minutes averages, using a COM. According to the permit, the facility must report semiannually a summary of all COM 6 minute averages that exceed 35% opacity. The summary must include the duration of exceedances in 5% magnitude increments with a breakout by the standard NSPS reason categories.

Facts of Violation:

Excess opacity is documented. The report submitted by the facility for the second half of the year indicates that the facility had 750 six minute periods in excess of 35% opacity. Of the 750 exceedances, 730 were in the 60% to 80% range, and 20 six minute periods were between 40% and 45% opacity. The facility contended that startup and shutdown accounted for 124 of the 730 exceedances. There were no periods of malfunction. The opacity monitor was out of service for three weeks (but only for 116 hours of the recovery furnace operating period). During this period, facility personnel conducted VE readings once a day, as required under the permit, but no opacity exceedances were recorded. The recovery furnace operated for 1,300 hours in the reporting period.

Time in Violation	Percent in Excess of Reference Limit	Supplemental Significant Threshold
Time in Violation Calculation: [HPV Value = >5% of the operating time for one reporting period or >3% of the operating time for two consecutive reporting periods] Time in violation duration: 750 six min periods – 124 exempt = 626 periods 626 six min periods ÷ 10/hr = 62.6 hrs Operating time: 1,300 hrs – 116 hrs COM down – 12.4 hrs exempt = 1171.6 hrs. Time in violation percentage: (62.6 hrs ÷ 1171.6 hrs) x 100 = 5.3% **>5% threshold is met.**	Percent in Excess Calculation: [HPV Value = >10% opacity for >5% of operating time] HPV opacity threshold: 35% opacity limit + >10% opacity = >45% opacity Magnitude of violation: 606 six min periods >45% opacity 606 six min periods ÷ 10/hr = 60.6 hrs >45% opacity Magnitude duration percentage: (60.6 hrs ÷ 1171.6 hrs) x 100 = 5.17% **>45% opacity for 5.17% of operating time meets >5% duration threshold.** **Place source on HPVL.**	N/A

Discussion:
In this case the facility claimed startup and shutdown exemptions, but the agency was doubtful. The HPV duration calculation is made using exemption assumptions most beneficial to the facility and it still exceeds the >5% duration and magnitude thresholds. Note that the time in violation percentage calculation removes the 116 hrs COM downtime as well as the claimed exempt time from the operating time denominator.

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SECTION 5: DISCRETIONARY HPV DETERMINATIONS

5.1 Discussion

If none of the General HPV Criteria or the factors in the HPV Matrix lead to a finding that the source is an HPV, the source may be considered an HPV for other reasons. For example, if a source does not meet the threshold criteria as presented here, but violates regulations not taken into account by the HPV Policy, or violates regulations in a manner that otherwise deserves a high enforcement priority, the State or Local agency or the EPA Regional Office may decide that the source should be designated an HPV. The Policy indicates that this decision should be made based on the mutual agreement of the State or Local agency and the Regional Office.

5.1.1 Questions and Answers

.1 ***How should "discretionary HPV determination" be defined? Could you provide more specific examples?***

A "discretionary HPV determination" is a determination made to list a facility as an HPV when none of the general or matrix criteria clearly apply. It should occur in a situation for which the agency (State/Local or EPA) believes that specific violations are severe enough to justify HPV status even if the HPV criteria are not triggered. For example, specific violations may be of limited duration and magnitude but indicate unacceptable, egregious behavior; or there is a long term pattern of low level violations that do not trigger the HPV Policy duration criteria for chronic violators but nonetheless indicate that ineffective action is being taken by the source to resolve continuing violations; or the source has been an HPV in the past, and recent violations, while less severe, are viewed as a warning that more severe problems are likely to occur.

A discretionary HPV determination would also be appropriate in circumstances where there are violations resulting in emissions of significant magnitude and duration that are not covered under the specific criteria of the Policy -- for example, violations of work practice or equipment use and maintenance standards to control major sources of fugitive emissions (e.g., violation of leak detection and repair requirements resulting in numerous valve and flange leaks); or violations of control system parameter limits (e.g., differential pressure drop across a baghouse) when there is no requirement to monitor the parameter continuously and therefore no way to document the percentage of time the parameter violation occurs; or violations of operational limits (e.g., hours of operation limits that apply to internal combustion engines used during startup) designed to limit overall pollutant emissions from a major facility but do not involve synthetic minor restrictions and therefore do not trigger other HPV operating limit criteria in the Policy.

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SECTION 6: TIMELY AND APPROPRIATE ENFORCEMENT

6.1 Discussion

The HPV Policy contains revisions to certain portions of the preexisting guidance on timely and appropriate enforcement. This section presents the differences between the guidance on Timely and Appropriate Enforcement presented in the HPV Policy and the prior applicable guidance (Guidance on the Timely and Appropriate Enforcement Response to Significant Air Pollution Violators). It also contains a brief description of the timeline for actions to be taken under the new Policy, in chronological order.

6.1.1 Changes to Timely and Appropriate Guidelines

The HPV Policy changes the appropriate schedules for identification, processing, and addressing or resolving violations. Under the prior guidance, the time between the date a violation was first discovered to Day Zero was 30 days. If additional information had to be obtained by the lead agency, Day Zero was 90 days after the violation was discovered, or the date of receipt of the additional information, whichever was earlier. Under the HPV Policy, the timeframe for actions occurring before Day Zero has been extended so that Day Zero will ordinarily be no later than 45 days from the day the violation was discovered. For violations requiring additional information, Day Zero is still 90 days from the date the violation is discovered, or the date of receipt of the additional information, whichever is earlier. If a violation is self-reported, Day Zero will be 30 days from the date the agency receives the information.

The timeframe for actions taken in the processing of HPVs after Day Zero has also been extended. Under the previous Policy, the State/Local agency was directed to issue an FOV/NOV by Day 45 and to have a case evaluation conference with EPA by Day 90. Under the HPV Policy, the FOV/NOV should be issued by Day 60 and the conference with EPA should take place by Day 150.

The intended deadlines for addressing/resolving a violation have similarly been extended. Under the previous Policy, the violation was to be addressed/resolved by Day 150 (if there was no change in the lead agency) or Day 190 (with a lead change). Under the HPV Policy, those deadlines have been changed to Day 270 (no lead change) and Day 300 (with a lead change).

Figure 6-1, below, contains a timeline for enforcement under the HPV Policy.

6.1.2 Questions and Answers

.1 ***With respect to the T&A Guidelines, what is the difference between day 150 and day 270 relative to addressed or resolved?***

Day 150 in the 1992 guidance was the date the source was either to be in compliance (resolved) or to be addressed (subject to an enforceable compliance schedule or the case has been referred for civil action). That date has been extended to Day 270 in the new Policy. Day 150 in the new Policy provides for a focused consultation between the State/Local agency and EPA with a possible

outcome that EPA would assume the case. If EPA assumes the case, the timeline to address or resolve the case would be extended to Day 300.

.2 ***What if the State/Local agency and EPA disagree on whether a source qualifies as an HPV?***

The State or Local agency and EPA should have a discussion to attempt to resolve the issues. If no resolution is reached, then (as under the past policies) EPA will have the final decision.

.3 ***Please clarify the statement in the Policy that "...Regions and States should adapt national timely and appropriate enforcement response criteria to State-specific circumstances to fit State authorities and procedures."***

Under a State's law there may be specific evidentiary or procedural requirements that, when applicable, interrupt the T&A timeline. For example, the violator may have a right to a hearing before an administrative board before the Agency can refer the case for civil action, and this may occur near Day 270. The Region may agree not to assume the lead at this point, recognizing the State's diligence and likely success within a predictable timeframe.

6.2 Violation Discovered to Day Zero

6.2.1 Timeline

The first occurrence is discovery of a violation, whether by an inspection or by self-reporting. Once a violation is discovered, the circumstances and evidence should be analyzed to determine whether the violation is an HPV. In some instances, additional information about the violation may be needed in order to determine whether it fits within the HPV Policy.

If no additional information is needed, Day Zero should take place no later than 45 days after the violation is discovered. If additional information is needed, it should be requested from the source. In those cases, Day Zero will be the day the additional information is received or the 90th day after the violation was discovered, whichever is earlier. For violations that are self-reported, Day Zero is 30 days after the information on the violation is received.

6.2.2 Grouping of Violations

Note that if multiple violations are discovered at a single source and if the violations occurred within 30 days of each other, they should be given the same Day Zero. This is the case whether the violations were discovered in a single inspection or in a series of inspections. For more information on grouping of violations for AIRS, see Section 8.

6.3 Day Zero to Violation Resolved/Addressed

Appropriate timelines for enforcement actions are calculated from Day Zero. Some of the enforcement steps taken by State/Local agencies and EPA are one time events, while others will occur on an ongoing basis.

6.3.1 Ongoing Activities/Issues

! State/Local -- EPA Consultations:

On a monthly basis, the State/Local agency and EPA should hold a conference call to discuss the status of current cases. The purpose of this call is to communicate the compliance status of each source, where relevant, and to determine which agency is best suited to take or maintain the lead for each case. In addition, the participants to the call should use the conference to determine the best method of returning the source to compliance.

! Lead Changes:

At any point in a case, EPA may assume the lead in the enforcement action. EPA may also have the lead on a case from the beginning, such as in the case where EPA discovers a violation.

! Extension of Timeline/Deadlines:

For some cases, extra time may be needed to completely address all of the issues. In those cases, a consultation between the State/Local agency and EPA should take place and the appropriate changes to the usual timeline should be made.

6.3.2 Timeline

! Issuance of NOV/FOV:

By Day 60, the State/Local agency must issue an NOV/FOV to the source. The State/Local agency may also request that EPA issue the notice and EPA may issue a notice where the State/Local agency has failed to do so.

! Case Progress Evaluation:

On or before Day 150, if a case has not been Resolved/Addressed, the State/Local agency and EPA should have a conference to determine specific actions to take to Resolve/Address the case.

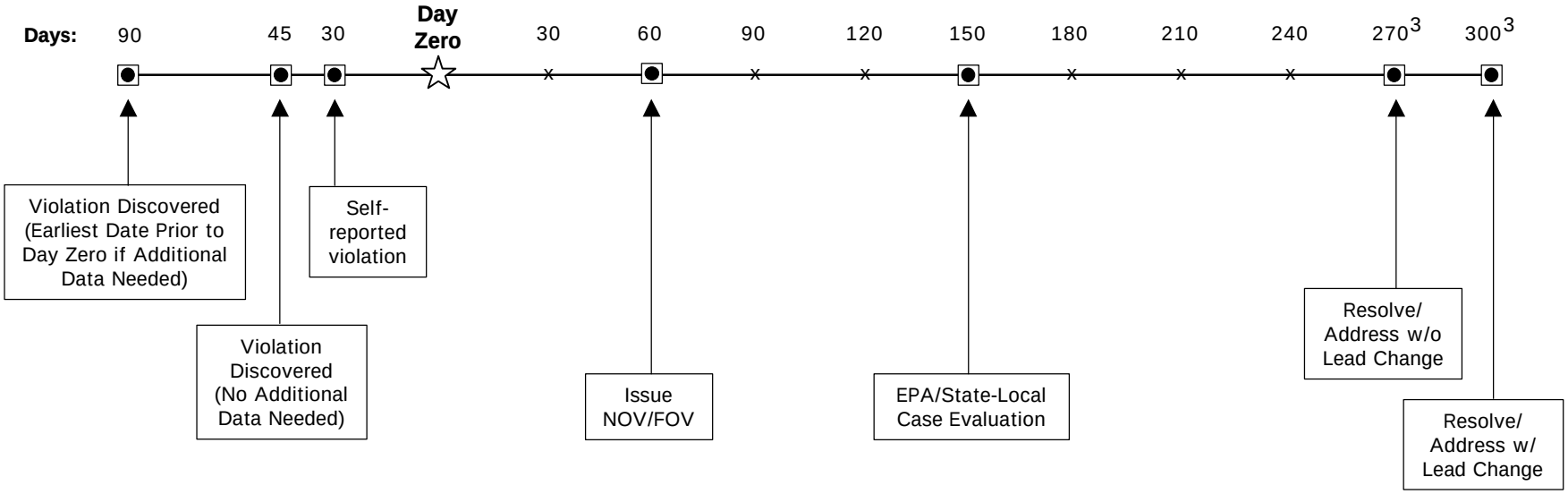
! Violation Resolved/Addressed:

By Day 270 (if there has been no lead change), the violation should be either Resolved or Addressed. There should be an administrative or judicial order in place for compliance purposes, or the case should be subject to referral for an enforcement hearing or judicial action (Addressed) or the source should have been returned to compliance (Resolved).

If a lead change has occurred, EPA has until Day 300 to make certain the violation is Resolved/Addressed.

Figure 6-1:

Timely and Appropriate Enforcement Timeline [1,2]



1 A regularly scheduled State-Local/EPA conference call should be held at least monthly.

2 The timeline applies to the agency (EPA or the State-Local) initiating the action. Parallel actions and lead changes may occur at any time.

3 Timeline may be extended in a complex case. Also, followup may be necessary to complete the case or to monitor compliance schedule.

SECTION 7: PENALTIES

7.1 Discussion

EPA's position on penalty calculations has not been altered by the HPV Policy. For that reason, this Workbook contains only a brief discussion of penalties. EPA's goal is to have penalty amounts calculated to include a component that reflects the economic benefit of noncompliance. EPA expects that a penalty will be collected for all HPVs and is also interested in having penalties reflect the seriousness of a violation.

EPA uses the *Clean Air Act Stationary Source Civil Penalty Policy* (SSCPP) for calculation of penalties. The SSCPP provides details on factors to be considered when making determinations about the benefit of noncompliance and the gravity of the violation. It is included as Appendix B to this Workbook.

State/Local agencies should follow the principles set forth above with respect to formulation of penalties. The economic benefit of noncompliance and the seriousness of the violation should be considered when calculating penalties to be assessed for High Priority Violations. The BEN computer model must be used, unless State/Local agencies have created their own comparable models.

In general, other penalty calculation principles that were in effect prior to the HPV Policy should still be considered. For example, State/Local agencies have long been directed to increase statutory maximum penalty amounts to $10,000 per day, per violation. That concept remains applicable under the HPV Policy.

State/Local agencies should note that EPA will give more oversight to State/Local agencies that have not adopted adequate penalty policies, and will consider overfiling in cases where the State/Local penalty fails to meet the goals set forth by EPA.

7.1.1 Questions and Answers

Questions relating to the substance of EPA's penalty Policy are beyond the scope of the Workbook and should be raised in another forum. Questions relating to the interaction between the HPV Policy and EPA's Penalty Policy may be raised in this Workbook; no such questions have been asked at this time.

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SECTION 8: HPV TRACKING

8.1 AIRS Facility Subsystem (AFS) and HPV

EPA has announced that modifications to the AIRS Facility Subsystem (AFS) have been installed to implement and fully support HPV data management. Modifications are limited to field names and system generated timelines of Day 60, 150, 270 and 300.

In EPA's HPV Policy two major aspects of HPV accounting are recognized. One is the HPV1 flag in the AIRS Facility Subsystem (AFS) which indicates whether or not a source is an HPV and is critical for tracking HPVs and for multimedia enforcement targeting. The second is the T&A accounting of how long the lead agency took to address the violation(s), which is based on Day Zero. Proper monitoring of HPVs in AFS consists of three steps and can be performed using AFS on-line or batch capability.

1. Update the HPV1 flag on the Plant General Record. There are 4 flags, although currently the national guidance only calls for values in HPV1. The other 3 flags can be used for historical purposes. HPV1 should be populated with the code that best identifies the lead agency expected to address the violation along with the level of non-compliance.

2. Update the compliance status by entering a non-compliance code in the State Pollutant Compliance Status field for the Air Program Pollutant Record(s) in violation.

3. Update the Plant Action Record with the appropriate action type to identify that a facility is in violation. Upon discovery of a violation, a Day Zero action type is entered. This begins the clock for which T&A timelines are based.

As a facility returns to compliance, the three steps are repeated by adding actions, updating the compliance status and modifying the HPV1 flag. The HPV1 flag should represent the most significant violation when there are multiple violations pending. However, violations that were discovered during that same investigation should be grouped under the same Day Zero, especially if the clustered violations will be addressed in the same enforcement action.

AFS is capable of associating certain related actions types within a facility. This process is called action linking, and was developed to improve the AFS tracking of violation activity to resolution. Action linking associates information on activities performed to address a single violation by using something called a pathway. A pathway should be viewed as a timeline, starting with an initial action, any and all activities which occurred as a result of the initial action, and eventually an action which brings the timeline to a close.

AFS provides action types which represent initial, supporting, and closing actions performed in the process of bringing a violation to resolution. Beginning action types are often referred to as "key" (or "Day Zero") actions. Actions that bring a pathway to a close are often called Addressing or Resolving actions. Supporting actions which occur between those two points in time can be just about any action type, but predefined Day Zeros and Addressing actions must be used.

The action linking mechanism in AFS allows compliance users to track a violation at a plant or point through its life cycle, by grouping related actions into a single "pathway." A pathway is initiated by a "key" action which must be one of several established key action types. Once a user has entered an action as a key action, the user will be presented with a series of screens to enter multiple actions to be linked with the key action. In this way, the user will be able to establish a "starting" action and attach new or existing actions to it, in order to create an identifiable pathway. The pathway information may be viewed in browse or retrieved using fixed format and ad hoc reports.

Under most circumstances, standard addressing action types will properly register a pathway closure. However, it should be noted that action types "VL" (HVP reported as added) and "RT" (HVP reported as addressed) are used for accounting purposes to note when Day Zero and addressing actions are reported in a quarter other than that in which they occurred. The use of these actions allows for adjustments to the actual number of days needed to address a violation.

Regions, States and Local agencies utilizing the action linking capability should consult the AFS action table for their Region for specific Regional equivalents to these national codes.

8.1.1 AFS Batch

Using the Batch function of AFS to update or change HPV data in AFS may present difficulties for some users of AFS. As stated previously, a pathway is initiated by a "key" action. Once a user has entered an action as a key action, the user may enter multiple actions to be linked with the key action by referencing the "key" action number. Data that are extracted from a state or Local system must maintain this "key" action number in order to attach (link) subsequent enforcement activity to the "key" action.

8.1.2 Universal Interface (UI)

The HPV1 flag and the State pollutant compliance status flag in AFS can be updated using the UI. It should be noted that, currently, the Universal Interface does not support the use of action linking.

8.1.3 AFS Fixed Format Reports

Three fixed format reports show timeliness information: AFS Pathway Summary Report (#620), AFS Plant Compliance Inventory (#627) and AFS Significant Violator Summary Report (#653). Users will be given the option to run two versions of each report: (1) the SV version, displays all the current AFS data against the SV program T&A guidelines (including Day 90), and (2), the HPV program version, displaying all current AFS data against HPV program T&A guidelines (without Day 90, and including Day 60, 150, 270 and 300 calculations). The title of each report will clearly identify to which of the two programs the report pertains. Additionally, the SV program versions of the report will include text under the title that identifies that the report provides T&A calculations that are for a previously utilized T&A schedule.

8.1.4 Questions and Answers

.1 ***How is asbestos treated in the new Policy (i.e., do we put demolition and renovation (D&R) violations as HPVs into AIRS or NARS)?***

Asbestos violations are covered by the HPV Policy for major sources. D&R violations should be entered into NARS for minor sources and into NARS and AIRS for major sources.

.2 ***Must all violations be consolidated into one HPV per facility per month?***

In order to normalize information on the Air Enforcement Program across the country, agencies are expected to report as single events, surveillance or enforcement activities which are frequently (but not always) aggregated. Thus, when a number of surveillance events may be aggregated to produce a single, full-plant inspection, only one inspection is to be reported. Similarly, all violations which are uncovered by a full-plant inspection should be reported as a single HPV event. Also, all NOVs or formal enforcement actions resulting from a full plant inspection should be reported once.

Sometimes agencies perform many partial inspections of a large source throughout the year. In such an instance, a good rule of thumb for national reporting is to aggregate and report all violations which are identified within a 30 day period into a single HPV event.

The full plant perspective is normal business practice for many agencies so that they as a matter-of-course file single enforcement actions to address all violations which occur within a short period. Those agencies with a different business practice should nevertheless perform their national reporting consistent with this perspective. For example, agencies which issue multiple (point level) NOVs and AOs as a result of a single inspection, should aggregate their activity into a single nationally reported HPV finding, and follow that HPV finding with a reported single aggregated NOV and AO event.

.3 ***How should monthly calls be documented -- should just new and changed data be reported to AIRS?***

At a minimum, new and changed data should be reported in AIRS.

.4 ***How should we document that EPA wants a State or Local agency to keep the lead on a case beyond the usual time frame?***

This may be done as a narrative outside of AIRS or within AIRS using the Comment field.

.5 ***How should we document a new Day Zero when there is an existing HPV and a new timeline for a separate investigation needs to be entered for the same facility?***

Input a new Day Zero into AIRS (so there will be two for that facility).

.6 ***How should we document the issuance of multiple NOVs to the same facility in a single inspection?***

This situation should be listed in AIRS as one NOV.

.7 ***How should State/Local agencies choose the most important NOV, pollutant, or air program to use as the basic Day Zero information?***

The worst violating air program should be selected for use for the basic Day Zero information.

APPENDIX A:
THE TIMELY AND APPROPRIATE (T&A) ENFORCEMENT RESPONSE TO HIGH PRIORITY VIOLATIONS (HPVs)

I. SCOPE OF POLICY

A. Introduction

This policy is designed to help prioritize federal, state and local agency enforcement efforts with respect to sources of air pollution in their jurisdictions. This policy supersedes previous policy documents related to Significant Violators (SV), and Timely and Appropriate (T&A) policy. Specifically, this document supersedes the following policy documents: (1) "Clarification Package: Guidance on the Timely and Appropriate Enforcement Response to Significant Air Pollution Violators", dated April 17, 1995; (2) "Clarification Package for the Guidance on the Timely and Appropriate Enforcement Response to Significant Air Pollution Violators", dated June 14, 1994; and (3) "Issuance of Guidance on the 'Timely and Appropriate Enforcement Response to Significant Air Pollution Violators'", dated February 7, 1992. Nothing in this policy is intended to change the underlying applicable requirements or somehow imply that compliance must be achieved on a less than continuous basis.

This revision eliminates use of the terms "Significant Violator" and "Significant Violation" and substitutes the term "High Priority Violation" (HPV) in describing violations. This term better conveys the intent of the policy as a tool for prioritizing which violations receive the highest scrutiny and oversight. This change is reflected in both the title of the revised policy and the list on which high priority violations are placed i.e., the High Priority Violation List (HPVL).

The policies set forth in this document are intended solely for government personnel to use to prioritize enforcement efforts. They cannot be used to establish new standards or limits, are not binding on any party, and cannot be relied upon to create any rights enforceable by any party. The EPA reserves the right to change this policy at any time without public notice.

B. Applicability

This policy applies to all States, Locals, Territories, and Tribes (hereafter described as State or State and local) within the United States and any "major" (as defined by the Clean Air Act Amendments of 1990 (CAAA) or subsequent revisions, or as clarified in national guidance) stationary sources of air pollution which are in violation of a Federally-enforceable regulation. This policy also applies to "synthetic minor" sources as described in the general criteria. A "synthetic minor" source is any source that avoids Title V or New Source Review (NSR) permitting by means of a minor source permit limiting its potential to emit below major source thresholds. Additional violations, whether at major or minor sources, may rise to the level of a high priority violation at the mutual agreement of the Region and the delegated agency on a case-by-case basis. For example, regions and state and/or local air agencies may, on a case by case basis, mutually decide to add a violation to the HPVL based on criteria and factors other than those contained in this policy, such as for certain significant exceedances that otherwise are not captured by the application of this policy.

C. General Process Summary

EPA expects that all violations of air pollution regulations, whether meeting the HPV criteria or not, will be addressed by States, local agencies, or EPA. EPA further expects that state and local agencies will use this policy to focus appropriate and adequate enforcement and compliance activities on those violations identified by this policy. EPA will also use the policy to focus its ongoing oversight role on HPVs and the timely and appropriate enforcement response to violations on the HPVL. This policy is also intended to foster and develop a more complete and accurate compliance picture and to enhance the responsibility of the state and local agencies, as well as EPA, to track and address all violations. An essential part of this tracking process is assuring that all HPVs are promptly entered into shared EPA-State databases such as AIRS. Any facility which falls within the definition of an HPV should be promptly entered into the databases. This entry should occur even for "atypical" cases, such as where: the violations are immediately or quickly remedied; there are no penalties; the potential violations are remedied by a permit modification; no enforcement action is deemed appropriate; etc.

Agency High Priority Violation activities shall be designed to identify and to expeditiously return to compliance those violating sources that the agency believes are environmentally most important, namely the HPVs. Although this policy requires agencies to address all High Priority Violations, EPA recognizes that agencies may be unable to address all of them immediately. Each agency shall return all HPVs to compliance with applicable requirements by addressing the violations in accordance with the Timely and Appropriate Section of this policy.

D. General Information about the Policy

1. While EPA expects that States will address violations of air pollution regulations within their jurisdictions, except for non-delegated Federal standards, by focusing on a limited group of violators (e.g., those targeted by this policy), this policy is not intended to detract from the importance of addressing other violators and the right and responsibilities of the States and EPA for doing so.

2. This policy articulates the mutual expectations of the respective parties of the Federal - State partnership in the enforcement of air pollution control requirements for stationary sources. It is fully expected that this policy will be modified and expanded in future years to reflect experiences in its implementation and the evolution of the air program itself.

3. In accordance with the revised Policy Framework for State/EPA Enforcement Agreements issued by the Deputy Administrator on August 25, 1986 (and its three addenda), this national policy will serve as the framework for State specific agreements reflecting the parties' mutual expectations. As that policy states, "...Regions and States should adapt national timely and appropriate enforcement response criteria to State-specific circumstances to fit State authorities and procedures..." In addition, this HPV policy is consistent with the development of EPA/State performance partnership agreements as described in their joint statement on the National Environmental Performance Partnership System issued on May 17, 1995. That statement provides for joint planning and priority-setting in dialogue between EPA and the states which will be "...informed by the analysis and strategic directions being set by EPA national and regional program managers and the states."

II. Definition of High Priority Violations

When a violation is detected, the violation's characteristics shall be compared with the Definition of High Priority Violation given in Parts A and B below. To the extent that the violation fits one or more of the elements of the General High Priority Violation Criteria given in Part A or

the High Priority Violation Matrix given in Part B, it shall be designated as a high priority violation and is subject to the Timely and Appropriate Section of this policy.

A. General HPV Criteria

The following criteria trigger HPV status. The criteria apply to the pollutant(s) of concern at major sources, (i.e., pollutant for which source is major) except where the criterion itself indicates otherwise (e.g., applies to a synthetic minor source). The determination of what is substantive/substantial shall be part of a case-by-case analysis/discussion by the EPA and the delegated agency.

1. Failure to obtain a PSD permit (and/or to install BACT), an NSR permit (and/or to install LAER or obtain offsets) and/or a permit for a major modification of either.

2. Violation of an air toxics requirement (i.e., NESHAP, MACT) that either results in excess emissions or violates operating parameter restrictions.

3. Violation by a synthetic minor of an emission limit or permit condition that affects the source's PSD, NSR or Title V status (i.e., fails to comply with permit restrictions that limit the source's potential emissions below the appropriate thresholds; refers only to pollutants for which the source is a synthetic minor. It is not necessary for a source's actual emissions to exceed the NSR/PSD/Title V thresholds.)

4. Violation of any substantive term of any local, state or federal order, consent decree or administrative order.

5. Substantial violation of the source's Title V certification obligations, e.g., failure to submit a certification.

6. Substantial violation of the source's obligation to submit a Title V permit application. (i.e., failure to submit a permit application within sixty (60) days of the applicable deadline)

7. Violations that involve testing, monitoring, record keeping or reporting that substantially interfere with enforcement or determining the source's compliance with applicable emission limits.

8. A violation of an allowable emission limit detected during a reference method stack test.

9. Clean Air Act (CAA) violations by chronic or recalcitrant* violators.

10. Substantial violation of Clean Air Act Section 112(r) requirements (for permitting authorities that are not implementing agencies under Section 112(r) program, limited to source's failure to submit Section 112(r) risk management plan).

*Chronic or recalcitrant violator refers to a source that may stay below the HPV threshold but continually violates requirements to the extent that it is mutually agreed by the Region and the delegated agency that the source should be bumped up into HPV status.

B. High Priority Violation Matrix

The matrix below contains specific criteria for assessing whether violations are high priority. The matrix is set out in six columns that identify: the violation, the means by which the violation was identified (method of detection), the applicable standard, the supplemental significance

threshold, percentage in excess of the reference limit or standard and the time in excess of the reference limit or standard. A discussion of each of these elements of the matrix is set out below. Violations not on the High Priority Violation List may nonetheless be serious, but may not be initially subject to the provisions of this policy.

Violations and Method of Detection

The first column lists four types of violations addressed by the matrix. The second column identifies six methodologies for detecting the four types of violations listed in the first column. The following shows the four types of violations and the associated method(s) of detecting violations that are reflected in the first two columns of the matrix. Although the matrix provides specific detection methods for violations, nothing in this policy is intended to limit the agency in using other credible evidence to document a violation.

I. Violation of Allowable Emissions Limitations
   - A. Reference Method Stack Testing or
   - B. Coatings Analysis, Fuel Samples or Other Process Material Sampling

II. Violation of Parameter Emissions Limitations
   - A. Continuous/Periodic Parameter Monitoring

III. Violation of Applicable Standards (non-opacity)
   - A. Continuous Emissions Monitoring (where the CEM is certified under federal performance specifications)

IV. Violation of Applicable Standards (opacity)
   - A. Continuous Opacity Monitoring or
   - B. Method 9 Visual Emissions Readings

Standards

This column identifies the standard(s) for which a violation is being assessed.

Supplemental Significance Threshold

This column provides a supplemental significance threshold (SST) that is to be considered along with the other matrix factors to determine high priority violations. The SST is intended only as a surrogate threshold against which a violation can be judged and obviates the situation that would occur if an emissions limitation was high enough that a less than 15% excursion of the applicable requirement would result in significant environmental impact. The SST is consistent with the level at which a source would be required to obtain a PSD permit for a major modification for the applicable criteria pollutant(s), expressed as an hourly emission rate. The use of an SST is not intended in and of itself to imply that a facility must obtain a PSD permit.

Percent in Excess of Limit/Parameter

This column is the yardstick by which a violation is judged to be a high priority violation. In some cases (i.e., where the word "FOR" connects this column with the last column), the percent in excess of the limit is paired with a time element. To determine the level of excess emissions for which a violation is considered high priority, multiply the applicable standard by the applicable percentage from this column.

Percent of Time in Excess of the Applicable Standard

The percent of time in excess of the applicable standard is based on the operating time of the facility during the reporting period in which the violation was discovered.

VIOLATION	METHOD OF DETECTION	STANDARD	SUPPLEMENTAL SIGNIFICANT THRESHOLD[1]	% IN EXCESS OF REFERENCE LIMIT/PARAMETER		% OF TIME IN EXCESS OF REFERENCE LIMIT
Violation of Allowable Emissions Limitations	Stack Testing	Any applicable requirement		Any violation of the applicable standard		N/A
	Coatings analysis, fuel samples, other process materials sampling or raw/process materials usage reports	Any applicable requirement	CO 23 lb/hr NOx 9 lb/hr SO2 9 lb/hr VOC 9 lb/hr PM 6 lb/hr PM10 3 lb/hr	>15% of the applicable emission limitation or the supplemental significant threshold (whichever is more stringent)		N/A
Violation of parameter limits where the parameter is a direct surrogate for an emissions limitation	Continuous/Periodic Parameter Monitoring (includes indicators of control device performance)	Any applicable requirement		>5% of the applicable parameter limit	FOR	>3% of the operating time during the reporting period
					OR	any exceedance of the parameter limit for >50% of the operating time during the reporting period [3]
Violation of applicable non-opacity standard	Continuous Emissions Monitoring (where the CEM is certified under federal performance specifications)	<24 hour averaging period (for example, one hour or three hour blocks)	CO 23 lb/hr NOx 9 lb/hr SO2 9 lb/hr VOC 9 lb/hr	15% of the applicable standard or, the supplemental significant threshold, (whichever is more stringent)	FOR	>5% of the operating time during the reporting period [4 6]
					OR	any exceedance of the reference limit for >50% of the operating time during the reporting period [3]
	Continuous Emissions Monitoring (where the CEM is certified under federal performance specifications)	> 24 hour averaging period		Any violation of the applicable standard		N/A
Violation of applicable opacity standard [2]	Continuous Opacity Monitoring	0-20% opacity >20% opacity		>5% opacity over the limit >10% opacity over the limit	FOR	>5% of the operating time during the reporting period [4 6]
	Method 9 VE Readings	0-20% opacity		>50% over limit	AND	Any violation of SIP/NSPS limits[5]
		>20% opacity		>25% over limit		

Table Footnotes:

1. Supplemental Significant Threshold is based on PSD significant levels. The significant threshold value is the lb/hr emission rate at 8760 hours which would result in PSD review.
2. Based on the applicable averaging period (e.g. 6-minute block averages).
3. For the first reporting period. If exceedances occur for more than 25 % of the operating time during the first reporting period evaluated, and if such exceedances continue during the subsequent consecutive reporting period, the exceedances will be considered high priority violations for both reporting periods if the percent of time in excess exceeds 25% of the operating time during the second reporting period.
4. For the first reporting period. If exceedances occur for more than 3% of the operating time during the first reporting period evaluated, and if such exceedances continue during the subsequent consecutive reporting period, the exceedances will be considered high priority violations for both reporting periods if the percent of time in excess exceeds 3% of the operating time during the second reporting period.
5. Unless the state or local agency concludes that 1) the cause of the violation has been corrected within 30 days and the source has returned to compliance, or 2) the source was in compliance with an applicable mass limit at the time the Method 9 visual reading was taken.
6. This would not include any federally approved exempt period (e.g., startup/shutdown/malfunction 40 CFR 60.11), since these would not be violations.

III. PROCESSING OF HIGH PRIORITY VIOLATORS

A. Agency Communications Concerning HPVs

As soon as possible (at least within one month) after an agency initially detects a potentially high priority violation, that agency shall communicate the compliance status of that source to all other agencies which are responsible for bringing and maintaining that source into continuous compliance (e.g., State to EPA, or EPA to State). Such communications shall be performed to:

1. Develop and maintain a common, agreed upon list of HPVs;

2. Determine, on a case by case basis, which agency is best suited to take the initial lead in addressing this HPV;

3. Ensure that the HPVs are returned to compliance, consistent with the T&A section of this policy; and

4. Foster a cooperative "team-building" spirit among all of the involved agencies.

B. Processing of High Priority Violators

Once a violation is detected, the agencies shall take the following five actions:

1. The "finding" agency shall compare the source's characteristics with the definition of HPV contained in this policy. To the extent that the violation fits one or more of the elements of the definition, it shall be designated as a "High Priority Violation" and therefore subject to the Timely and Appropriate section of this policy.

2. Within sixty (60) days after designation of the violation as an HPV, an NOV or FOV shall be issued to each source with an HPV, regardless of which agency has the lead.

3. The State agency and the EPA Regional Office shall jointly decide which agency has the necessary resources and will take the lead in resolving the HPV.

4. The lead agency shall routinely address each HPV as it is identified. Once the agency initiates any type of enforcement activity related to an HPV, it shall not interrupt this activity.

5. EPA (or delegated State) shall add the source to its HPV list (HPVL) for agency tracking and reporting.

6. The high priority violator shall remain an HPV (tracked in AFS) until all violations against it have been resolved.

C. EPA Maintains Enforcement Authority

The Clean Air Act vests responsibility for enforcement of the law in EPA. Therefore, EPA may move independently with respect to designation of a violation as a "High Priority Violation", and EPA shall assume the lead at any time in cases when it becomes apparent that the State is unable or unwilling to act in accordance with this policy to resolve a violation in a timely and appropriate manner.

IV. T&A TIMELINES FOR ENFORCEMENT ACTION

All HPVs, except emergency episodes and sources which construct without a valid PSD or Part D permit (where one is required), are subject to the following timelines and penalty requirements (see Section V below). The timeline for enforcement actions is generally the same for high priority violators discovered by EPA as for those discovered by a State or local agency, regardless of which agency takes the initial lead. The only exception is for the unusual situation in which EPA assumes the lead from a State. If EPA does take over the lead, it receives up to an additional 150 days to address the HPV. This policy provides EPA Regional Offices up to 150 additional days to address an HPV after it assumes the lead from a State. It should not need 270 days like it would in a normal situation. This is based upon the assumptions that EPA has closely tracked the State enforcement activity and data gathering, and will be able to rely upon the fact that the State's NOV started the penalty clock. (As stipulated in the CAAA of 1990, taking formal action, e.g., issuing an NOV/FOV, shifts the burden of proof of continuous compliance to the source, and "starts the penalty clock".)

A separate (new) timeline will be established for any additional violations discovered at an existing HPV before it has been fully resolved.

Violations discovered in records received from a source shall be assigned a day zero no later than thirty (30) days after the records were received by the enforcing agency.

A separate day zero can be created for any additional violations at a source that has unresolved violations. However, violations that were discovered during the same investigation, e.g., a series of inspections, a section 114 response, a record review or a quarterly report, that occurred within 30 days of each other, should be grouped under the same day zero, especially if the clustered violations will be addressed in the same enforcement action. When more than one air program or pollutant is listed under one day zero only the most serious air program and emission violation should be counted for purposes of Headquarters reporting.

A. Day Zero

The clock starts (i.e., day zero) no later than 45 days after the discovering agency first receives information concerning a Federally enforceable violation (e.g., date of inspection, stack test or continuous emission monitoring system report). If, during this 45-day period, the enforcement agency decides that additional monitoring or analysis is required to determine or confirm the violation, the clock does not start until the earlier of the date of receipt of such additional data or on the 90th day after the violation was initially discovered. This additional period (up to 45 days) provides sufficient time for agency evaluation of the data to determine if a Federally enforceable violation occurred.

B. Day 60 - Routine Issuance of NOV/FOV and EPA Tracking

Unless the State agency requests that EPA issue the notice, by Day 60 the State or local agency shall routinely issue an NOV (if required for SIP sources), or an FOV (for non SIP sources) to the source.

If the State has not taken such action, EPA shall immediately issue an appropriate notice.

Any EPA-issued NOV or FOV, in a case where the State has the lead, will indicate that EPA is still looking to the State to resolve the matter, and further EPA action will be required only in the absence of an acceptable, prompt resolution by the State.

The issuing office will transmit a copy of any NOVs or FOVs it issues to other agencies in whose jurisdiction the source is located. If the violation clearly impacts upon the air quality of an adjacent State, EPA will also transmit a copy of the NOV or FOV to that State as well.

Also, the EPA should add this source to its list of HPVs for Agency tracking and reporting purposes.

C. Day 150 - Case Progress Evaluation

If the State or local agency has the initial lead and the case has not been resolved/addressed by Day 150, the EPA and the State or local agency will have a focused, case-specific consultation concerning overall case strategy, including a discussion of effective means for expeditiously addressing/resolving the case. Possible strategies could include continued deferral to the State or local agency, EPA assumption of the case, or continuation of the case in a work-sharing arrangement between EPA and the State or local agency.

D. EPA Responsibilities After It Assumes the Lead

After EPA assumes the lead in a case, it will have up to an additional 150 days to get the source into compliance, onto a schedule, issue a Section 113(a) administrative order (including administrative remedies), a Section 113(d) administrative enforcement action, or subject the source to a Section 120 action or judicial referral. EPA will encourage continued State participation even in situations where EPA takes over the lead. The possibility of a joint action should be considered as an alternative to a unilateral EPA action where feasible.

E. Day 270 (no lead change) or Day 300 (lead change)

By Day 270 (or 300 with lead change), the source shall either be RESOLVED or ADDRESSED i.e., on a legally-enforceable and expeditious administrative or judicial order, or be subject to a referral to the (State) attorney general or (Federal) Department of Justice for an adjudicatory enforcement hearing or judicial action. In some complex cases, more time may be required. The State should discuss with the Region that a case's complexity will require additional time as soon as those factors are determined.

F. Resolved versus Addressed

Normally a violation is addressed first and then resolved. As indicated above, the term RESOLVED shall mean that the source is returned to COMPLIANCE. Thus after the case has been addressed as per Part E (above), EPA and the State will continue to track the source. Note that the source remains on the HPV list until it is returned to compliance (RESOLVED). Follow-up may be required in one of the following outcomes once the case has been addressed: if a schedule is established, the State will monitor compliance with that schedule and report on progress in accordance with established reporting requirements; if a referral is made, EPA will continue to monitor the progress of the case to and after filing; and if a case becomes unduly delayed, EPA will discuss this with the State and may choose to initiate a parallel Federal action. No formal timelines are being established for this stage of the enforcement process, however.

V. PENALTIES

EPA's national goal is to have all Federal, State and local enforcement actions for Clean Air Act violations assess a penalty sufficient to achieve effective deterrence for the source subject to enforcement and for the regulated community as a whole. EPA assesses penalties in Federal Clean Air Act actions pursuant to the Clean Air Act Stationary Source Civil Penalty Policy. Under

the EPA penalty policy, both the economic benefit of noncompliance and a gravity component reflecting the seriousness of the violation are calculated. This calculated penalty may then be adjusted where appropriate for several factors including the risks involved in litigating the enforcement action and the violator's ability to pay a penalty.

All State and local agency enforcement actions should also assess civil penalties of sufficient magnitude to maintain a credible deterrent effect. To accomplish this goal, State and local enforcement agencies should calculate and assess the economic benefit of noncompliance (where possible and appropriate). State and local enforcement agencies are also encouraged but not required to use the BEN computer model developed by EPA to calculate the economic benefit of noncompliance. State and local enforcement agencies which use the BEN computer model or a similar model to calculate economic benefit will receive less intensive EPA case-specific oversight. In cases where penalty policies have been developed, the state and local agencies should provide these to the appropriate EPA Regional contacts for review and comment.

In some cases, the risks involved in litigating the case or the violator's inability to pay a penalty may justify not assessing a penalty which recaptures the full economic benefit. Legitimate litigation risks include adverse legal precedent and evidentiary problems. The inability of a violator to pay a penalty must be demonstrated by the violator through financial information analyzed by State or local environmental enforcement personnel. Additionally, penalties based on economic benefit for long term violations may be so large (e.g., tens of millions of dollars) that it may be unlikely that a judge would award such a large amount. In deciding to reduce the penalty on this basis, it is encouraged that the State/local agency confer with EPA prior to reducing the penalty. If it is not possible or appropriate to assess the economic benefit of noncompliance, the penalty which is assessed should be of such a magnitude to act as a deterrent.

An additional amount (i.e., beyond economic benefit) reflecting the seriousness of the violation should also be assessed. This is especially important for violations which may not have a readily calculated economic benefit but which are critical to program integrity, such as monitoring, reporting, record keeping and testing violations. In some cases, this additional amount may be adjusted to reflect the violator's history of compliance with air pollution laws and regulations, and the source's good faith efforts to comply. All penalty calculations in State and local enforcement actions must be documented in the appropriate case file.

EPA will consider overfiling when State or local penalties fail to meet these criteria, taking into account available Federal resources and enforcement priorities. EPA will consult with applicable State or local agencies prior to overfiling to ensure agencies have notice of EPA’s plans.

State and local enforcement agencies should increase the statutory maximum civil penalty authorized by State or local law to at least $10,000 per day per violation as required by Title V of the Clean Air Act, as amended, for an approved operating permits program. States and municipalities with penalty authority of less than $10,000 per day per violation will be subject to more intensive EPA oversight and potential overfiling.

State and local enforcement agencies are also strongly encouraged to develop a penalty policy implementing these general penalty criteria. EPA will then review and evaluate, but not formally approve, these penalty policies for consistency with the general penalty criteria. A State or local enforcement agency which adopts a sound penalty policy implementing these penalty criteria and demonstrates a pattern of adherence to it will receive less case specific EPA oversight than agencies that do no adopt and adhere to such penalty policies.

VI. CONSULTATION AND DATA TRANSFER

A. Informal Consultation

EPA and States should conduct frequent (at least monthly) informal consultations to discuss compliance efforts. During these discussions, information exchange relative to obtaining compliance and penalties should occur. This exchange should include at least the following items:

1. The State and EPA would each identify any newly-found violators subject to this policy.

2. The State and EPA would each identify sources notified of noncompliance during the month.

3. The State and EPA would each identify violators where action had been taken.

4. The State would discuss the status of other enforcement actions pending or in progress, if requested by EPA.

5. EPA would identify sources for which it had completed action and provide the status for other sources where action is pending or in progress.

6. EPA would identify any sources it had found in violation and confer with the State as required above.

B. Updating EPA's Compliance Databases

The HPV flag (SVI1 field in AFS) must be accurately maintained in order to ensure that these data, which are shared by other enforcement offices within EPA and the States, correctly reflect the HPV status for all sources subject to the HPV policy. Summary data that is incorporated in the quarterly report to the Office of Enforcement and Compliance Assurance shall be used as the archived summary data for trends analysis.

The AIRS Facility database will be updated by EPA and/or the State on a monthly basis to reflect the following: (See Part E below for additional guidance.)

1. Compliance status changes for newly-identified violators which are in violation on the last day of the month prior to the consultation, and which were (or are expected to be) in that status for 7 days or more.

2. Sources notified of noncompliance.

3. Sources with completed enforcement actions, including any schedules and incremental dates for returning to compliance.

4. Sources found to be in compliance with final limits.

C. Provide Inspection Results

Inspection results other than those affected by the above will be provided in accordance with current practices and EPA accountability system requirements.

D. Sharing of Data

EPA and the State will share inspection results and other monitoring reports (e.g., stack tests, CEMS) for use in enforcement proceedings to the extent practicable. State personnel should be encouraged to provide evidence, including testimony, for Federal proceedings. Federal personnel should similarly support State enforcement proceedings.

E. HPV Accounting Guidelines

There are two major aspects of HPV accounting that need to be recognized. One is the SVI1 flag in the AIRS Facility Subsystem (AFS) that indicates whether or not a source is a high priority violator and it is critical for tracking HPVs and multimedia enforcement targeting. The second is the T&A accounting of how long the lead agency took to address the violation(s), which is based on the day zero. (Appendix A is a glossary of terms used in this policy and additional accounting guidance associated with those terms.)

1. Adding HPV's to AFS: The finding agency detects a violation and enters it into AFS or reports it manually if not yet a direct or upload user of AFS. EPA and the State discuss/examine violation(s) and if it is a high priority violation(s), EPA or the State enters the compliance status and the SVI1 flag in AFS indicating that the source is a high priority violator. From this time until resolution, the SVI1 flag is modified monthly to reflect the source's HPV status. For multiple violations, the SVI1 flag shall reflect the worst compliance status. The HPV is reported as "added" in the quarter the source is added to AFS. Violation(s) involving multiple pollutants or multiple air programs should not be counted more than once. Violations discovered during a single investigation should be counted for purposes of EPA Headquarters (HQ) T&A reporting as one high priority violator under a single day zero.

2. HPV's discovered by EPA after the end of the quarter: When a high priority violator is reported to EPA by a State or local agency after the end of the quarter in which it was discovered, it shall be reported to HQ as if it had occurred during the quarter that it was reported to the EPA Regional Office. Although this may distort the exact date that violations, addressing, or resolution occurred, it will simplify reporting while continuing to provide HQ with an indication of the level of HPV activity. The goal is to maintain a stable count for each quarter while allowing HPV's that are discovered after the quarter ended to be added.

3. Addressed: The High Priority Violator is maintained on HQ reports as unaddressed until the violations against it are addressed. Once an HPV has been addressed it remains on the HQ HPV Summary Report only until the end of the fiscal year. At the beginning of the fiscal year, only unaddressed HPV's from the previous FY will appear on the HQ Summary HPV Report. The Region continues to track addressed HPV's until they are resolved and reports them to HQ as such in AFS.

4. Unaddressed: Unaddressed HPV's are reported on the HPV Summary Report and are brought forward from the previous quarter to the next. Similarly, the unaddressed HPV's are brought forward from one fiscal year to the next.

5. Deletions from HPV list: If it is determined that an HPV has been incorrectly identified as an HPV, for instance, if upon further examination it is determined that no violation actually occurred, or if the source was not in fact subject to the requirement, then the appropriate action code "RV" is added to AFS by EPA and the HPV is reported in the HQ Summary Report as being deleted for cause, and the SVI1 flag is reset. For auditing purposes, a note to the file in the action comment field must be added that explains why the source is not being tracked as an HPV.

6. Resolved: The resolved HPV's should be reported in the quarter that EPA or the State discovers that the violation has been resolved, whether or not it is the actual quarter the violation was resolved. It is expected that the States and Regions will monitor addressed HPV's until they are resolved. Once resolved, the SVI1 flags in AFS are updated and the violation is no longer tracked.

7. Annual Reports: In order to accommodate the end of year reports, the Timely and Appropriate Report and the State by State Enforcement Data Summaries, the Regions need to ensure that the core data fields and the T&A fields in AFS are properly filled out, otherwise manual tabulations will be required.

HPV Glossary

This glossary of terms is designed to clarify the terminology used by EPA in the HPV Policy and the associated compliance and enforcement reporting. Terms that originate with the policy have been underlined and those that are legal terms have been italicized. In addition, accounting guidance is provided for the terms, addressed and resolved.

Addressed means that one of the following actions that impose a compliance schedule or require immediate compliance have been taken: a notice of noncompliance that includes a penalty (section 120) issued (AFS code: 7A); an EPA civil action referred to DOJ (AFS code: 4B); a CAA Section 113(a) order issued (AFS code: 8A); EPA CAA Section 167 order issued (AFS code: 7E); a CAA Section 113(d) complaint filed (AFS code: 7F); EPA criminal referral to DOJ (AFS code: 5B); a consent decree or consent agreement filed (AFS code: 6B); a consent decree or consent agreement filed (AFS code: 2D); a State civil action has been referred to AG (AFS code: 9C); a State criminal action referral to the AG (AFS code: 1D); a State administrative order issued (AFS code: 8C); or the source will be subject to a proposed SIP or FIP provision which will lead to compliance upon approval (AFS code: 2M or 2L) and EPA staff-level review indicates that the provision is likely to be approved.

Two additional addressing codes are listed in AFS for tracking purposes. They are: source returned to compliance by EPA with no further action required (AFS code: 7G); and, source returned to compliance by State with no further action required (AFS code: 2K). For cases where penalties are required, penalties that conform to the "Clean Air Act Stationary Source Civil Penalty Policy" must also be assessed.

Addressed with Penalties means appropriate penalties were collected or are likely to be collected because the action or complaint stipulates that a penalty be paid. Penalties must be calculated in accordance with the EPA civil penalty policy.

Administrative Order means a CAA Section 113(a) or Section 167 order that requires the source to comply with the CAA or a permit promulgated thereunder but does not stipulate penalties; a State administrative action (not civil or criminal) against a source pursuant to the State authority.

Administrative Penalty Order (APO) means a CAA Section 113(d) order issued by EPA that has stipulated penalties.

Civil Judicial Referral means a Federal or State case that has been referred to the Department of Justice or the State Attorney General for resolution in the civil judicial forum.

Complaint means a written communication, alleging one or more violations of specific provisions of the Act, or regulations or a permit promulgated thereunder, issued by the complainant to a person.

Confirming a Violation/Compliance may include the following: an on site inspection, a review of an appropriate self monitoring report, a stack test, a reference method compliance test, or a response to a CAA Section 114 letter.

Consent Agreement (or Consent Decree) means any written document, signed by the parties, containing stipulations or conclusions of fact or law and a proposed penalty or proposed revocation or suspension acceptable to both complainant and respondent.

Consent Agreement/Consent Order (CACO) means a signed document settling a CAA Section 113(d) administrative penalty order.

In Compliance means all Federal and State administrative and judicial action against the source is complete and the source has been confirmed to be complying with the CAA. This term, as it is used in the HPV Policy, refers to a source being in compliance with all aspects of CAA requirements, not simply their emission limit.

Investigation includes, but is not limited to, a series of inspections, review of CAA Section 114 responses, record reviews, or review of quarterly reports that were discovered within 30 days of each other and that pertain to the same source.

Lead Change means the lead changes from the State to EPA because either the State did not address the violation by day 150 or the State asked EPA to assume the lead. In the case of asbestos NESHAP D&R violators and non-transitory NESHAP violators "Lead Change" means: the lead changes from the State because the State did not address the violation within two months or the State asked EPA to assume the lead. This does not include a change from EPA to the State.

Major Source means a stationary source(s) located on one or more contiguous or adjacent properties that have the same standard industrial classification and are under the control of one person or persons and that emits or has the potential to emit 100 tons per year of VOC, SO2, NO2, CO, or PM-10; or a source, regardless of its attainment status, that emits or has the potential to emit 10 tons per year (tpy) of Hazardous Air Pollutants (HAP's) or 25 (tpy) of a combination of HAPs and other pollutants; or if the source is located in a nonattainment area and it emits or has the potential to emit quantities of VOC, NO2, CO, or PM-10 that equal or exceed the following nonattainment status thresholds.

	Nonattainment Status	Major Source (in tons per year)
OZONE (VOC / NO2)	Marginal/Moderate	100
	Serious	50
	(Ozone Transport Region)	50
	Severe	25
	Extreme	10
CARBON MONOXIDE		
	Moderate	100
	Serious	50
PM-10		
	Moderate	100
	Serious	70

For a detailed definition of Major Source see Part 70 - State Operating Permit Programs Federal Register vol. 57, No 140/ Tuesday, July 21, 1992 and the CAA sections 112 & 302.

Resolved means that once the violation is addressed and a closeout memo has been issued, all penalties have been collected and the source is confirmed to be in compliance. Once these actions have been completed, AFS should be updated with the following: C7 (Closeout memo issued), C3 (CAA Section 113(d) penalty collected), WD (CAA Section 113(d) complaint withdrawn), VR (Violation Resolved).

APPENDIX B:
CLEAN AIR ACT STATIONARY SOURCE CIVIL PENALTY POLICY

(Issued October 25, 1991; Clarified January 17, 1992)

I. INTRODUCTION

Section 113(b) of the Clean Air Act, 42 U.S.C. § 7413(b), provides the Administrator of EPA with the authority to commence a civil action against certain violators to recover a civil penalty of up to $25,000 per day per violation. Since July 8, 1980, EPA has sought the assessment of civil penalties for Clean Air Act violations under Section 113(b) based on the considerations listed in the statute and the guidance provided in the Civil Penalty Policy issued on that date.

On February 16, 1984, EPA issued the Policy on Civil Penalties (GM-21) and a Framework for Statute-Specific Approaches to Penalty Assessments (GM-22). The Policy focuses on the general philosophy behind the penalty program. The Framework provides guidance to each program on how to develop medium-specific penalty policies. The Air Enforcement program followed the Policy and the Framework in drafting the Clean Air Act Stationary Source Civil Penalty Policy, which was issued on September 12, 1984, and revised March 25, 1987. This policy amends the March 25, 1987 revision, incorporating EPA's further experience in calculating and negotiating penalties. This guidance document governs only stationary source violations of the Clean Air Act. All violations of Title II of the Act are governed by separate guidance.

The Act was amended on November 15, 1990, providing the Administrator with the authority to issue administrative penalty orders in Section 113(d), 42 U.S.C. § 7413(d). These penalty orders may assess penalties of up to $25,000 per day of violation and are generally authorized in cases where the penalty sought is not over $200,000 and the first alleged date of violation occurred no more than 12 months prior to initiation of the administrative action. In an effort to provide to initiation of the administrative action. In an effort to provide consistent application of the Agency's civil penalty authorities, this penalty policy will serve as the civil penalty guidance used in calculating administrative penalties under Section 113(d) of the Act and will be used in calculating a minimum settlement amount in civil judicial cases brought under Section 113(b) of the Act.

In calculating the penalty amount which should be sought in an administrative complaint, the economic benefit of noncompliance and a gravity component should be calculated under this penalty policy using the most aggressive assumptions supportable. Pleadings will always include the full economic benefit component. As a general rule, the gravity component of the penalty plead in administrative complaints may not be mitigated. However, the gravity component portion of the plead penalty may be mitigated by up to ten per cent solely for degree of cooperation. Any mitigation for this factor must be justified under Section II.B.4.b. of this Policy. The total mitigation for good faith efforts to comply for purpose of determining a settlement amount may never exceed thirty per cent. Applicable adjustment factors which aggravate the penalty must be included in the amount plead in the administrative complaint. Where key financial or cost figures are not available, for example those costs involved in calculating the BEN calculation, the highest figures supportable should be used.

This policy will ensure the penalty plead in the complaint is never lower than any revised penalty calculated later based on more detailed information. It will also encourage sources to provide the litigation team with the more accurate cost or financial information. The penalty may then be recalculated during negotiations where justified under this policy to reflect any appropriate adjustment factors. In administrative cases, where the penalty is recalculated based

upon information received in negotiations or the prehearing exchange, the administrative complaint must be amended to reflect the new amount if the case is going to or expected to go to hearing. This will ensure the complaint reflects the amount the government is prepared to justify at the hearing. This pleading policy also fulfills the obligation of 40 C.F.R. § 22.14(a)(5) that all administrative complaints include "a statement explaining the reasoning behind the proposed penalty."

This policy reflects the factors enumerated in Section 113(e) that the court (in Section 113(b) actions) and the Administrator (in Section 113(d) actions) shall take into consideration in the assessment of any penalty. These factors include: the size of the business, the economic impact of the penalty on the business, the violator's full compliance history and good faith efforts to comply, the duration of the violation, payment by the violator of penalties assessed for the same violation and such other factors as justice may require.

This document is not meant to control the penalty amount requested in judicial actions to enforce existing consent decrees.[1] In judicial cases, the use of this guidance is limited to pre-trial settlement of enforcement actions. In a trial, government attorneys may find it relevant and helpful to introduce a penalty calculated under this policy, as a point of reference in a demand for penalties. However, once a case goes to trial, government attorneys should demand a larger penalty than the minimum settlement figure as calculated under the policy.

The general policy applies to most Clean Air Act violations. There are some types of violations, however, that have characteristics which make the use of the general policy inappropriate. These are treated in separate guidance, included as appendices. Appendix I covers violations of PSD/NSR permit requirements. Appendix II deals with the gravity component for vinyl chloride NESHAP violations. Appendix III covers the economic benefit and gravity components for asbestos NESHAP demolition and renovation violations. The general policy applies to violations of volatile organic compound regulations where the method of compliance involves installation of control equipment. Separate guidance is provided for VOC violators which comply through reformulation (Appendix IV). Appendix VI deals with the gravity component for volatile hazardous air pollutants violations. Appendix VII covers violations of the residential wood heaters NSPS regulations. Violation of the regulations to protect stratospheric ozone are covered in Appendix VIII. These appendixes specify how the gravity component and/or economic benefit components will be calculated for these types of violations. Adjustment, aggravation or mitigation, of penalties calculated under any of the appendixes is governed by this general penalty policy.

This penalty policy contains two components. First, it describes how to achieve the goal of deterrence through a penalty that removes the economic benefit of noncompliance and reflects the gravity of the violation. Second, it discusses adjustment factors applied so that a fair and equitable penalty will result. The litigation team[2] should calculate the full economic benefit and

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[1] In these actions, EPA will normally seek the penalty amount dictated by the stipulated penalty provisions of the consent decree. If a consent decree contains no stipulated penalty provisions, the case development team should propose penalties suitable to vindicate the authority of the Court.

[2] With respect to civil judicial cases, the litigation team will consist of the Assistant Regional Counsel, the Office of Enforcement attorney, the Assistant United States Attorney, the Department of Justice attorney from the Environmental Enforcement Section, and EPA technical professional assigned to the case. With respect to administrative cases, the litigation team will generally consist of the EPA technical professional and Assistant Regional Counsel assigned to the case. The recommendation of the litigation team must be

gravity components and then decide whether any of the adjustment factors applicable to either component are appropriate. The final penalty obtained should never be lower than the penalty calculated under this policy taking into account all appropriate adjustment factors including litigation risk and inability to pay.

All consent agreements should state that penalties paid pursuant to this penalty policy are not deductible for federal tax purposes under 28 U.S.C. § 162(f).

The procedures set out in this document are intended solely for the guidance of government personnel. They are not intended and cannot be relied upon to create rights, substantive or procedural, enforceable by any party in litigation with the United States. The Agency reserves the right to act at variance with this policy and to change it at any time without public notice.

This penalty policy is effective immediately with respect to all cases in which the first penalty offer has not yet been transmitted to the opposing party.

II. THE PRELIMINARY DETERRENCE AMOUNT

The February 16, 1984, Policy on Civil Penalties establishes deterrence as an important goal of penalty assessment. More specifically, it says that any penalty should, at a minimum, remove any significant economic benefit resulting from noncompliance. In addition, it should include an amount beyond recovery of the economic benefit to reflect the seriousness of the violation. That portion of the penalty which recovers the economic benefit of noncompliance is referred to as the "economic benefit component;" that part of the penalty which reflects the seriousness of the violation is referred to as the "gravity component." When combined, these two components yield the "preliminary deterrence amount." This section provides guidelines for calculating the economic benefit component and the gravity component. It will also discuss the limited circumstances which justify adjusting either component.

A. THE ECONOMIC BENEFIT COMPONENT

In order to ensure that penalties recover any significant economic benefit of noncompliance, it is necessary to have reliable methods to calculate that benefit. The existence of reliable methods also strengthens the Agency's position in both litigation and negotiation. This section sets out guidelines for computing the economic benefit component. It first addresses costs which are delayed by noncompliance. Then it addresses costs which are avoided completely by noncompliance. It also identifies issues to be considered when computing the economic benefit component for those violations where the benefit of noncompliance results from factors other than cost savings. The section concludes with a discussion of the limited circumstances where the economic benefit component may be mitigated.

1. Benefit from delayed costs

In many instances, the economic advantage to be derived from noncompliance is the ability to delay making the expenditures to achieve compliance. For example, a facility which fails to install a scrubber will eventually have to spend the money needed to install the scrubber in order to achieve compliance. But, by deferring these capital costs until EPA or a State takes an

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unanimous. If a unanimous position cannot be reached, the matter should be escalated and a decision made by EPA and the Department of Justice managers, as required.

enforcement action, that facility has achieved an economic benefit. Among the types of violations which may result in savings from deferred cost are the following:

- **!** Failure to install equipment needed to meet emission control standards.
- **!** Failure to effect process changes needed to reduce pollution.
- **!** Failure to test where the test still must be performed.
- **!** Failure to install required monitoring equipment.

The economic benefit of delayed compliance should be computed using the "Methodology for Computing the Economic Benefit of Noncompliance," which is Technical Appendix A of the BEN User's Manual. This document provides a method for computing the economic benefit of noncompliance based on a detailed economic analysis. The method is a refined version of the method used in the previous Civil Penalty Policy issued July 8, 1980, for the Clean Water Act and the Clean Air Act. Ben is a computer program available to the Regions for performing the analysis. Questions concerning the BEN model should be directed to he Program Development and Training Branch in the office of Enforcement, FTS 475-6777.

2. Benefit from avoided costs

Many types of violations enable a violator to avoid permanently certain costs associated with compliance. These include cost savings for:

- **!** Disconnecting or failing to properly operate and maintain existing pollution control equipment (or other equipment if it affects pollution control).
- **!** Failure to employ a sufficient number of adequately trained staff.
- **!** Failure to establish or follow precautionary methods required by regulations or permits.
- **!** Removal of pollution equipment resulting in process, operational, or maintenance savings.
- **!** Failure to conduct a test which is no longer required.
- **!** Disconnecting or failing to properly operate and maintain required monitoring equipment.
- **!** Operation and maintenance of equipment that the violator failed to install.

The benefit from avoided costs must also be computed using methodology in Technical Appendix A of the BEN User's Manual.

The benefit from delayed and avoided costs is calculated together, using the Ben computer program, to arrive at an amount equal to the economic benefit of noncompliance for the period from the first provable date of violation until the date of compliance.

As noted above, the BEN model may be used to calculate only the economic benefit accruing to a violator through delay or avoidance of the costs of complying with applicable requirements of the Clean Air Act and its implementing regulations. There are instances in which the BEN methodology either cannot compute or will fail to capture the actual economic benefit

of noncompliance. In those instances, it will be appropriate for the Agency to include in its penalty analysis a calculation of the economic benefit in a manner other than that provided for in the Ben methodology.

In some instances this may include calculating and including in the economic benefit component profits from illegal activities. An example would be a source operating without a preconstruction review permit under PSD/NSR regulations or without an operating permit under Title V. In such a case, an additional calculation wold be performed to determine the present value of these illegal profits which would be added to the Ben calculation for the total economic benefit component. Care must be taken to account for the preassessed delayed or avoided costs included in the Ben calculation when calculating illegal profits. Otherwise, these costs could be assessed twice. The delayed or avoided costs already accounted for in the BEN calculation should be subtracted from any calculation of illegal profits.

3. Adjusting the Economic Benefit Component

As noted above, settling for an amount which does not recover the economic benefit of noncompliance can encourage people to wait until EPA or the State begins an enforcement action before complying. For this reason, it is general Agency policy not to adjust or mitigate this amount. There are three general circumstances (described below) in which mitigating the economic benefit component may be appropriate. However, in any individual case where the Agency decides to mitigate the economic benefit component, the litigation team must detail those reasons in the case file and in any memoranda accompanying the settlement.

Following are the limited circumstances in which EPA can mitigate the economic benefit component of the penalty:

a. Economic benefit component involves insignificant amount

Assessing the economic benefit component and subsequent negotiations will often represent a substantial commitment of resources. Such a commitment may not be warranted in cases where the magnitude of the economic benefit component is not likely to be significant because it is not likely to have substantial financial impact on the violator. For this reason, the litigation team has the discretion not to seek the economic benefit component where it is less than $5,000. In exercising that discretion, the litigation team should consider the following factors:

- Impact on violator: The likelihood that assessing the economic benefit component as part of the penalty will have a noticeable effect on the violator's competitive position or overall profits. If no such effect appears likely, the benefit component should probably not be pursued.

- The size of the gravity component: If the gravity component is relatively small, it may not provide a sufficient deterrent, by itself, to achieve the goals of this policy. In situations like this, the litigation team should insist on including the economic benefit component in order to develop an adequate penalty.

b. Compelling public concerns

The Agency recognizes that there may be some instances where there are compelling public concerns that would not be serviced by taking a case to trial. In such instances, it may become necessary to consider mitigating the economic benefit component. This may be done only if it is

absolutely necessary to preserve the countervailing public interests. Such settlement might be appropriate where the following circumstances occur:

- The economic benefit component may be mitigated where recovery wold result in plant closings, bankruptcy, or other extreme financial burden, and there is an important public interest in allowing the firm to continue in business. Alternative payment plans, such as installment payments with interest, should be fully explored before resorting to this option. Otherwise, the Agency will give the perception that shirking one's environmental responsibilities is a way to keep a failing enterprise afloat. This exemption does not apply to situations where the plant was likely to close anyway, or where there is a likelihood of continued harmful noncompliance.

- The economic benefit component may also be mitigated in enforcement actions against nonprofit public entities, such as municipalities and publicly-owned utilities, where assessment threatens to disrupt continued provision of essential public services.

c. Concurrent Section 120 administrative action

EPA will not usually seek to recover the economic benefit of noncompliance from one violation under both a Section 113(b) civil judicial action or 113(d) civil administrative action and a Section 120 action. Therefore, if a Section 120 administrative action is pending or has ben concluded against a source for a particular violation and an administrative or judicial penalty settlement amount is being calculated for the same violation, the economic benefit component need not include the period of noncompliance covered by the Section 120 administrative action.

In these cases, although the agency will not usually seek double recovery, the litigation team should not automatically mitigate the economic benefit component by the amount assessed in the Section 120 administrative action. The Clean Air Act allows dual recovery of the economic benefit, and so each case must be considered no its individual merits. The Agency may mitigate the economic benefit component in the administrative or judicial action if the litigation team determines such a settlement is equitable and justifiable. The litigation team should consider in making this decision primarily whether the penalty calculated without the Section 120 noncompliance penalty is a sufficient deterrent.

B. THE GRAVITY COMPONENT

As noted above, the Policy on Civil Penalties specifies that a penalty, to achieve deterrence, should recover any economic benefit or noncompliance, and should also include an amount reflecting the seriousness of the violation. Section 113(e) instructs courts to take into consideration in setting the appropriate penalty amount several factors including the size of the business, the duration of the violation, and the seriousness of the violation. These factors are reflected in the "gravity component." This section of the policy establishes an approach to quantifying the gravity component.

Assigning a dollar figure to represent the gravity of the violations is a process which must, of necessity, involve the consideration of a variety of factors and circumstances. Linking the dollar amount of the gravity component to these objective factors is a useful way of insuring that violations of approximately equal seriousness are treated the same way. These objective factors are designed to reflect those listed in Section 113(e) of the Act.

The specific objective factors in this civil penalty policy designed to measure the seriousness of the violation and reflect the considerations listed in the Clean Air Act are as follows:

- Actual or possible harm: This factor focuses on whether (and to what extent) the activity of the defendant actually resulted or was likely to result in the emission of a pollutant in violation of the level allowed by an applicable State Implementation Plan, federal regulation or permit.

- Importance to the regulatory scheme: This factor focuses on the importance of the requirement to achieving the goals of the Clean Air Act and its implementing regulations. For example, the NSPS regulations require owners and operators of new sources to conduct emissions testing and report the results within a certain time after start-up. If a source owner or operator does not report the test results, EPA wold have no way of knowing wether that source is complying with NSPS emissions limits.

- Size of violator: The gravity component should be increased, in proportion to the size of the violator's business.

The assessment of the first gravity component factor listed above, actual or possible harm arising from a violation, is a complex matter. For purposes of determining how serious a given violation is, it is possible to distinguish violations based on certain considerations, including the following:

- Amount of pollutant: Adjustments based on the amount of the pollutant emitted are appropriate.

- Sensitivity of the environment: this factor focuses on where the violation occurred. For example, excessive missions in a nonattainment area re usually more serious than excessive emissions in an attainment area.

- Toxicity of the pollutant: Violations involving toxic pollutants regulated by a National Emissions Standard for Hazardous Air Pollutants (NESHAP) or listed under Section 112(b)(1) of the Act are more serious and should result in larger penalties.

- The length of time a violation continues: Generally, the longer a violation continues uncorrected, the greater the risk of harm.

- Size of violator: A corporation's size is indicated by its stockholder's equity or "net worth." This value, which is calculated by adding the value of capital stock, capital surplus, and accumulated retained hearings, corresponds to the entry for "worth" in the Dun and Bradstreet reports for publicly traded corporations. The simpler bookkeeping methods employed by sole proprietorships and partnerships allow determination of their size on the basis of net current assets. Net current assets are calculated by subtracting current liabilities from current assets.

The following dollar amounts assigned to each factor should be added together to arrive at the total gravity component:

1. Actual or possible harm

a. Level of violation

Percent Above Standard[3]	Dollar Amount
1-30%	$ 5,000
31-60%	10,000
61-90%	15,000
91-120%	20,000
121-150%	25,000
151-180%	30,000
181-210%	35,000
211-240%	40,000
241-270%	45,000
271-300%	50,000
over 300%	50,000 + $5,000 for each 30% or fraction of 30% increment above the standard

This factor should be used only for violations of emissions standards. Ordinarily the highest documented level of violation should be used. If that level, in the opinion of the litigation team, is not representative of the period of violation, then a more representative level of violation may be used. If that level, in the opinion of the litigation team, is not representative of the period of violation, then a more representative level of violation may be used. This figure should be assessed for each emissions violation. For example, if a source which emits particulate matter is subject to both an opacity standard and a mass emission standard and is in violation of both standards, this figure should be assessed for both violations.

b. Toxicity of the pollutant

Violations of NESHAPs emission standards not handled by a separate appendix and non-NESHAP emission violations involving pollutants listed in Section 112(b)(1) of the Clean Air Act Amendments of 1990[4]: $15,000 for each hazardous air pollutant for which there is a violation.

c. Sensitivity of environment (for SIP and NSPS cases only).

The penalty amount selected should be based on the status of the air quality control district in question with respect to the pollutant involved in the violation.

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[3] Compliance is equivalent to 0% above the emission standard.

[4] An example of a non-NESHAP violation involving a hazardous air pollutant would be a violation of a volatile organic compound (VOC) standard in a State Implementation Plan involving a VOC contained in the Section 112(b)(1) list of pollutants for which no NESHAP has yet been promulgated.

1. Nonattainment Areas

I. Ozone:

Extreme	$18,000
Severe	16,000
Serious	14,000
Moderate	12,000
Marginal	10,000

ii. Carbon Monoxide and Particulate Matter:

Serious	$14,000
Moderate	12,000

iii. All Other Criteria Pollutants: $10,000

2. Attainment area PSD Class I: $10,000

3. Attainment area PSD Class II or III: $5,000

d. Length of time of violation

To determine the length of time of violation for purposes of calculating a penalty under this policy, violations should be assumed to be continuous from the first provable date of violation until the source demonstrates compliance if there have been no significant process or operational changes. If the source has affirmative evidence, such as continuous emission monitoring data, to show that the violation was not continuous, appropriate adjustments should be made. In determining the length of violation, the litigation team should take full advantage of the presumption regarding continuous violation in Section 113(e)(2). This figure should be assessed separately for each violation, including procedural violations such as monitoring, recordkeeping and reporting violations. For example, if a source violated an emissions standard, a testing requirement, and a reporting requirement, three separate length of violation figures should be assessed, one for each of the three violations based on how long each was violated.

Months	Dollars
0-1	$ 5,000
2-3	8,000
4-6	12,000
7-12	15,000
13-18	20,000
19-24	25,000
25-30	30,000
31-36	35,000
37-42	40,000
43-48	45,000
49-54	50,000
55-60	55,000

2. Importance to the regulatory scheme

The following violations are also very significant in the regulatory scheme and therefore require the assessment of the following penalties:

Work Practice Standard Violations:

-- failure to perform a work practice requirement: $10,000-15,000
(See Appendix III for Asbestos NESHAP violations.)

Reporting and Notification Violations:

-- failure to report or notify: $15,000
-- late report or notice: $5,000
-- incomplete report or notice: $5,000 - $15,000
(See Appendix III for Asbestos NESHAP violations.)

Recordkeeping Violations:

-- failure to keep required records: $15,000
-- incomplete records: $5,000 - $15,000

Testing Violations:

-- failure to conduct required performance testing or testing using an improper test method: $15,000
-- late performance test or performing a required test method using an incorrect procedure: $5,000

Permitting Violations:

-- failure to obtain an operating permit: $15,000
-- failure to pay permit fee: See Section 502(b)(3)(c)(ii) of the Act

Emission Control Equipment Violations:

-- failure to operate and maintain control equipment required by the Clean Air Act, its implementing regulations or a permit: $15,000
-- intermittent or improper operation or maintenance of control equipment: $5,000-15,000

Monitoring Violations:

-- failure to install monitoring equipment required by the clean Air Act, its implementing regulations or a permit: $15,000
-- late installation of required monitoring equipment: $5,000
-- failure to operate and maintain required monitoring equipment: $15,000

Violations of Administrative Orders[5]: $15,000

Section 114 Requests for Information Violations:

-- failure to respond: $15,000
-- incomplete response: $5,000 - $15,000

[5] This figure should be assessed even if the violation of the administrative order is also a violation of another requirement of the Act, for example a NESHAP or NSPS requirement. In this situation, the figure for violation of the administrative order is in addition to appropriate penalties for violating he other requirement of the Act.

Compliance Certification Violations:

-- failure to submit a certification: $15,000
-- late certifications: $5,000
-- incomplete certifications: $5,000 - $15,000

Violations of Permit Schedules of Compliance:

-- failure to meet interim deadlines: $5,000
-- failure to submit progress reports: $15,000
-- incomplete progress reports: $5,000 - $15,000
-- late progress reports: $5,000

A penalty range is provided for work practice violations to allow Regions some discretion depending on the severity of the violation. Complete disregard of work practice requirements should be assessed the full $15,000 penalty. Penalty ranges are provided for incomplete notices, reports, and recordkeeping to allow the Regions some discretion depending on the seriousness of the omissions and how critical they are to the regulatory program. If the source omits information in notices, reports or records which document the source's compliance status, this omission should be treated as a failure to meet the requirement and assessed $15,000.

A late notice, report or test should be considered a failure to notify, report or test if the notice or report is submitted or the test is performed after the objective of the requirement is no longer served. For example if a source is required to submit a notice of a test so that EPA may observe the test, a notice received after the test is performed should be considered a failure to notify.

Each separate violation under this section should be assessed the corresponding penalty. For example, a NSPS source may be required to notify EPA at startup and be subject to a separate quarterly reporting requirement thereafter. If the source fails to submit the initial start-up notice and violates the subsequent reporting requirement, then the source should be assessed $15,000 under this section for each violation. In addition, a length of violation figure should be assessed for each violation based on how long each has ben violated. Also, a figure reflecting the size of the violator should be assessed once for the case as a whole. If, however, the source violates the same reporting requirement over a period of time, for example by failing to submit quarterly reports for one year, the source should be assessed one $15,000 penalty under this section for failure to submit a report. In addition, a length of violation figure of $15,000 for 12 months of violation and a size of the violator figure should be assessed.

3. Size of the violator

Net worth (corporations); or net current assets (partnerships and sole proprietorships):

Under $100,000	$2,000
$100,001-$1,000,000	5,000
1,000,001-5,000,000	10,000
5,000,001-20,000,000	20,000
20,000,001-40,000,000	35,000
40,000,001-70,000,000	50,000
70,000,001-100,000,000	70,000
over 100,000,000	70,000 + $25,000 for every additional $30,000,000 or fraction thereof

In the case of a company with more than one facility, the size of the violator is determined based on the company's entire operation, not just the violating facility. With regard to parent and subsidiary corporations, only the size of the entity sued should be considered. Where the size of the violator figure represents over 50% of the total preliminary deterrence amount, the litigation team may reduce the size of the violator figure to 50% of the preliminary deterrence amount.

The process by which the gravity component was computed must be memorialized in the case file. Combining the economic benefit component with the gravity component yields the preliminary deterrence amount.

4. Adjusting the Gravity Component

The second goal of the Policy on Civil Penalties is the equitable treatment of the regulated community. One important mechanism for promoting equitable treatment is to include the economic benefit component discussed above in a civil penalty assessment. This approach prevents violators from benefitting economically from their noncompliance relative to parties which have complied with environmental requirements.

In addition, in order to promote equity, the system for penalty assessment must have enough flexibility to account for the unique facts of each case. Yet it still must produce consistent enough results to ensure similarly-situated violators are treated similarly. This is accomplished by identifying many of the legitimate differences between cases and providing guidelines for how to adjust the gravity component amount when those facts occur. The application of these adjustments to the gravity component prior to the commencement of negotiation yields the initial minimum settlement amount. During the course of negotiation, the litigation team may further adjust this figure based on new information learned during negotiations and discovery to yield the adjusted minimum settlement amount.

The purpose of this section is to establish adjustment factors which promote flexibility while maintaining national consistency. It sets guidelines for adjusting the gravity component which account for some factors that frequently distinguish different cases. Those factors are: degree of willfulness or negligence, degree of cooperation, history of noncompliance, and environmental damage. These adjustment factors apply only to the gravity component and not to the economic benefit component. Violators bear the burden of justifying mitigation adjustments they propose. The gravity component may be mitigated only for degree of cooperation as specified in II.B.4.b. The gravity component may be aggravated by as much as 100% for the other factors discussed below: degree of willfulness or negligence, history of noncompliance, and environmental damage.

The litigation team is required to base any adjustment of the gravity component on the factors mentioned and to carefully document the reasons justifying its application in the particular case. The entire litigation team must agree to any adjustments to the preliminary deterrence amount. Members of the litigation team are responsible for ensuring their management also agrees with any adjustments to the penalty proposed by the litigation team.

a. Degree of Willfulness or Negligence

This factor may be used only to raise a penalty. The Clean Air Act is a strict liability statute for civil actions, so that willfulness, or lack thereof, is irrelevant to the determination of legal liability. However, this does not render the violator's willfulness or negligence irrelevant in assessing an appropriate penalty. Knowing or willful violations can give rise to criminal liability, and the lack of any negligence or willfulness would indicate that no addition to the penalty based

on this factor is appropriate. Between these two extremes, the willfulness or negligence of the violator should be reflected in the amount of the penalty.

In assessing the degree of willfulness or negligence, all of the following points should be considered:

- The degree of control the violator had over the events constituting the violation.
- The foreseeability of the events constituting the violation.
- The level of sophistication within the industry in dealing with compliance issues or the accessibility of appropriate control technology (if this information is readily available). This should be balanced against the technology-forcing nature of the statute, where applicable.
- The extent to which the violator in fact knew of the legal requirement which was violated.

b. Degree of Cooperation

The degree of cooperation of the violator in remedying the violation is an appropriate factor to consider in adjusting the penalty. In some cases, this factor may justify aggravation of the gravity component because the source is not making efforts to come into compliance and is negotiating with the agency in bad faith or refusing to negotiate. This factor may justify mitigation of the gravity component in the circumstances specified below where the violator institutes comprehensive corrective action after discovery of the violation. Prompt correction of violations will be encouraged if the violator clearly sees that it will be financially disadvantageous to litigate without remedying noncompliance. EPA expects all sources in violation to come into compliance expects all sources in violation to come into compliance expeditiously and to negotiate in good faith. Therefore, mitigation based on this factor is limited to no more than 30% of the gravity component and is allowed only in the following three situations:

1. Prompt reporting of noncompliance

The gravity component may be mitigated when a source promptly reports its noncompliance to EPA or the state or local air pollution control agency where there is no legal obligation to do so.

2. Prompt correction of environmental problems

The gravity component may also be mitigated where a source makes extraordinary efforts to avoid violating an imminent requirement or to come into compliance after learning of a violation. Such efforts may include paying for extra work shifts or a premium on a contract to have control equipment installed sooner or shutting down the facility until it is operating in compliance.

3. Cooperation during pre-filing investigation

Some mitigation may also be appropriate in instances where the defendant is cooperative during EPA's pre-filing investigation of the source's compliance status or a particular incident.

c. History of Noncompliance

This factor may be used only to raise a penalty. Evidence that a party has violated an environmental requirement before clearly indicates that the party was not deterred by a previous

governmental enforcement response. Unless one of the violations was caused by factors entirely out of the control of the violator, the penalty should be increased. The litigation team should check for and consider prior violations under all environmental statutes enforced by the Agency in determining the amount of the adjustment to be made under this factor.

In determining the size of this adjustment, the litigation team should consider the following points:

- Similarity of the violation in question to prior violations.
- Time elapsed since the prior violation.
- The number of prior violations
- Violator's response to prior violation(s) with regard to correcting the previous problem and attempts to avoid future violations.
- The extent to which the gravity component has already been increased due to a repeat violation. (For example, under the Asbestos Demolition and Renovation Penalty Policy in Appendix III.)

A violation should generally be considered "similar" if a previous enforcement response should have alerted the party to a particular type of compliance problem. Some facts indicating a "similar violation" are:

- Violation of the same permit.
- Violation of the same emissions standard.
- Violation at the same process points of a source.
- Violation of the same statutory or regulatory provision.
- A similar act or omission.

For purposes of this section, a "prior violation" includes any act or omission resulting in a State, local, or federal enforcement response(e.g., notice of violation warning letter, administrative order, field citation, complaint, consent decree, consent agreement, or administrative and judicial order) under any environmental statute enforced by the Agency unless subsequently dismissed or withdrawn on the grounds that the party was not liable. It also includes any act or omission for which the violator has previously been given written notification, however informal, that the regulating agency believes a violation exists. In researching a defendant's compliance history, the litigating team should check to see if the defendant has been listed pursuant to Section 306 of the Act.

In the case of large corporations with many divisions or wholly-owned subsidiaries, it is sometimes difficult to determine whether a prior violation by the parent corporation should trigger the adjustments described in this section. New ownership often raises similar problems. In making this determination, the litigation team should ascertain who in the organization exercised or had authority to exercise control or oversight responsibility over the violative conduct. Where the parent corporation exercised or had authority to exercise control over the violative conduct, the parent corporation's violations should be considered part of the subsidiary or division's compliance history.

In general, the litigation team should begin with the assumption that if the same corporation was involved, the adjustment for history of noncompliance should apply. In addition, the team should be wary of a party changing operations or shifting responsibility for compliance to different groups as a way of avoiding increased penalties. The Agency may find a consistent pattern of noncompliance by many divisions or subsidiaries of a corporation even though the facilities are at different geographic locations. This often reflects, at best, a corporate-wide indifference to environmental protection. Consequently, the adjustment for history of noncompliance should apply unless the violator can demonstrate that the other violating corporate facilities are under totally independent control.

d. Environmental Damage

Although the gravity component already reflects the amount of environmental damage a violation causes, the litigation team may further increase the gravity component based on severe environmental damage. As calculated, the gravity component takes into account such factors as the toxicity of the pollutant, the attainment status of the area of violation, the length of time the violation continues, and the degree to which the source has exceeded an emission limit. However, there may be cases where the environmental damage caused by the violation is so severe that the gravity component alone is not a sufficient deterrent, for example, a significant release of a toxic air pollutant in a populated area. In these cases, aggravation of the gravity component may be warranted.

III. LITIGATION RISK

The preliminary deterrence amount, both economic benefit and gravity components, may be mitigated in appropriate circumstances based on litigation risk. Several types of litigation risk may be considered. For example, regardless of the type of violations a defendant has committed or a particular defendant's reprehensible conduct, EPA can never demand more in civil penalties than the statutory maximum (twenty-five thousand dollars per day per violation). In calculating the statutory maximum, the litigation teams should assume continuous noncompliance from the first date of provable violation (taking into account the five year statute of limitation) to the final date of compliance where appropriate, fully utilizing the presumption of Section 113(e)(2). When the penalty policy yields an amount over the statutory maximum, the litigation team should propose an alternative penalty which must be concurred on by their respective management just like any other penalty.

Other examples of ligation risks would be evidentiary problems, or an indication from the court, mediator, or Administrative Law Judge during settlement negotiations that he or she is prepared to recommend a penalty below the minimum settlement amount. Mitigation based on the concerns should consider the specific facts, equities, evidentiary issues or legal problems pertaining to a particular case as well as the credibility of government witnesses.

Adverse legal precedent which the defendant argues is indistinguishable from the current enforcement action is also a valid litigation risk. Cases raising legal issues of first impression should be carefully chosen to present the issue fairly in a factual context the Agency is prepared to litigate. Consequently in such cases, penalties should generally not be mitigated due to the risk the court may rule against EPA. If an issue of first impression is litigated and EPA's position is upheld by the court, the mitigation was not justified. If EPA's position is upheld by the curt, the mitigation was not justified. If EPA's position is not upheld, it is generally better that the issue be decided than to avoid resolution by accepting a low penalty. Mitigation based on litigation risk should be carefully documented and explained in particular detail. In judicial cases this should be done in coordination with the Department of Justice.

IV. ABILITY TO PAY

The Agency will generally not request penalties that are clearly beyond the means of the violator. Therefore, EPA should consider the ability to pay a penalty in adjusting the preliminary deterrence amount, both gravity component and economic benefit component. At the same time, it is important that the regulated community not see the violation of environmental requirements as a way of aiding a financially-troubled business. EPA reserves the option, in appropriate circumstances, of seeking a penalty that might contribute to a company going out of business.

For example, it is unlikely that EPA would reduce a penalty where a facility refuses to correct a serious violation. The same could be said for a violator with a long history of previous violations. That long history would demonstrate that less severe measures are ineffective.

The litigation team should assess this factor after commencement of negotiations only if the source raises it as an issue and only if the source provides the necessary financial information to evaluate the source's claim. The source's ability to pay should be determined according to the December 16, 1986 Guidance on Determining a Violator's Ability to Pay a Civil Penalty (GM-56) along with any other appropriate means.

The burden to demonstrate inability to pay, as with the burden of demonstrating the presence of any other mitigating circumstances, rests on the defendant. If the violator fails to provide sufficient information, then the litigation team should disregard this factor in adjusting the penalty. The Office of Enforcement Policy has developed the capability to assist the Regions in determining a firm's ability to pay. This is done through the computer program, ABEL. If ABEL indicates that the source may have an inability to pay, a more detailed financial analysis verifying the ABEL results should be done prior to mitigating the penalty.

Consider delayed payment schedule with interest: When EPA determines that a violator cannot afford the penalty prescribed by this policy, the next step is to consider a delayed payment schedule with interest. Such a schedule might even be contingent upon an increase in sales or some other indicator of improved business. EPA's computer program, ABEL, can calculate a delayed payment amount for up to five years.

Consider straight penalty reductions as a last recourse: If this approach is necessary, the reasons for the litigation team's conclusion as the size of the necessary reduction should be carefully documented in the case file.[6]

Consider joinder of a corporate violator's individual owners: This is appropriate if joinder is legally possible and justified under the circumstances. Joinder is not legally possible for SIP cases unless the prerequisite of Section 113 of the Clean Air Act has been met -- issuance of an NOV to the person.

Regardless of the Agency's determination of an appropriate penalty amount to pursue based on ability to pay considerations, the violator is always expected to comply with the law.

[6] If a firm fails to pay the agreed to penalty in a final administrative or judicial order, then the Agency must follow the procedures outlined in the February 6, 1990 Manual on Monitoring and Enforcing Administrative and Judicial Orders for collecting the penalty amount.

V. OFFSETTING PENALTIES PAID TO STATE AND LOCAL GOVERNMENTS OR CITIZEN GROUPS FOR THE SAME VIOLATIONS

Under Section 113(e)(1), the court in a civil judicial action or the Administrator in a civil administrative action must consider in assessing a penalty "payment by the violator of penalties previously assessed for the same violation." While EPA will not automatically subtract any penalty amount paid by a source to a State or local agency in an enforcement action or to a citizen group in a citizen suit for the same violation that is the basis for EPA's enforcement action, the litigation team may do so if circumstances suggest that it is appropriate. The litigation team should consider primarily whether the remaining penalty is a sufficient deterrent.

VI. SUPPLEMENTAL ENVIRONMENTAL PROJECTS

The February 12, 1991 Policy on the Use of Supplemental Environmental Projects in EPA Settlements must be followed when reducing a penalty for such a project in any Clean Air Act Settlement.

VII. CALCULATING A PENALTY IN CASES WITH MORE THAN ONE TYPE OF VIOLATION

EPA often takes an enforcement action against a stationary source for more than one type of violation of the Clean Air Act. The economic benefit of noncompliance with all requirements violated should be calculated. Next, the gravity component factors under actual or possible harm and importance to the regulatory scheme which are applicable should be calculated separately for each violation. The size of the violator factor should be figured only once for all violations.

For example, consider the case of a plant which makes laminated particle board. The particle board plaint is found to emit particulate in violation of the SIP particulate emission limit and the laminating line which laminates the particle board with a vinyl covering is found to emit volatile organic compounds in violation of the SIP VOC emission limit. The penalty or the particulate violation should be calculated figuring the economic benefit of not complying with that limit (capital cost of particulate control, etc., determined by running the BEN computer model), and then the gravity component for this violation should be calculated using all the factors in the penalty policy. After the particulate violation penalty is determined, the VOC violation should be calculated as follows: the economic benefit should be calculated for the VOC violation using all the applicable factors under actual or possible harm and importance to the regulatory scheme. The size of the violator factor should be figured only once for both violations.

Another example would be a case where, pursuant to Section 114, EPA issues a request for information to a source which emits SO2, such as a coal-burning boiler. The source does not respond. Two months later, EPA issues an order under Section 113(a) requiring the source to comply with the Section 114 letter. The source does to respond. Three months later, EPA inspects the source and determines that the source is violating the SIP SO_2 emission limit.

In this case, separate economic benefits should be calculated, if applicable. Thus, if the source obtained any economic benefit from not responding to the Section 114 letter or obeying the Section 113(a) order, that should be calculated. If not, only the economic benefit from the SO_2 emission violation should be calculated using the BEN computer model. In determining the gravity component, the penalty should be calculated as follows:

1. Actual or possible harm

    a. level of violation - calculate for the emission violation only

    b. toxicity of pollutant - applicable to the emission violation only

    c. sensitivity of environment - applicable to the emission violation only

    d. length of time of violation - separately calculate the time for all three violations. Note the Section 114 violation continues to run even after the Section 113(e) order is issued until the Section 114 requirements are satisfied.

2. Importance to regulatory scheme

    Section 114 request for information violation - $15,000
    Section 113 administrative order violation - $15,000

3. Size of violator

    a. One figure based on the source's assets.

VIII. APPORTIONMENT OF THE PENALTY AMONG MULTIPLE DEFENDANTS

This policy is intended to yield a minimum settlement penalty figure for the case as a whole. In many cases, there may be more than one defendant. In such instances, the Government should generally take the position of seeking a sum for the case as a whole, which the defendants allocate among themselves. Civil violations of the Clean Air Act are strict lability violations and it is generally not in the government's interest to get into discussions of the relative fault of the individual defendants. The government should therefore adopt a single settlement figure for the case and should not reject a settlement consistent with the bottom line settlement figure because of the way the penalty is allocated.

Appointment of the penalty in a multi-defendant case may be required if one party is willing to settle and others are not. In such circumstances, the government should take the position that if certain portions of the penalty are attributable to such party (such as economic benefit or aggravation due to prior violations), that party should pay those amounts and a reasonable portion of the amounts not directly assigned to any single party. If the case is settled as to one defendant, a penalty not less than the balance of the settlement figure for the case as a whole must be obtained from the remaining defendants.

There are limited circumstances where the Government may try to influence apportionment of the penalty. For example, if one party has a history of prior violations, the Government may try to assure that party pays the amount the gravity component has been aggravated due to the prior violations. Also, if one party is known to have realized all or most of the economic benefit, that party may be asked to pay that amount.

IX. EXAMPLES

Example 1:

I. Facts:

Company A runs its manufacturing operations with power produced by its own coal-fired boilers[7]. The boilers are major sources of sulfur dioxide. The State Implementation Plan has a sulfur dioxide emission limitation for each boiler of .68 lbs. per million B.T.U. The boilers were inspected by EPA on March 19, 1989, and the SO_2 emission rate was 3.15 lbs. per million B.T.U for each boiler. A NOV was issued for the SO_2 violations on April 10, 1989. EPA again inspected Company A on June 2, 1989 and found the SO_2 emission rate to be unchanged. Company A had never installed any pollution control equipment on its boilers, even though personnel from the state pollution control agency had contacted Company A and informed it that the company was subject to state air pollution regulations. The state had issued an administrative order on September 1, 1988 for SO_2 emission violations at the same boilers. The order required compliance with applicable regulations, but Company A had never complied with the state order. Company A is located in a nonattainment area for sulfur oxides. Company A has net current assets of $760,000. Company A's response to an EPA Section 114 request for information documented the first provable day of violation of the emission standard as July 1, 1988.

II. Computation of penalty

A. Economic benefit component

EPA used the BEN computer model in the standard mode to calculate the economic benefit component. The economic benefit component calculated by the computer model was $243,500.

B. Gravity component

1. Actual or possible harm

a. Amount of pollutant: between 360-390% above standard - $65,000

b. Toxicity of pollutant: not applicable.

c. Sensitivity of the environment: nonattainment - $10,000

d. Length of time of violation: Measured from the date of first provable violation, July 1, 1988 to the date of final compliance under a consent decree, hypothetically December 1, 1991. (If consent decree or judgment order is filed at a later date, this

[7] Note that a penalty is assessed for the entire facility and not for each emission unit. In this example, the source has several boilers. However, the penalty figures are not multiplied by the number of boilers. The penalty is based on the violations at the facility as a whole, specifically the amount of pollutant factor and length of violation factor are assessed once based on the amount of excess emissions at the facility from all the boilers.

element, as well as elements in the economic benefit component must be recalculated.) 41 mos. - $40,000

2. Importance to regulatory scheme.

No applicable violations.

3. Size of violator: net assets of $760,000 - $5,000

$243,500 economic benefit component
+ 120,000 gravity component
$363,500 preliminary deterrence amount

C. Adjustment Factors

1. Degree of willfulness/negligence

Because Company A was on notice of its violations and, moreover, disregarded the state administrative order to comply with applicable regulations, the gravity component in this example should be aggravated by some percentage based on this factor.

2. Degree of Cooperation

No adjustments were made in the category because Company A did not meet the criteria.

3. History of noncompliance

The gravity component should be aggravated by some percentage for this factor because Company A violated the state order issued for the same violation.

Initial penalty figure: $353,500 preliminary deterrence amount plus adjustments for history of noncompliance and degree of willfulness or negligence.

Example 2:

I. Facts

Company C, located in a serious nonattainment area for particulate matter, commenced construction in January 1988. It began its operations in April 1989. It runs a hot mix asphalt plant subject to the NSPS regulations at 40 C.F.R. Part 60, Subpart I. Subpart I requires that emissions of particulate not exceed 90 mg/dscm (.04 gr/dscf) nor exhibit 20% opacity or greater. General NSPS regulations require that a source owner or operator subject to a NSPS fulfill certain notification and recordkeeping functions (40 C.F.R. § 60.7), and conduct performance tests and submit a report of the test results (40 C.F.R. § 60.8).

Company C failed to notify EPA of: the date it commenced construction within 30 days after such date (February 1988)(40 C.F.R. § 60.7(a)(1)); the date of anticipated start-up between 30-60 days prior to such date (March, 1989)(40 C.F.R. § 60.7(a)(2)); or the date of actual start-up within 15 days after such date (April, 1989) (40 C.F.R. § 60.7(a)(3). Company C was required under 40 C.F.R. § 60.8(a) to test within 180 days of start-up, or by October 1989.

The company finally conducted the required performance test in September 1990. The test showed the plant to be emitting 120 mg/dscm of particles and to exhibit 30% opacity.

Company C did submit the required notices in November 1989 in response to a letter from EPA informing it that it was subject to NSPS requirements. It did negotiate with EPA after the complaint was filed in September 1991, and agreed to a consent decree requiring compliance by December 1, 1991. Company C has assets of $7,000,000.

II. Computation of penalty

A. Benefit component

The Region determined after calculation that the economic benefit component was $90,000 for violation of the emissions standard according to the BEN computer calculation. The litigation team determined that the economic benefit from the notice and testing requirement was less than $5,000. Therefore, the litigation team has discretion not to include this amount in the penalty consistent with the discussion at II.A.3.a.

B. Gravity component

1. Actual or possible harm

a. Amount of pollutant:

I. mass emission standard: 33% above standard - $10,000
ii. opacity standard: 50% over standard - $10,000

b. Toxicity of pollutant: not applicable

c. Sensitivity of the environment serous nonattainment - $14,000

d. Length of time of violation

1) Performance testing: October, 1989 - September 1990: 12 months - $15,000

2) Failure to report commencement of construction: February 1988 - November 1989: 21 months (date of EPA's first letter to Company) - $25,000

3) Failure to report actual start-up: April, 1989 - November 1989: 7 months - $15,000

4) Failure to report date of anticipated startup between 30-60 days prior to such date: March, 1989 - November 1989: 8 months - $15,000

5) Mass Emission Standard Violation: September 1990 - December 1991: 15 months - $20,000

6) Opacity Violation: September 1990 - December 1991: 15 months - $20,000

2. Importance to regulatory scheme:

Failure to notify 40 C.F.R. § 60.7(a)(1) - $15,000

Failure to notify 40 C.F.R. § 60.7(a)(2) - $15,000

Failure to notify 40 C.F.R. § 60.7(a)(3) - $15,000

Failure to conduct required performance test 40 C.F.R. § 60.8(a) - $15,000

3. Size of violator: Net current Assets - $7,000,000 - $20,000

$ 90,000 economic benefit component
224,000 gravity component
$314,000 preliminary deterrence amount

C. Adjustment factors

1. Degree of willfulness/negligence

No adjustments were made based on willfulness in this category because there was no evidence that Company C knew of the requirements prior to receiving the letter from EPA. Specific evidence may suggest that the company's violations were due to negligence justifying an aggravation of the penalty on that basis.

2. Degree of Cooperation

No adjustments were made in this category because Company C did not meet the criteria.

3. History of noncompliance

The gravity component should be aggravated by an amount agreed to by the litigation team for this factor because the source ignored two letters from EPA informing them of the requirements.

Example 3:

I. Facts

Chemical Inc. operates a mercury cell chlor-alkali plant which produces chlorine gas. The plant is subject to regulations under the National Emissions Standard for Hazardous Air Pollutants (NESHAP) for mercury, 40 C.F.R. Part 61, Subpart E. On September 9, 1990, EPA inspectors conducted an inspection of the facility, and EPA required the source to conduct a stack test pursuant to Section 114. The stack test showed emissions at a rate of 3000 grams of mercury per 24-hour period. The mercury NESHAP states that emissions from mercury cell chlor-alkali plants shall not exceed 2300 grams per 24-hour period. The facility has been in operation since June 1989.

In addition under 40 C.F.R. § 61.53, Chemical Inc. either had to test emissions from the cell room ventilation system within 90 days of the effective date of the NESHAP or follow

specified approved sign, maintenance and housekeeping practices. Chemical Inc. has never tested emissions. Therefore, it has committed itself to following the housekeeping requirements. At the inspection, EPA personnel noted the floors of the facility were badly cracked and mercury droplets were found in several of the cracks. The inspectors noted that the mercury in the floor cracks was caused by leaks from the hydrogen seal pots and compressor seals which housekeeping practices require be collected and confined for further processing to collect mercury. A follow up inspection was conducted on September 30, 1990 and showed that all of the housekeeping requirements were being observed. Chemical Inc. will have to install control equipment to come into compliance with the emissions standard. A complaint was filed in June 1991. The equipment was installed and operational by June 1992. A consent decree was entered and penalty paid in February 1992. Chemical Inc. has a net corporate worth of $2,000.000.

II. Calculation of Penalty

A. Economic Benefit Component

The delay in installing necessary control equipment from June 1989 to June 1992 as calculated using the BEN computer model resulted in an economic benefit to Chemical Inc. Of $35,000.

B. Gravity Component

1. Actual or possible harm

a. Amount of pollutant: 30 % above the standard - $5,000

b. Toxicity of pollutant: $15,000 for violations involving a NESHAP

c. Sensitivity of the environment: not applicable

d. Length of time of violation:

1) Emissions violation: 22 mos. - $25,000

2) Work Practice violation: 1 mo. - $5,000

2. Importance to regulatory scheme.

Failure to perform work practice requirements - $15,000

3. Size of Violator: net worth of $2,000,000 - $10,000

$35,000 economic benefit component
+ 75,000 gravity component
$110,000 preliminary deterrence amount

C. Adjustment Factors

1. Degree of willfulness/negligence

It is unlikely Chemical Inc. would not be aware of the NESHAP requirements. Therefore, an adjustment should probably be made for this factor.

2. Degree of Cooperation

   No adjustments made because Chemical Inc. Did not meet the criteria.

3. History of Compliance

   No adjustments were made because Chemical Inc. had no prior violations.

X. CONCLUSION

Treating similar situations in a similar fashion is central to the credibility of EPA's enforcement effort and to the success of achieving the goal of equitable treatment. This document has established several mechanisms to promote such consistency. Yet it still leaves enough flexibility for tailoring the penalty to still leaves enough flexibility for tailoring the penalty to particular circumstances. Perhaps the most important mechanisms for achieving consistency are the systematic methods for calculating the benefit component and gravity component of the penalty. Together, they add up to the preliminary deterrence amount. The document also sets out guidance on uniform approaches for applying adjustment factors to arrive at an initial amount prior to beginning settlement negotiations or an adjusted amount after negotiations have begun.

Nevertheless, if the Agency is to promote consistency, it is essential that each case file contain a complete description of how each penalty was developed as required by the August 9, 1990 Guidance on Documenting Penalty Calculations and Justifications in EPA Enforcement Actions. This description should cover how the preliminary deterrence amount was calculated and any adjustments made to the preliminary deterrence amount. It should also describe the facts and reasons which support such adjustments. Only through such complete documentation can enforcement attorneys, program staff and their managers learn from each other's experience and promote the fairness required by the Policy on Civil Penalties.

Appendices:

I. Permit Penalty Policy
II. Vinyl Chloride Penalty Policy
III. Asbestos Penalty Policy
IV. VOC Penalty Policy
V. Air Civil Penalty Worksheet
VI. Volatile Hazardous Air Pollutant Penalty Policy
VII. Residential Wood Heaters Penalty Policy
VIII. Stratospheric Ozone Penalty Policy

[The Appendices are not reproduced in this version. All of the Appendices are available at: http://es.epa.gov/oeca/aed/comp/bcomp]

APPENDIX C:
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