



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6

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MAY 21 2008

Mr. Richard Hyde, P.E.
Director
Air Permits Division
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

Dear Mr. Hyde:

Since March 2007, we have been discussing with your staff the process for addressing emissions from maintenance, start-up, and shutdown (MSS) activities in new source permits for major sources. My staff has reviewed the Texas Commission on Environmental Quality (TCEQ) draft model permit for MSS emissions e-mailed to us on February 11, 2008. We appreciate the opportunity to provide comments on the draft model permit.

The TCEQ's initiative to address MSS emissions through permits at major stationary sources is related to changes in the State's Chapter 101 Excess Emissions rule, which establishes an affirmative defense for excess emissions during MSS, but then provides a schedule for phasing out the use of the affirmative defense for excess emissions from planned MSS activities. The U.S. Environmental Protection Agency (EPA) has not yet taken rulemaking action on this State Implementation Plan (SIP) revision. The EPA understands that these sources have combinations of Federal major and minor New Source Review permits, as well as State permits that will need to be amended. Reconciliations to correct terms and conditions in Prevention of Significant Deterioration/Nonattainment New Source Review permits, including adding or revising requirements for MSS activities, should undergo the same process as the original Federal Permit. This process would include a Best Available Control Technology (BACT) and/or Lowest Achievable Control Technology (LAER) review, an air quality impact analyses, and public participation requirements for all sources.

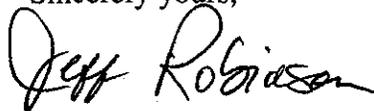
The EPA is concerned that the model permit may authorize increased emission limits for maintenance of control devices that occurs during normal process operations. The EPA's long-standing guidance states that maintenance for pollution control devices is a predictable event that can be scheduled at the discretion of the facility to coincide with maintenance of process equipment. The Texas Commission on Environmental Quality (TCEQ) should explicitly state that this permit does not authorize excess

emissions that occur as a result of maintenance activities of these control devices that occurs during normal operations. Additionally, we are concerned that the draft permit might be construed to allow sources to address MSS periods in a manner that is inconsistent with Federal rules and regulations such as New Source Performance Standard Subpart J, applicable consent decrees, current permit conditions, and the approved SIP. The MSS permit should state that compliance with the most stringent applicable requirement is required. The new source permit process may only be used to address MSS from activities permitted in the original new source permit. Moreover, terms in the permit cannot authorize emissions that are prohibited by Federal requirements, including any requirements in the approved SIP. As noted above, any modification of compliance obligations in current permits for periods of MSS may occur only by reopening these permits and providing public participation consistent with the public participation requirements for the initial permit.

Enclosed are our detailed comments. These comments were developed jointly with EPA's Office of Air Quality and Planning Standards, the Office of Compliance Assurance and Enforcement, the Office of General Counsel, and other EPA Regions. Please note that while we have carefully considered the draft model permit and consulted with other EPA offices, it is difficult to review the model permit in the abstract, without consideration of source-specific information. As we indicate in the body of our comments, the ultimate determination of emission limits and requirements for individual sources will occur on a case-by-case basis to evaluate applicability issues, BACT, LAER, air quality impacts and compliance monitoring and recordkeeping for the sources. Thus, we may identify additional issues with the model permit as we review the analyses for individual sources.

We look forward to continuing to work with TCEQ to resolve these issues. Should you have any questions regarding our comments, please feel free to contact me or you may contact Bonnie Braganza of my staff at (214) 665-7340.

Sincerely yours,



Jeff Robinson
Chief
Air Permits Section

Enclosure

ENCLOSURE

I. MSS emissions must be addressed through the SIP-approved new source permitting program

The EPA's long-standing interpretation of the Clean Air Act (CAA) and Parts 51 and 52 requires a source subject to New Source Review (NSR) to evaluate its maximum capacity to emit a pollutant under its physical and operational design. EPA has stated that MSS emissions are part of normal operation of a source and should be accounted for in planning, design, and implementation of operating procedures for process and control equipment.¹ As such, MSS emissions should have been included in Potential to Emit (PTE) and subject to all PSD and NNSR requirements, including public participation, BACT, and air quality analysis, at the time of issuance of the original permit. TCEQ's action to reconcile PSD and NNSR permits should demonstrate that all program requirements are met.² MSS activities must be authorized in permits issued under the Federally approved SIP

Emission increases resulting from maintenance activities should be minimal because those events can be scheduled during process unit downtime. Maintenance of control devices during process operations which would result in increased emissions should be prohibited unless redundant control devices are operational.

The model permit indicates TCEQ may authorize MSS emissions by this site-wide permit without reopening existing permits. As a preliminary matter, the only MSS emissions that can be addressed through this permit are from units that have obtained or are obtaining a new source permit. A unit cannot obtain an MSS permit allowing emissions but be "grandfathered" from new source program requirements in other respects (e.g., no Federal BACT or LAER, etc...). Furthermore, EPA regards the inclusion of MSS emissions related to any SIP approved nonattainment New Source Review (NNSR) or Prevention of Significant Deterioration (PSD) permit program as a reopening of the original NSR permit to correct the potential to emit (PTE) assumption. TCEQ should reopen and correct the PTE and other terms and conditions in existing permits that will conflict with this permit.

¹See, e.g., Memorandum from John B. Rasnic, Director, Stationary Source Compliance Division, Office of Air Quality Planning and Standards, U.S. EPA, to Linda M. Murphy, Director, Air, Pesticides and Toxics Management Division, U.S. EPA Region I (Jan. 28, 1993) ("Rasnic Memo");

See Memorandum from Kathleen M. Bennett, Assistant Administrator for Air And Radiation, to the Regional Administrators, entitled "Policy Regarding Excess Emissions During Startup, Shutdown, Scheduled Maintenance, and Malfunctions" (February 15, 1983) (referred to hereafter as "1983 Excess Emissions Policy").

²See, Memorandum from Gary McCutchen, New Source Review Section Chief and Michael Trutna, Air Toxics Section Chief to J. David Sullivan, ALO Enforcement Section, Region VI, Request for Determination on Best Available Control Technology Issues - Ogden Martin Tulsa Municipal Waste Incinerator Facility, Nov. 19, 1987.

A. BACT

1. Secondary BACT or LAER emission limits or an increase in existing BACT or LAER emission limitations for MSS activities should be considered only after the State has made an on-the-record determination that compliance with existing emission limitations during periods of MSS is infeasible.³ Allowing an increase in allowable emissions or adding secondary emission limitations without this demonstration is inconsistent with the definition of BACT and LAER. Note that conditions in other existing NSR permits may not be superseded without reopening and correcting terms and conditions in the relevant permit.
2. Special Condition 12 should be restated to eliminate the exemption for combustion units from Federally enforceable emission limits or BACT limits required by the CAA (Federal BACT). The condition should provide for the development of an alternative case by case Federal BACT limitation for MSS periods. The EPA has noted that several permit applicants indicate using a TCEQ Tier approach of BACT. This approach should be substantially equivalent to the Federal guidance on the top/down BACT approach and be a case by case analysis. The duration for startup/shutdown in this Special Condition 12 should be based on BACT. EPA recognizes that TCEQ has attempted to provide thresholds for the durations for startup and shutdown activities. However, Federal BACT is based on a case by case analysis based on the specific units that vary in size, age and control devices, and therefore should not contain generalized BACT limits.
3. BACT for the MSS activities should have numerical emission limits and/or specific work practice standards that can be effectively monitored and recorded. It is not clear that all the emission units identified in the Maximum Allowable Emission Rates Table (MAERT) will have short term and annual limits.

B. Public Participation

EPA would like to emphasize our concern regarding public participation in the permitting of MSS emissions. Texas' actions to reconcile PSD and NNSR permits at this time must ensure that all permitting requirements in the original authorization, including public participation, are met. EPA guidance and policy requires 30-day notice and comment on a draft permit when a PSD or NNSR permit is re-opened. EPA is aware that all the permit applications were public noticed. However in developing the draft permits, several revisions and updates were provided to TCEQ, such that the rationale for terms and conditions in some draft permits may not represent the original public noticed permit applications. Additionally, we understand that the modeling for the increased emission limits was requested by TCEQ in February 2008 and is still not complete, which means that the public has not had an opportunity to comment on the modeling. The EPA questions whether this process meets the SIP public participation requirements for major or minor NSR modifications/revisions.

³ See, *In re: Tallmadge Generating Station, PSD Appeal No. 02-12*, (EAB, May 22, 2003) and *In re: Rockgen Energy Center, PSD Appeal No. 99-1*, (EAB, August 25, 1999).

Therefore, these draft permits should have a 30-day public notice and comment period.

Various environmental organizations have informed EPA that some permit applications claimed emission data as Confidential Business Information (CBI). Sections 110 and 114(c) of the Clean Air Act (CAA) require emission data to be made available to the public, even if it otherwise qualifies as trade secret information.⁴ EPA has determined that emission data does not qualify as confidential if it meets the definition under 40 CFR 2.301(a)(2)(I) for information necessary to determine the identity, amount, frequency, concentration, or other characteristics of any emission which has been emitted by the source or information necessary to determine the identity, amount, frequency, concentration, or other characteristics of the emission which, under an applicable standard or limitation, the source was authorized to emit. We note that the Office of the Attorney General of Texas also recently reviewed this requirement.⁵ EPA recommends that TCEQ review permit applications to determine whether the CBI claims are allowed under State and Federal law, and therefore whether the permit application is administratively complete.

C. Air Quality Analyses

The EPA will provide comments on the modeling protocol for MSS emissions received via email on February 20, 2008, at a later date. EPA is requesting the modeling data from the facilities or TCEQ for our records. TCEQ should consider emissions from background sources in the modeling to ensure that these permits do not interfere with attainment and maintenance of the NAAQS or PSD increments.

D. Houston/Galveston/Brazoria (HGB) area NSR applicability thresholds and offset ratios and Title V applicability

The EPA has proposed to grant the State's request to reclassify the HGB area from moderate to severe nonattainment for the 8-hour ozone standard. However, even prior to the time the area is reclassified to severe for the 8-hour standard, permitting for sources in the HGB area should be consistent with the Non-attainment new source review (NSR) and Title V based on the 1-hour ozone nonattainment classification of severe for the area.

In *South Coast Air Quality Management District (SCAQMD) v. EPA*, 472 F.3d. 882 (D.C.Cir. 2006), the Court of Appeals reviewing EPA's rule for implementing the 8-hour ozone standard decided that the EPA had improperly determined that areas designated as non-attainment under the 1-hour ozone NAAQS would no longer be subject to 1-hour NSR requirements. The effect of the court's ruling is to restore the applicability of the

⁴ See Notice of Policy on Public Emission Data within the meaning of Sections 110 and 114(c) of the Clean Air Act (CAA), 56 FR 7042-01, February 21, 1991.

⁵ See letter from Heather Pendleton Ross, Assistant Attorney General, Office of the Attorney General of Texas to Mr. Robert Martinez, Director of Environmental Law Division, Texas Commission on Environmental Quality, dated July 30, 2007, reference number OR2007-9631.

more stringent NSR thresholds and emission offsets that applied under the Act based on an area's 1-hour ozone classification.

Recordkeeping

Recordkeeping requirements must be sufficient to determine whether a facility is operating in normal, startup, shutdown, and turnaround or maintenance mode to ensure enforceability of the permit. In other words, the owner or operator must identify which emission limitation or other requirements are applicable at all times. We recommend that TCEQ revise the recordkeeping requirements to ensure that records are required to document which mode of operation is current before the startup, shutdown, turnaround or maintenance activity begins. The recordkeeping should state the start and end time of the activity, not just the duration. The estimated quantity of each pollutant should be expressed in terms of short-term limitations in the permit. Exceedances of the short-term emission limitation must be documented and will be considered a violation of this permit.

II. Practical Enforceability

- A. Permitting of MSS emissions should be incorporated into a permit issued under a SIP-approved rule. We are aware that many of these facilities have flexible permits that are not SIP-approved permits. For Federally enforceable permit terms, TCEQ may only use the approved SIP rules for permitting of MSS. Where MSS emissions are incorporated into a flexible permit, the source has an authorization for those emissions under State law. However, the source has no Federal authorization for MSS emissions under the SIP. Therefore, the source should consider MSS emissions as unauthorized under the SIP and subject to all reporting requirements, including Federal Operating Permit (FOP) deviation reporting and compliance certification. The flexible permit should be incorporated into the FOP as a State-only requirement.

These exemptions from the Maximum Allowable Emission Rate Table (MAERT) limits for periods of startup, shutdown, maintenance or malfunction are not authorized by EPA because they would allow for circumvention of Federal CAA requirements. The exemption is also inconsistent with the language of the model MSS permit. EPA believes, at a minimum, underlying permits with such exemptions must be reopened to remove the provision and other terms or conditions that are inconsistent with the MSS permit. We also request that TCEQ include a statement in all permits issued under the SIP that when there are multiple Federal or SIP requirements that apply to an emission source during MSS periods, the most stringent requirement applies and that an exceedance of this applicable emission limitation is a violation which may be subject to enforcement action.

- B. The EPA has concerns regarding the enforceability of the MSS emission limits where an older existing permit at a facility may contain an exemption from compliance with emission limitations during periods of upset, startup, shutdown or maintenance activities. We believe such exemption language is inconsistent with the model MSS permit. EPA recommends that underlying permits with such exemptions be reopened to remove the

provision. Alternatively, please provide a method to ensure that exceedances of permit emission limitations during periods of startup, shutdown, maintenance, and upsets can be enforced as violations of the SIP. We also request that TCEQ include a statement in the MSS permits that when there are multiple Federal or SIP requirements that apply to an emission source during MSS periods, the most stringent requirement applies and that an exceedance of this applicable emission limitation is a violation which may be subject to enforcement action.

- C. Special Condition 1 states "Startup and shutdown emissions due to the activities identified in Special Condition 2 are authorized from facilities and emission points in other construction permits at the site provided the facility and emissions are compliant with the respective MAERT and special conditions, or Special Condition 12 of this permit." EPA is not clear how this condition can be practically enforceable. The MSS permit cannot alter or supersede terms and conditions in an existing permit without reopening and revising the existing permit. Since TCEQ is undertaking this effort because planned MSS emissions were not specifically subject to specific limits in existing permits, the MSS permitting actions should address all units that have MSS activities and emissions from the site.
- D. Please ensure that the applicable leak detection program for the site is addressed in this permit.

III. Permits by Rule (PBR)

We also are concerned that these sources can use the Permit by Rule (PBR) to amend the MSS emissions in these permits. The Permit by Rule should only be used for small minor sources (PTE less than 100TPY/250TPY) and is not a vehicle for major sources to supplement emission limits or conditions in a Federally enforceable permit. EPA has consistently expressed concerns about PBRs that authorize a category of emissions, such as MSS, or that modify an existing NSR permit.⁶ These PBRs are inconsistent with the approved SIP and may serve as a circumvention of CAA requirements. At a minimum, condition 11 should be removed from the model permit.

IV. Comments on Special Conditions of the model permit.

- A. The model permit should contain the provision that MSS activities not listed in the permit are not authorized. Special Condition 2 refers to MSS activities in the permit application. In most cases the permit applications were revised extensively, therefore EPA believes that references to activities in a permit application are not practically enforceable unless

⁶ Letter dated November 16, 2007 to Mr. Richard Hyde regarding Comments on Proposed Amendments to Chapter 106, 116 for Maintenance Startup and Shutdown (MSS), Chapter 106 Subchapter K.

Letter dated March 30, 2006 to Mr. Steve Hagle regarding comments on Proposed Rule Revisions to 30 Texas Administrative Code Chapter 106 and 116 and to the State Implementation Plan B Rule Project Number 2005-016-106-PR;

TCEQ provides a cross-walk and rationale for the differences between the permit and permit application. Please explain what type of exceptions TCEQ expects to see in Special Condition 10 regarding a planned process unit startup.

- B. Special Condition 3 provides the process for degassing, emptying and depressurizing of process units and facilities. This condition should require a case by case assessment of the types and quantities of air pollutants. TCEQ should provide the rationale for the conclusion that venting to the atmosphere of pollutants below 0.5 psi and 50 lbs has a negligible air quality impact and is consistent with other Federal requirements and standards. The permit should also indicate monitoring requirements for determining when the condition of 50 lbs is reached.
- C. Special Condition 7 appears to have a typographical error and should read "Special Condition 6.B (i) through 6.B(v)"
- D. Special Condition 9 requires frac or temporary tanks that are used to support MSS and that are exposed to the sun to be white or aluminum effective May 1, 2013. If the emissions are minimized by these requirements, this should be considered BACT at the time of permit issuance. Please remove the effective date requirement of May 1, 2013 in this condition.
- E. It is not clear how TCEQ will apply Special Condition 12 universally to all combustion sources without referring to the current existing limits, units and permits. EPA recommends that this permit identify the existing limit for each combustion unit at the site and then identify the secondary (MSS) BACT limit or work practice standard to make this practically enforceable.
- F. Please clarify if Special Condition 13 only applies to control devices used during periods of MSS. This permit should not supersede any previous Federal conditions in current permits, unless a case by case rationale is provided and the underlying permit is reopened. EPA believes that BACT should consider having redundant control devices.
- G. For the control devices in Specific Condition 13, the method for monitoring compliance should be specified for the Internal Combustion engines. Please clarify if these are the only required control devices to be used during MSS activities and if this list will be updated as new technology to control these emissions are developed.
- H. Special Condition 14 refers to capture systems for flare control devices. The monitoring condition in 14A should be performed during an MSS activity to determine compliance with the emission rates, not on a monthly or annual basis. Special Condition 14 states "A deviation shall be reported if the monitoring or inspections indicate bypass of the control device." However this condition is allowing the bypass of a control device. Please clarify the language. The permit must not provide for automatic exemption to allow bypass of an emission control device.

V. General Comments:

- A. Please provide definitions for startup, shutdown and maintenance activities. It is possible that startup, shutdown and maintenance are specific to the source and therefore these definitions may need to be included in each permit. As we have discussed earlier, EPA's guidance states that maintenance activities are a planned and predictable event that can be scheduled at the discretion of the operator to coincide with maintenance of production equipment. TCEQ's BACT evaluation for MSS activities must eliminate or minimize periods during which production equipment operates without control devices.
- B. Attachment A to the permit application was missing. That Attachment identifies a list of activities with low emissions that are performed numerous times each year. It appears that these activities will be exempt from emission monitoring. Similarly, the draft you provided us did not include Attachment B to the permit application, which identifies maintenance activities involving equipment/facilities such as valves, pumps, piping, and heat exchangers. It is expected that these attachments will be site specific. Therefore our comments are limited to information provided in the model permit and additional comments will be provided at the time EPA reviews the site specific permits. Please note that there can be no exemption for MSS activities as indicated in the Special Conditions of the model permit.
- C. The specific conditions related to the MAERT and Facility List table are not clear, since there are no emission estimates associated with the emission units. Each emission unit should have an applicable short term emission limit. EPA understands that these provisions may be clarified when the source specific permit is reviewed and we may provide additional comments at that time.
- D. The permit does not contain monitoring for the special conditions in this permit with the exceptions of some control devices that are listed in the permit. Monitoring and recordkeeping are required to determine compliance with permit terms and conditions.
- E. EPA is also concerned that there are no PM considerations for catalyst loading activities that happen frequently during major unit turnarounds. BACT for these activities should be considered using control devices such as filters baghouses etc.
- F. Please clarify how the MSS emissions are included in this permit on an annual and short term basis for units that have a turnaround frequency of less than a year.
- G. There are references in the permit to using "good engineering practice" to reduce emissions such as Specific Condition 6 B (ii). BACT in the permit should be specific with respect to emission limits, and work practice standards should only be used when numerical emission limits are infeasible. All BACT terms and conditions should require monitoring and recordkeeping sufficient to ensure compliance. Monitoring should be done by approved EPA methods or other approved methods that are replicable under these operating conditions.