

# Permitting Consent Decree Emission Limits and Standards

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# Permits are Extremely Important Part of Consent Decrees

## Sample Consent Decree Language

*No later than 120 days following the Date of Lodging, the Company shall:*

- (1) submit applications to incorporate the emission limits and standards required by the Consent Decree into minor or major new source review permits or other permits (other than Title V permits), which are federally enforceable; and*
- (2) upon issuance of such permits, shall file any applications necessary to incorporate the requirements of those permits into the Company's Title V permit.*

# Permitting Consent Decree Emission Standards and Limits

## Goals of this Session

- ▶ Identify consent decree requirements that typically survive termination.
- ▶ Provide examples of properly incorporating consent decree requirements into permits.

# Identifying Consent Decree Requirements that Survive Termination

A typical consent decree can include:

1. Injunctive Relief;
2. Penalty; and/or
3. Mitigation.

Consent decree requirements that survive termination can be found in all of these sections.

# Identifying Consent Decree Requirements that Survive Termination

## 1. Injunctive Relief

- Comply with current regulations (*e.g.*, NSPS)
- Steps to come into compliance (*e.g.*, install pollution control equipment to meet BACT-like limits)
- Shutdowns

## 2. Penalty

- Supplemental Environmental Projects
- Beneficial Environmental Projects

## 3. Mitigation

- Limits on non-violating units to mitigate the prior illegal emissions

No. 1- Permitting Emission Limits That  
Were Coupled With An NSR Release- aka  
BACT-Like Limits and Standards

# BACT-Like Emission Limits or Standards

Must apply continuously- *i.e.*, some limit or standard must apply at all times.

Issues with permitting:

- Facility-wide requirements use a general authority allowing exemptions for start-ups, shutdowns, or malfunctions (SSM) at the discretion of the permitting agency or automatic exemptions.
- Director's discretion and the ability to waive testing or monitoring (such provisions do not yield reliable data as required by 70.6(a)- *See In re Midwest Gen Crawford* (2004)).
- CEMs QA/QC provisions (or exclusions) contain an exclusion to compliance beyond the specific provisions for QA/QC such as a provision in the general monitoring section that CEMS data shall be used "at the Director's discretion" to determine compliance.

# BACT-Like Emission Limits or Standards

- Shorter term limits from the consent decree (*e.g.*, 24-hour avg., 7-day avg.) exclude start-up, shutdown, and/or malfunction emissions but there is no exclusion in the consent decree. Exclusions should be permitted only if:
  - there is a longer-term limit for that same pollutant that applies at all times (*e.g.*, 30 day rolling average) and
  - the exclusion is in the consent decree.
- Shorter term limits that are conditioned on the source following a “plan” at these times (*e.g.*, Hydrotreater Outage Plan), the requirement to follow the plan at these times is not in the permit.



# BACT-Like Emission Limits or Standards

## Emission Limits

- Limits in the permit must match the CD
  - 500 ppm is not the same as “500 ppmvd at 0% O<sub>2</sub>”
  - TSP is not the same as “PM”
- Limits in the CD should not be rounded up in the permit
  - 3.3 lbs/hr is not the same as “3.26 lbs/hr”
  - 0.04 lbs/hr is not the same as “0.040 lbs/hr”

# BACT-Like Emission Limits or Standards

## Emission Limits

- Averaging periods in the permit must match the CD
  - 1 lb PM/1,000 lbs coke is not same as “1 lb PM/1,000 lb coke on a 3-hr average”
  - Annual is not the same as “365-day”
  - Citing to a excess emission reporting requirements is not a sufficient substitute
- If the CD specifies measurement techniques (*e.g.*, front half) - the permit must contain that requirement to avoid ambiguity with other requirements

**NOTE: Permitting Authority can streamline, but consent decree requirements cannot just be replaced.**

## Example: Limits Coupled with an NSR Release

### Consent Decree Language:

*17D. Beginning October 31, 2005, the Company shall comply with a final NOx emission limit of 40 ppmvd at 0% oxygen on a 365-day rolling average basis and a 60 ppmvd at 0% oxygen on a 7-day rolling average basis from the No. 4 FCCU.*

...

*NOx emission data during startup, shutdown or malfunction of an FCCU will not be used in determining compliance with the short-term NOx emission limits provided that during such periods the Company implements good air pollution control practices to minimize the emissions of NOx.*

# Example: Limits Coupled with an NSR Release (con't)

## From the Construction Permit

EU ID	Pollutant	Emission Limits
FCCU No. 4	NO <sub>x</sub>	60 (3)(6)(7) / 40 (4)(5)(7)

3. Limit is ppmdv @ 0% oxygen, 7-day rolling average.
4. Limit is ppmdv @ 0% oxygen, 365-day rolling average.
5. Applies at all times of operation including during startup, shutdown and malfunction.
6. Shall exclude periods of startup, shutdown and malfunction but shall apply at all other times that the No. 4 FCCU is operating.
7. For days when the No. 4 FCCU is not operating, which will be defined as operating less than 18 clock hours from midnight to midnight, no values shall be used to calculate averages and those periods shall be skipped in determining the 7-day and 365-day averages.

# Example: Limits Coupled with an NSR Release (con't)

## Revised Construction Permit Language

EU ID	Pollutant	Emission Limits
FCCU No. 4	NO <sub>x</sub>	60 <sup>(3)(6)(7)</sup> / 40 <sup>(4)(5)(7)</sup>

3. Limit is ppmdv @ 0% oxygen, 7-day rolling average.
4. Limit is ppmdv @ 0% oxygen, 365-day rolling average.
5. Applies at all times of operation including ~~during~~ startup, shutdown and malfunction of the FCCU and corresponding control equipment.
6. Applies at all times of operation except that emission data during ~~Shall exclude periods of startup and shutdown and malfunction of the FCCU but shall apply at all other times that the No. 4 FCCU is operating~~ will not be used in determining compliance with the short-term NOx emission limits provided that during such periods the Company implements the alternate standards in Condition 23.
7. For days when the No. 4 FCCU is not operating **at all**, ~~which will be defined as operating less than 18 clock hours from midnight to midnight,~~ no values shall be used to calculate averages and those periods days shall be skipped in determining the 7-day and 365-day averages. If the FCCU operates any portion of a day, then the emission data during those periods will be included in determining the daily averages (e.g., emissions from operation from 12:00 am to 1:00 pm will be used for that day).

# No. 2- Permitting NSPS or NESHAP Emission Limits and Standards

# NSPS or NESHAP Emission Limits and Standards

- Permits must contain adequate specificity
  - Some permitting authorities prefer to use a non-Title V permitting vehicle when the activity that would trigger the NSPS or NESHAP is not clear in the permitting history
  - General applicability would be acceptable in a non-Title V permit (*e.g.*, construction permit), so long as the Title V explicitly states all emission limitations and operational requirements for all applicable emission units

For Example: NSPS Subpart J allows three options to comply for an affected FCCU- see 40 C.F.R. § 60.104(b). One can measure SO<sub>2</sub> exiting the FCCU or monitor the fresh feed into the FCCU. Each limit has a differing measurement technique- see 40 C.F.R. §§ 60.105(a)(8), 60.105(c), and 60.106(j). The Title V must contain which limit and the corresponding method to determine compliance.

## NSPS or NESHAP Emission Limits and Standards

Older NSPS or NESHAPs may have insufficient monitoring or recordkeeping, such that the CD supplemented the requirements. Often, Consent Decrees will fill this gap. The Title V “gap filling” authority could be used to incorporate the additional monitoring or recordkeeping requirements listed in the Consent Decree.

- For Example: NSPS Subpart J contains both a PM limit of 1 lb/1,000 lbs coke and an opacity limit. NSPS requires COMS, but no regular monitoring to demonstrate compliance with the PM limit (demonstrated initially with the performance test within 180 days). Title V permit should contain periodic testing for PM to ensure compliance with the PM limit.



# Example: NSPS Specificity

## Consent Decree Language:

*101. The FCCU at The Refinery shall be considered an “affected facility” pursuant to 40 C.F.R. § PART 60, Subpart J, and shall comply with all requirements of 40 C.F.R. § Part 60, Subparts A and J, as such provisions relate to SO 2 emissions from the FCCU, by September 30, 2006.*

## Title V Permit Language:

*3. These facilities shall comply with all applicable requirements of the EPA regulations promulgated for the following:*

*A. The FCCU (EPN E-01) is subject to the requirements of 40 C.F.R. § Part 60, Subpart J.*

# Example: NSPS Specificity

## Revised Title V Permit Language:

3. These facilities shall comply with all applicable requirements of the EPA regulations promulgated for the following:

A. The FCCU (EPN E-01) is subject to the requirements of 40 C.F.R. § Part 60, Subpart J: 60.102(a)(1), 60.102(a)(2), 60.103(a), 60.104(b)(1), 60.104(c), 60.104(d), 60.105(a), 60.105(c), 60.105(e), 60.106(b), 60.106(d), 60.106(g), 60.106(h), 60.106(k), 60.107, and 60.108.

# Example: Supplementing the Monitoring

## Consent Decree Language:

*46. On the Date of Lodging of the Consent Decree, The Company shall comply with a PM emissions limit of 1 lb PM/1000 lbs of coke burned at the FCCU determined by a stack test. The Company shall submit the stack test protocol for approval to EPA no later than 240 days following Date of Lodging. Each year, the facilities shall conduct annual stack tests at the FCCU to determine compliance with the PM limit using the approved stack test protocol.*

## Title V Permit Language:

*355. Total suspended particulate  $\leq$  1kg/Mg (2.0 lb/ton) of coke burn-off, except as specified in 40 C.F.R. § 60.102(b).*

# Example: Supplementing the Monitoring

## Revised Permit Language:

355. ~~Total suspended particulate-PM  $\leq$  1kg/Mg (2.0 lb/ton) of coke burn-off, except as specified in 40 C.F.R. § 60.102(b).~~ Annual stack testing must be conducted for the particulate matter emissions by July 1 of each calendar year in accordance with the requirements in 40 C.F.R. § 60.106 (NSPS Subpart J). 40 C.F.R. § 70.6(c)(1) and 40 C.F.R. § 70.6(a)(3).

# No. 3- Inadequate Monitoring, Recordkeeping, and Reporting

# Monitoring, Reporting, and Recordkeeping

NSPS or NESHAP general section cites for monitoring (*e.g.*, 40 C.F.R. §60.105) should not be used unless the cite is unambiguous to the monitoring method required.

- The monitoring option that was chosen in CD must be in the permit even if the applicable regulation has options to ensure that any subsequent change undergoes a revision that complies with the permitting rules.
- For Example - NSPS Subpart J allows a source to monitor either the SO<sub>2</sub> emissions or the H<sub>2</sub>S concentration. If a source elects to install a FGRS and centrally monitor the H<sub>2</sub>S concentration, then the permit cannot also allow for SO<sub>2</sub> concentrations or cite just to the provision that gives both options - *e.g.*, 40 C.F.R. § 60.105(a)(4), not 40 C.F.R. § 60.105(a).

# Monitoring, Reporting, and Recordkeeping

## Additional Considerations

- Monitoring cite can be IBR if it is for a specific method and the referenced material is clear and available to the public (*e.g.*, 40 C.F.R., Part 60, Appendix A, Method 10A)
- If a site-specific AMP is approved in the Consent Decree or required by the Consent Decree after entry, the permit must contain the requirements of the AMP- and not just generally reference an AMP or the date the AMP was approved

*See Tesoro- Martinez (2004-06); Chevron- Richmond (2004-08)*

# Monitoring, Reporting, and Recordkeeping

## Continuous Emission Monitoring System (CEMS)

- CEMS requirements need to be pollutant specific
- Permit must also have QA/QC for the CEMs from the Consent Decree
  - “The Company shall install, certify, calibrate, maintain, and operate all CEMS in accordance with the requirements of 40 CFR § 60.11, 60.13 and Part 60, Appendices A, B and F. In lieu of the requirements of 40 C.F.R. Part 60 Appendix F §§ 5.1.1, 5.1.3 and 5.1.4, MAP shall conduct either a Relative Accuracy Audit ("RAA") or a Relative Accuracy Test Audit ("RATA") once every twelve (12) calendar quarters, provided that a Cylinder Gas Audit is conducted each calendar quarter. ”



# Monitoring, Reporting, and Recordkeeping

## Continuous Emission Monitoring System (CEMS)- con't

Underlying Permit needs to contain independent CEMS requirements for BACT-like emission limits.

- A similar CEMS requirement in a NSPS or NESHAP alone is not sufficient.
- Ensures that a CEMS that was obtained as part of the CD could not be easily removed after termination using the general option for an AMP per the NSPS or NESHAP provisions.
- Multiple CEMS requirements may be streamlined with *e.g.*, an NSPS or NESHAP monitoring requirement if done properly- and the alternate requirement is specific enough so that there is no ambiguity as to the monitoring requirement.

# Example: CEMS QA/QC Requirements

## Consent Decree Language:

*29. The Company shall install, certify, calibrate, maintain, and operate all CEMS required by this Part in accordance with the requirements of 40 CFR §§ 60.11, 60.13 and Part 60 Appendices A, B and F. With respect to 40 CFR Part 60, Appendix F, in lieu of the requirements of 40 CFR Part 60 Appendix F §5.1.1, 5.1.3 and 5.1.4, Conoco shall conduct either a Relative Accuracy Audit ("RAA") or a Relative Accuracy Test Audit ("RATA") once every twelve (12) calendar quarters, provided that a Cylinder Gas Audit is conducted each calendar quarter.*

## Construction Permit Language:

*382. CEMS shall be used to monitor NO<sub>x</sub> and SO<sub>2</sub> emissions from the FCCU Regenerator.*

# Example: CEMS QA/QC Requirements(con't)

## Revised Permit Language:

382. CEMS shall be used to monitor NO<sub>x</sub>, O<sub>2</sub> and SO<sub>2</sub> emissions from the FCCU Regenerator and demonstrate compliance with the emission limits. The Company shall install, certify, calibrate, maintain, and operate the CEMs in accordance with the requirements of 40 CFR §§ 60.11, 60.13 and Part 60 Appendices A, B and F. With respect to 40 CFR Part 60, Appendix F, in lieu of the requirements of 40 CFR Part 60 Appendix F §5.1.1, 5.1.3 and 5.1.4, Conoco shall conduct either a Relative Accuracy Audit ("RAA") or a Relative Accuracy Test Audit ("RATA") once every twelve (12) calendar quarters, provided that a Cylinder Gas Audit is conducted each calendar quarter.\*

\*NSPS compliance requires more frequent RATA or RAA testing

# No Exemptions to Specific NSPS Monitoring

## Consent Decree Language:

*101. CEMS or an EPA-approved alternate monitoring plan or monitoring waiver will be used to demonstrate compliance with the respective [NSPS] CO emission limits established pursuant to this Part VII.*

**Note-** The Company negotiated with EPA that it would use a CEMS and a CEMS is required by the Consent Decree. The decision in the Consent Decree must be made before termination. After termination, any change in monitoring must be done thru regular permit change processes.

## Title V Permit Language:

*93. Carbon monoxide monitored by continuous emission monitor (CEM) continuously, except as provided in 40 C.F.R. § 60.105(a)(2)(ii). Subpart J, 40 C.F.R. § 60.105(a)(2).*

# No Exemptions to Specific NSPS Monitoring

## Revised Title V Permit Language:

93. *Carbon monoxide monitored by continuous emission monitor (CEM) continuously, ~~except as provided in 40 C.F.R. § 60.105(a)(2)(ii).~~  
Subpart J, 40 C.F.R. § 60.105(a)(2).*

# No. 4- Permits that are Inconsistent with Current Law

# Consent Decrees are NOT Permits

## General Consent Decree Provisions:

- *Except as specifically provided by this Consent Decree, nothing in this Consent Decree shall not relieve the Company of its obligation to comply with all applicable federal, state, and local laws and regulations, including, but not limited to more stringent standards.*
- *In addition, nothing in this Consent Decree shall be construed to prohibit or prevent the United States or Plaintiff-Interveners from developing, implementing, and enforcing more stringent standards subsequent to the Date of Lodging of this Consent Decree through rulemaking, the permit process, or as otherwise authorized or required under federal, state, regional, or local laws and regulations.*

**Consent Decrees cannot permanently alter CAA and SIP requirements- so if a requirement in a Consent Decree is inconsistent, the CAA and the SIP governs.**

# Permits that are Inconsistent with Current Law

## **Emission Limit Exemptions**

Permits cannot have an “automatic” or blanket exemption for excess emissions during SSM events even if the consent decree provides Force Majeure provisions- Force Majeure does not automatically equate to Malfunction.

- The Force Majeure provisions in a consent decree is a legal concept solely for use implementing the consent decree; permits cannot have general Force Majeure provisions like the consent decree as they may be inconsistent with the SIP or the CAA.
- Check the permit’s general provisions (or exclusions) or Permit Shield to see if there is a exemption to the consent decree requirements.



# Permits that are Inconsistent with Current Law

## **Affirmative Defenses**

Affirmative defenses to stipulated penalties for exceedances in the limits imposed by the consent decree are for the life of the consent decree. Defenses cannot be brought over into the permit for the limits that survive after termination. There are no corresponding stipulated penalties once the consent decree is terminated.

## Permits that are Inconsistent with Current Law

- Permits should have emission limits or standards that provide for continuous compliance
  - If the CD has only one emission limit, that limit applies at all times. Permitting authority cannot grant a start up or shut down (SS) exemption that is not authorized by the Consent Decree
  - CD exemptions for compliance during SS for shorter-term BACT-Like emission limits can be permitted so long as the permit also includes the condition that applies in the Consent Decree.
    - Exemptions from data monitoring or collection should generally not be allowed even if periods are excluded from determining compliance- *See In re Xcel Energy- Hayden Power Station*

# Example: Force Majeure Requirements

## Consent Decree Language:

*28. Each 30-day Rolling Average NOx Emission Rate shall include all emissions that occur during all periods , including emissions from start-up, shutdown, and malfunctions, except as otherwise provided by in Section XIV (Force Majeure).*

## Construction Permit Requirement:

*3.a.i. Each 30-day Rolling Average NOx Emission Rate shall include all emissions that occur during all periods, including emissions from start-up, shutdown, and malfunctions, except as otherwise provided by in Section XIV (Force Majeure).*

## Revised Construction Permit Requirement:

*3.a.i. Each 30-day Rolling Average NOx Emission Rate shall include all emissions that occur during all periods, including emissions from start-up, shutdown, and malfunctions, ~~except as otherwise provided by in Section XIV (Force Majeure).~~*

# Example: Permits Inconsistent with Current Law

## Consent Decree Language:

- 101. Lodging of this Consent Decree shall satisfy any obligation otherwise applicable to The Company to provide notification in accordance with 40 CFR Part 60, Subparts A, including without limitation 40 CFR 60.7, as such requirements apply to relate to SO<sub>2</sub> emissions from FCCU regenerators.*

## Title V Permit Language:

- 93. The Owner/Operator of FCCU is exempt from notification requirements in accordance with 40 CFR Part 60, Subparts A, including without limitation 40 CFR 60.7, as such requirements apply to relate to SO<sub>2</sub> emissions from FCCU regenerators.*

# Example: Permits Inconsistent with Current Law

## Revised Title V Permit Language:

93. Until September 30, 2006, t*The Owner/Operator of FCCU is not required to provide ~~exempt from notification requirements~~ in accordance with 40 CFR Part 60, Subparts A and J, including without limitation 40 CFR 60.7, as such requirements apply to relate to SO<sub>2</sub> emissions from FCCU regenerators.*

*\* September 30, 2006 was lodging date of Consent Decree*

Questions?

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