



PUBLIC

Kansas Department of Health and Environment
Bureau of Air and Radiation
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**Reporting Deviations
Technical Guidance Document – BAR 2006-01**

Purpose Statement: To provide Class I Permit holders with guidance on reporting of deviations.

Class I Operating Permits contain the following language:

Reporting of Deviations from Permit Terms

Unless a different time period is specified in this permit, deviations from the requirements of this permit shall be reported to KDHE as follows:

- a. Deviations which result in emissions exceeding those allowed in this permit shall be reported the next business day (immediate deviation reports) following the discovery of the release, with follow-up written notice within five business days following discovery of the release. The report shall include the probable cause of such deviations and any corrective actions or preventive measures taken.*
- b. Deviations which do not result in emissions exceeding those allowed in this permit shall be reported in writing within 10 business days following discovery of the deviation.*

Oral notifications may be made to the air quality program field staff at the District Office in [...] or to the KDHE central office in Topeka. Written notifications shall be made to the KDHE central office with a copy to the [...] District Office.

The purpose of the immediate deviation reports described above is to identify actions/steps needed to get a process with excess air emissions, back into compliance with a limitation or other requirement. The deviation reports give KDHE the opportunity to provide constructive feedback within a short period of time while a process is being repaired; or to provide suggestions on the course of action that should be taken to minimize emissions and return the facility to compliance.

Deviations can include: operating above emission limitations, exceeding required ranges of operating parameters of an emission unit or control device, not following required work practice standards, exceeding required operational limitations, not following monitoring obligations, and/or failure to maintain records or submit reports.

In addition to the immediate deviation reports, each facility subject to monitoring requirements in the Class I operating permit is required to submit semi-annual monitoring reports which identify all instances of deviations from permit requirements. Facilities subject to the following rules also may have specific reporting requirements for deviations:

- 40 CFR Part 60 standards - New Source Performance Standards (NSPS)),
- 40 CFR Part 61 standards - National Emission Standards for Hazardous Air Pollutants (NESHAPS)
- 40 CFR Parts 63 standards - National Emission Standards for Hazardous Air Pollutants (NESHAPS) commonly referred to as Maximum Achievable Control Technology (MACT) Standards

In most cases, the deviation reporting requirements for these standards (underlying requirements) will supersede the general deviation report requirements contained in the *Reporting of Deviations from Permit Terms* section of the permit

I. When Is A Deviation Report Required?

There are several requirements regarding the reporting of deviations and exceedances. This guidance document will attempt to clarify the requirements for reporting deviations and the appropriate reporting frequency and timeframe.

The reporting frequency is determined by the underlying applicable requirement or regulation (examples of underlying requirements include 40 CFR Part 60, 61 and 63 standards (NSPS, NESHAP and MACT), If the underlying requirement is silent on reporting frequency requirements, then the operating permit shall identify the acceptable reporting frequency sufficient to demonstrate compliance as follows:

A. Next Business Day / 5 Day Reporting Requirements

General Provision in Class I operating Permit:

Deviations which result in exceeding limits (emissions or other) allowed in the permit shall be reported the next business day following the discovery of the release, with follow-up written notice within five business days following discovery of the release.

- 1) If an underlying applicable requirement contained within the permit includes excess emissions reporting requirements, that reporting requirement supersedes the next business day / 5 day reporting requirement.
- 2) Quantifiable emission limitations and operating parameter ranges that contain specific limitations for regulated pollutants with a defined time constraint (lbs/hr, tons/month, rolling 12-month total, etc) would be required to follow the next business day / 5 day reporting requirement unless the limit is based on an underlying requirement.

Example of a Deviation that requires next business day / 5 day reporting:

A facility has a permit limit in place that requires a thermal oxidizer to control emissions in order to avoid a federal requirement. The thermal oxidizer was shut down for a short period of time due to a malfunction. Thermal oxidizer downtime is a deviation that requires next business day reporting, with a follow-up written notice within five business days, because operation of the thermal oxidizer was a required limit of the permit.

B. 10 day Reporting Requirements

Deviations which do not result in exceeding limits allowed in the permit shall be reported in writing within 10 business days following discovery of the deviation.

- 1) When an applicable requirement does **not** contain a reporting requirement for deviations, the operating permit requires the information to be reported within ten days of the facility first becoming aware of the deviation.
- 2) Deviations related to operating parameter ranges that are not monitored continuously and do not contain an underlying requirement with a specified reporting frequency would be required to report within 10 days following discovery.

Example of an exception to the next business day / 5 day / 10 day reporting:

If the facility is subject to a 40 CFR Part 63 standard and the general provisions of 40 CFR Part 63, Subpart A, require a Startup, Shutdown and Malfunction (SSM) Plan. A report of any deviation from the procedures specified in the SSM Plan which result in the exceedance of an emission limitation must be reported within two working days after the action. The two-day report must include the actions taken for the event. If the two-day notification is submitted, the facility must also submit a letter within seven working days after the end of the event, in accordance with §63.10(d)(5).

Note: Deviations reported under the next business day / 5 day / 10 day reporting requirements must also be noted in the Class I Operating Permit semi-annual report. The report which originally contained the details of the deviation may be referenced in the semi-annual report.

II. What other types of deviation reports are required?

As noted above, several of the process and pollutant specific standards in 40CFR 60, 61, and 63 require specific reports and reporting frequencies. Reporting of deviations in these reports supersedes general deviation reporting requirements. These types of reports are described as follows:

A. Continuous Monitoring Systems

Specific deviation reporting requirements are provided for facilities that install continuous

monitoring systems (CMS). The continuous monitoring systems are typically required for compliance with 40 CFR 60, 61, and 63 standards but may also be required by a specific permit condition. CMS include any of the following monitoring systems:

- Continuous emission monitoring systems (CEMS)
- Continuous opacity monitoring systems (COMS)
- Continuous Parameter Monitoring Systems (CPMS) and
- Other manual or automatic monitoring used for demonstrating compliance with an applicable regulation on a continuous basis

The applicable requirements for continuous monitoring systems require the facility to submit quarterly or semi-annual reports of the continuously recorded data. These quarterly or semi-annual reports are required by the underlying requirement to contain the data to determine both deviations and exceedances.

The COMS reporting requirement also serves as reporting of deviations. Opacity emissions are monitored by COMS and are averaged on a six minute period and reported quarterly or semi-annually with the nature and cause of the excess emissions. Excess emissions do not necessarily result in an exceedance (or a deviation), this depends on the conditions concerning the excess emissions (start-up, shutdown, malfunction are usually excluded).

The CEMS reporting requirements under construction permit conditions and other applicable requirements require the facility to submit quarterly or semi-annual reports. Similar to the COMS, these quarterly or semi-annual reports required by the underlying requirement also contain the data to determine whether excess emissions are deviations or exceedances.

All continuous monitoring systems (pressure drops, etc.) and parametric monitoring systems (referred to as CPMS) should follow the same guidelines as for CEMS and COMS. Facilities that monitor operating parameters on a continuous basis or monitor processes and parameters with a computer program or data reduction system can submit deviation and exceedance reports on a quarterly or semi-annual basis as required by the underlying regulation or permit.

Therefore, submittal of the quarterly or semi-annual reports for the CEMS, COMS, and CPMS requirements satisfies the deviation reporting requirements of the Class I Operating Permit and the exceedance reporting requirements of 40 CFR Parts 60 and 63. KDHE requests that facilities reference these reports in the Class I permit semi-annual reports.

(For example a facility complying with a 40 CFR Part 63 standard that installs a continuous monitoring system is subject to the requirement to submit a Summary Report and/or a Gaseous and Opacity Excess Emissions and Continuous Monitoring System Performance Report. The report content requirements are provided at 40CFR63.10(e)(3). The full excess emissions report is only required if the emissions or monitored parameters exceed the levels specified in the specific NESHAP or Part 63 general provisions. Similar reporting requirements exist for sources with CMS subject to 40 CFR Part 60 standards.)

B. Work Practice Standards

Work practice standards are operating procedures that a facility must adhere to, but do not contain specific quantifiable emission limitations. Some examples of work practice standards are “the facility shall keep containers that store volatile materials closed or covered except during the addition or removal of materials”, “all personnel shall be trained once per year”, “the permittee shall prepare and maintain a written work practice implementation plan”, and “the permittee shall place solvent cloths in closed containers”.

The impact of the exceedance for these specific housekeeping measures is usually not as severe as a deviation from a quantifiable emission limitation. If an emission unit is uncontrolled and is not subject to any emission limitations other than work practice standards [e.g., dust suppression plan; keeping lids on solvent containers], then KDHE believes it is acceptable for the facility to report any departure from the aforementioned work practice standards no more frequently than in the semi-annual Class I Permit report, unless the underlying requirement requires a more frequent submission of deviation reports or the operating permit contains a more detailed condition requiring specific reports other than the semi-annual monitoring report. The KDHE will examine work practice standards and the underlying requirements on a case-by-case basis. When a specific underlying requirement requires specific reporting of work practice standards, then the underlying requirement governs.

C. Part 63 Startup, Shutdown, and Malfunction Reports

For those facilities subject to the startup, shutdown and malfunction requirements contained in the General Provisions of 40 CFR Part 63, Subpart A, the NESHAP semi-annual report must include the information required for the periodic startup, shutdown and malfunction reports provided in §63.10(d)(5).

- If the actions taken during a startup, shutdown, or malfunction are inconsistent with the startup, shutdown and malfunction plan (SSMP) and an emission limitation is exceeded, the actions taken must be reported within 2 working days after commencing the actions and written notice of the event is required 7 working days after the end of the event §63.10(d)(5)(ii).
- If the actions taken are inconsistent with the SSMP but did not result in an exceedance of an emission limitation, the information should be included with the source’s periodic startup, shutdown and malfunction report (submitted as part of the NESHAP report) on a semiannual basis §63.10(d)(5)(i).
- These deviations should also be referenced in the Class I permit semi-annual report.

III. What Deviations should be reported in Semi-annual Monitoring Reports and Annual Certifications?

The Title V semi-annual report is required to identify all instances of deviations from permit requirements since the previous annual compliance certification or semi-annual report. In addition to identifying the deviations, the principal purpose of semi-annual reports is to summarize all monitoring required during the reporting period and (where applicable) to provide information on any separate monitoring reports required by the permit (such as reports required by 40 CFR Parts 60, 61, 63 or other applicable requirements) that

are either submitted at this time or were submitted previously during the reporting period. If the deviation is already described in detail in previously submitted reports (such as an NSPS COMS report), it is sufficient to reference the title and date of the report in the semi-annual monitoring report.

Annual Compliance Certifications (completed on the KDHE CR-02 form) are due annually and provide a certification of the facility compliance status of each term or condition of the permit during the compliance period. If Section 2.0 on either block of the form is checked (i.e. non-compliance occurred during the certification period) an attachment to the report is required which provides a summary of the nature, duration, and frequency of the non-compliance. The annual certifications are also required to be submitted to the EPA Region VII. A summary of each non-compliance must accompany the annual certification report. It is not sufficient to reference previously submitted reports. However the previously submitted reports may be referenced to provide additional details of the non-compliance. Note that some deviations might not be defined by the underlying requirements as non-compliance.

The KDHE developed examples of the semi-annual reports and a form for annual compliance certifications. These are located on the KDHE web site at:

http://www.kdhe.state.ks.us/air-permit/tech_guidance.html

and

<http://www.kdhe.state.ks.us/air-permit/download.html>

IV. Where can I find the deviation reporting guidelines for underlying requirements?

The reporting requirements for the 40 CFR Part 60, 61, and 63 standards also contain guidelines for reporting deviations. Review the process or pollutant specific subpart of the standards for deviation reporting requirements particular to the subpart. The subpart deviation reporting requirements will specify whether the general provisions of the standard apply in addition to those required by the subpart. If the subpart does not have specific deviation reporting requirements, the general reporting requirements of the standard applies. The general deviation reporting requirements for each subpart can found in the rules as follows:

- A. NSPS - 40 CFR 60.7(c) and (d) for excess emissions and monitoring systems performance reports and/or summary reports
- B. NESHAP - 40 CFR 61 does not contain any general deviation reporting requirements – refer to the pollutant specific subpart for any deviation reporting requirements
- C. NESHAP (MACT)- 40 CFR 63.10(d)(5) for periodic and immediate startup, shutdown, and malfunction reports and/or 40CFR 63.10(e)(3) for Excess emissions and continuous monitoring system performance and summary reports

V. Where can I find other sources for deviation reporting requirements?

The requirements for reporting deviations in the Class I Operating Permit semi-annual summary reports are provided in K.A.R. 28-19-512 (a)(11) and the Testing, Monitoring, Recordkeeping and Reporting section

of the facility Class I Operating Permit. Exceptions due to breakdowns or scheduled maintenance may apply per K.A.R. 28-19-11. Refer to Technical Guidance Document: BAR 2005-01 (http://www.kdheks.gov/air-permit/forms/BAR_2005-01_KAR_28-19-11.pdf) for a detailed description of the specific limited conditions for which this exclusion applies.

VI. In Summary

To determine the requirements for reporting a deviation follow these steps:

- 1) Identify the type of deviation (i.e. emission/limitation exceedance vs. other types of deviations)
- 2) Identify the underlying requirement of the condition for which there was a deviation (such as determine whether the permit condition was based on a NSPS requirement, PSD permit condition, or K.A.R. regulation)
- 3) If there is an underlying requirement, evaluate the deviation reporting requirements starting with:
 - the subpart of the underlying requirement
 - then the general provisions of underlying requirements
- 4) If there is not a reporting period defined in the underlying requirement, follow the immediate Deviation Reporting Requirements under the General Provisions of the permit
- 5) Reference all deviations that occurred during the six-month reporting period in the semi-annual monitoring report
- 6) Provide a summary of all deviations during the previous year as an attachment to the Annual Compliance Certification.

In the event that more than one underlying requirement for reporting applies to a deviation, report the deviation using the most stringent (i.e. earliest) schedule for reporting. However include the deviation in the other required reports when due.

Confused? Just call Mary Mahaffey (785)296-1548 or your assigned permit engineer.
For your facility's assigned permit engineer go to <http://www.kdheks.gov/air-permit/index.html>.

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