

Marisa Weber

From: PUBCOMMENT
Sent: Wednesday, June 13, 2012 8:52 AM
To: PUBCOMMENT-OCC2
Subject: FW: Public comment on Permit Number 51770

*NSR
76973*

H

From: PUBCOMMENT-OCC
Sent: Wednesday, June 13, 2012 7:39 AM
To: PUBCOMMENT
Subject: FW: Public comment on Permit Number 51770

From: 00712@sbcglobal.net [mailto:00712@sbcglobal.net]
Sent: Tuesday, June 12, 2012 5:52 PM
To: donotReply@tceq.state.tx.us
Subject: Public comment on Permit Number 51770

REGULATED ENTY NAME LCRA SAM SEYMOUR FAYETTE POWER PROJECT

RN NUMBER: RN100226844

PERMIT NUMBER: 51770

DOCKET NUMBER:

COUNTY: FAYETTE

PRINCIPAL NAME: LOWER COLORADO RIVER AUTHORITY

CN NUMBER: CN600253637

FROM

NAME: MR Raul P Bustillo

E-MAIL: 00712@sbcglobal.net

COMPANY:

ADDRESS: 3909 AGGIE DR
BAY CITY TX 77414-4613

PHONE: 9792444877

FAX:

MW

COMMENTS: I wish to request a contested case hearing for the above planned relaxing and lowering pollution laws for the Fayette Power Plant. For the simple reason that the coal industries are causing enviromental damage that is more costly than the money they generate. We need more protection from dirty polluters not less.

Marisa Weber

From: PUBCOMMENT
Sent: Friday, June 15, 2012 8:08 AM
To: PUBCOMMENT-OCC2
Subject: FW: Public comment on Permit Number 51770
Attachments: LCRA comments and hearing request.pdf

*NSR
76973*

H

From: PUBCOMMENT-OCC
Sent: Friday, June 15, 2012 7:16 AM
To: PUBCOMMENT
Subject: FW: Public comment on Permit Number 51770

From: gclark-leach@environmentalintegrity.org [<mailto:gclark-leach@environmentalintegrity.org>]
Sent: Thursday, June 14, 2012 4:10 PM
To: donotReply@tceq.state.tx.us
Subject: Public comment on Permit Number 51770

REGULATED ENTITY NAME LCRA SAM SEYMOUR FAYETTE POWER PROJECT

RN NUMBER: RN100226844

PERMIT NUMBER: 51770

DOCKET NUMBER:

COUNTY: FAYETTE

PRINCIPAL NAME: LOWER COLORADO RIVER AUTHORITY

CN NUMBER: CN600253637

FROM

NAME: Gabriel Clark-Leach

E-MAIL: gclark-leach@environmentalintegrity.org

COMPANY: Environmental Integrity Project

ADDRESS: 1303 SAN ANTONIO ST 200
AUSTIN TX 78701-1636

PHONE: 5126379478

FAX:

mw

COMMENTS: Please find attached comments and a request for a contested case hearing submitted on behalf of the Sierra Club and Texas Campaign for the Environment.



1303 San Antonio Street, Suite 200
Austin TX, 78701
p: 512-637-9477 f: 512-584-8019
www.environmentalintegrity.org

June 14, 2012

Ms. Bridget Bohac
Office of the Chief Clerk, MC-105
Texas Commission on Environmental Quality
12100 Park 35 Circle, Building F
Austin, TX 78753

via electronic submission

Re: Comments, Request for Contested Case Hearing on Draft Permit No. 51770 & PSD-TX-486M3, authorizing emissions from the Lower Colorado River Authority's Fayette Power Project/Sam Seymour Plant in Fayette County, Texas

Dear Ms. Bohac:

Please find attached comments and a request for a contested case hearing on Draft Permit No. 51770 & PSD-TX-486M3 submitted on behalf of Sierra Club and Texas Campaign for the Environment.

Sincerely,

Gabriel Clark-Leach

Enclosure

Duplicate Original ~~with Attachments~~ (no CD)
Please file stamp.

June 14, 2012

VIA HAND DELIVERY

Ms. LaDonna Castanuela
Office of the Chief Clerk, MC-105
TCEQ
P.O. Box 13087
Austin, TX 78711-3087

Re: Comments, Request for Contested Case Hearing on Draft Permit No. 51770 & PSD-TX-486M3, authorizing emissions from the Lower Colorado River Authority's Fayette Power Project/Sam Seymour Plant in Fayette County, Texas

Dear Ms. Castanuela:

On behalf of the Sierra Club and Texas Campaign for the Environment, we are submitting these comments and request for a contested case hearing in response to the mailed Public Notice of the Application and Preliminary Decision on the above referenced air permit for the Fayette Power Project ("power plant").

We have several major concerns regarding the Application and Draft Permit. We have raised some of these issues in previous letters regarding the Fayette power plant's deficient air permits. These letters are attached and incorporated by reference. In general, our concerns fall under the following specific issues:

- The Application and Draft Permit fail to demonstrate how the proposed emission limits meet the *best available control technology* ("BACT") standard.
- The Application and Draft Permit fail to demonstrate that the emissions will not cause or contribute to violations of health-based ambient air quality standards.
- The Application and Draft Permit do not set emission limits that are as least as stringent as the emission limits in effect prior to the Flexible Permit.
- LCRA misrepresented emissions and inflated capacity (annualized heat input) in order to get high Flex Permit limits. Those past misrepresentations should be corrected in this Permit proceeding.
- LCRA Fayette plant has undergone major modifications to its boilers, which would have triggered NSR/PSD review had LCRA not relied on its Flex Permit and PAL to avoid federal permitting requirements. These modifications resulted in increased life of the boilers, fewer maintenance outages, and more annual hours in operation. Thus, these

major modifications are classic NSR activities that require BACT analyses and impacts analyses.

- The Application and Draft Permit should be strengthened to reduce air toxics such as lead and mercury, in light of new federal rules requiring *maximum achievable control technology* ("MACT") to reduce dangerous toxics from coal-fired power plant boilers.

These issues and other issues relevant to the Executive Director or Commission's actions regarding Permit No. 51770/PSD-TX-486M3 are also discussed more fully below and in the attachments. Please carefully review all these comments and attachments as you prepare your responses to comments, as we believe the evidence is overwhelming that: (a) the LCRA has misled TCEQ and misrepresented its emissions and operations, which raises not only several compliance issues, but also demonstrates that a more careful review be performed before issuing a new PSD permit, (b) the Fayette power plant should conduct a full BACT analysis, and demonstrate compliance with all national ambient air quality standards before a new PSD permit can issue.

I. Request for Contested Case Hearing

On behalf of the Sierra Club and Texas Campaign for the Environment, we request a contested case hearing.

The **Sierra Club** is one of the oldest environmental membership organizations in the country. Sierra Club is a nonprofit corporation headquartered in California, with offices, programs and members in Texas. Sierra Club's Austin, Texas offices are at 1202 San Antonio Street, Austin, Texas 78701, (512) 477-1729 (phone), (512) 477-8526 (fax). Among the goals of the Sierra Club are preserving and enhancing the natural environment and protecting public health. The Sierra Club has the specific goal of improving outdoor air quality. The Sierra Club and its members have a significant interest in ensuring that the LCRA Fayette plant complies with the Clean Air Act and reduces air emissions that endanger public health and property. Sierra Club has an interest in ensuring that the LCRA's Fayette power plant air pollution permit, at issue here, complies with the federal and Texas Clean Air Act and is protective of public health and the environment. Sierra Club members own property, reside, and/or recreate nearby and downwind of the power plant. One such Sierra Club member is Ms. Carol Daniels. Ms. Daniels resides at 3701 FM 609, La Grange, Texas, 78945. This is approximately less than 10 miles from the Fayette power plant. Ms. Daniels, a retired nurse, has concerns about air quality at her home and in her community, and specifically is concerned that air pollution from the power plant harms her health and property and interferes with her normal use and enjoyment of her home. Ms. Daniels would like the Fayette power plant to comply with all air pollution laws and have an air permit that protects public health and the environment. Ms. Daniels has standing to request a hearing in her own right.

Texas Campaign for the Environment (TCE) is a nonprofit membership organization dedicated to informing and mobilizing Texans to protect their health, their communities and the

environment. TCE has offices located at 3303 Lee Parkway #402, Dallas, TX 75219; 611 S. Congress #200-B, Austin, TX 78704; and 3100 Richmond #290, Houston, TX 77098. TCE has participated in numerous legislative, regulatory, legal, and other lawful actions over the years to reduce air pollution. TCE members and staff live, work, own property and recreate in the vicinity and directly downwind of the Fayette power plant. One such TCE member is Maggie Rivers. Mrs. Rivers and her husband have owned property, resided, and raised their family at 2506 E. State Hwy. 237, Round Top, Texas, since 1982. This property is roughly six miles north of the Fayette power plant. Mrs. Rivers can see the smokestacks from her property. Mrs. Rivers has observed smoke coming from the power plant's smokestacks and she has seen sooty ash on her property and vehicles, consistent with the prevailing winds in Fayette County, which blow the power plant's plume directly toward Mrs. Rivers' property for much of the time. Mrs. Rivers, who is a lifelong non-smoker, developed severe asthma and a lung condition in recent years. Mrs. Rivers believes that air pollution from the Fayette power plant causes or contributes to her asthma. When Mrs. Rivers sought medical advice from a specialist in Houston, and informed the doctor that she lives near a coal-fired power plant, he suggested that she move. Mrs. Rivers has standing to request a hearing in her own right.

For the reasons stated above, and in order to ensure that the Fayette power plant's air permit complies with air quality laws and rules, and is protective of public health and the environment, Sierra Club and TCE request a contested case hearing on the Application and Draft Permit.

Please direct all communications or questions regarding this request to Ilan Levin, Senior Attorney, Environmental Integrity Project, at (512) 637-9479, or ilevin@environmentalintegrity.org.

II. Comments

A. The Fayette Power Plant Must Demonstrate Compliance with Federal Clean Air Act § 165

The federal Clean Air Act and Texas State Implementation Plan require major sources of air pollution to undergo a rigorous permit review, known as New Source Review, before undertaking major modifications that could cause significant emissions increases. Because the Fayette plant is located in an area designated as attainment/unclassifiable in terms of meeting the national health-based ambient air quality standards (NAAQS), the specific federal New Source Review permit requirements are the "prevention of significant deterioration" (PSD) provisions of the federal Clean Air Act Section 165. The law requires the Fayette power plant to demonstrate, in essence, two things:

- That the power plant's air emissions and pollution controls meet the definition of "best available control technology" (BACT), and

- That the emissions from the plant will not cause or contribute to a violation of any federal ambient air standard, including the health-based “national ambient air quality standards” (NAAQS).

The Fayette is a major source of air pollution currently operating without a valid PSD permit. Thus, the power plant should be brought into compliance with Clean Air Act Section 165 immediately, by undergoing a complete BACT review and demonstrating compliance with all NAAQS under existing rules. In other words, the Application and Draft Permit should be strengthened to ensure that the plant meets today’s BACT and that emissions do not violate any NAAQS, such as the short-term SO₂ and NO₂ health-based standards. The Fayette plant has *never* made these demonstrations, and only when LCRA does so can members of the public truly trust that the power plant’s emissions are protective of health and property.

If you disagree that the plant should be required to show compliance with present-day BACT and NAAQS, please explain your basis. In addition, please consider a less onerous alternative, such as requiring the Fayette plant to demonstrate compliance with BACT and NAAQS in effect *at the time of the major boiler upgrades and modifications* that occurred after the Flex Permit and PAL issued in 2002. In other words, the Fayette power plant should at least be brought up to the NSR/PSD standards that it should have applied, and would have had to apply but for the 2002 issuance of the Flex Permit and PAL. EPA’s recommended approach for bringing Flex Permits into compliance included requiring permit applicants to provide detailed explanations and emissions data for all major modifications during the life of the Flex Permit. LCRA’s Application fails to provide any such information regarding the major modifications to the coal-fired boilers between 2002 and 2012. LCRA has relied on its Flex Permit and PAL to make major boiler modifications while avoiding PSD review. The result is that boiler Units No. 1, 2, and 3 are virtually completely rebuilt boilers from the units originally constructed in the late 1970’s and early 1980’s, and yet, LCRA has avoided compliance with Clean Air Act Section 165.

An even less onerous alternative would be to require LCRA to demonstrate compliance with BACT and NAAQS based on the standards in place in 2002, when LCRA first received its Flex Permit. LCRA’s 2002 Flex Permit Application misled the TCEQ and the public by misrepresenting emissions and maximum annual heat input for each of the three boilers. The 2002 Application fails to demonstrate both BACT and compliance with NAAQS. For example, LCRA has never explained how the particulate matter emission rates used for setting limits in either its 2002 Flex Permit or in the current Draft Permit meet BACT.

B. The Plant Has Undergone Major Modifications Without Meeting Best Available Control Technology or Conducting Required Impacts Analyses.

By its own admission, LCRA has undertaken several major modifications without undergoing NSR/PSD review, because LCRA has relied on the plantwide caps in its Flex Permit. LCRA has called its Flex Permit a “safe harbor from NSR enforcement.” During the life of the

Flex Permit, LCRA believed that, as long as emissions do not exceed the caps in the Flex Permit and PAL, then the Fayette plant was exempt from compliance with the federal Clean Air Act's PSD requirements.

Wholesale Power Services Hot Topics – Mar 25, 2002

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Asset Issues

FPP permit amendment – FPP has initiated a project to evaluate the costs and benefits of obtaining a flexible air permit from the TNRCC. This unique permitting strategy would allow FPP to perform pre-authorized maintenance projects and efficiency upgrades, under the premise that FPP would not exceed a pre-negotiated emissions cap for the entire facility. The permit would commit FPP to install scrubbers by the end of the 10-year permit term, but allow FPP to perform the needed work in the boilers without being subject to New Source Review (NSR) regulation. The UR\$ Corporation presented a cost estimate for installing scrubbers on FPP Units 1 and 2 last week. The cost is estimated to be \$90-95 million. These costs assume the excess capacity of the Units 3 limestone preparation and de-watering equipment is used and the existing Units 1 and 2 stacks can accommodate a higher moisture concentration. In addition, on April 22, 2002, the TNRCC staff provided LCRA with a NOx BACT determination (in terms of an emission limit) that will likely necessitate making emission reductions beyond those that we will be capable of with the technology that is being used in the current NOx reduction project. However, the BACT limit and associated annual emissions cap would not be so stringent as to force SCR technology. A review of the technology capable of meeting the new emission cap and the associated control costs are being evaluated.

LCRA's Fayette power plant Air Operating Manual states:

FPP is currently exempt from the provisions of State and Federal NSR provided a modification does not cause the emissions from the facility to exceed the emissions limit in the flexible permit and does not result in the emissions of an air pollutant not previously emitted. The FPP flexible

And, in fact, during the past decade, LCRA has virtually rebuilt the entire boilers, replacing all boiler tubes and major boiler components to avoid future outages and extend the life of the power plant. As the additional attachments demonstrate, LCRA has clearly undertaken major upgrades and modifications to the boilers, including, for example, a complete Unit 2 Upper Arch replacement (all 260 furnace tubes and sidewall tubes along the length of the upper arch). LCRA's internal documents show that LCRA admits that these projects would trigger NSR but for the Flexible Permit's inflated caps, stating, "adequate cushion was included in the [Flex Permit and PAL] cap calculations to guard against potential exceedences of emission limits that may be associated with this type of project."

LCRA misled TCEQ (and EPA) in 2002, when it obtained the "adequate cushion" in the caps – both the Flexible Permit's MAERT caps as well as the PAL caps, which are essentially

the same because they are based on the same assumptions and calculations. First, as LCRA's internal emails and correspondence, attached to this comment letter, indicate, for several criteria pollutants, including NOx, PM, CO, and VOC, the 2002 establishes "final" caps that were not demonstrated to be BACT levels (and are not BACT). LCRA obtained PM emission limits based on levels it knew were significantly higher than it achieved in practice. For example, LCRA knew the Flex Permit's hourly and annual PM limits, based on high NSPS limits, were significantly higher than anything LCRA had ever reported in recent years:

LCRA has reported actual emission rates to TNRCC each year in its annual Emissions Inventory for FPP. There could be an issue with claiming an actual rate for the PAL that exceeds these previously reported levels. For example, we may wish to permit PM emissions based on the NSPS limit of 0.03 lb/mmBtu, and in previous EIQs, Unit 3 emissions have been reported based on stack test data which shows 0.01 lb/mmBtu. After scrubbers are installed on Units 1 and 2, PM emissions will likely come down, eventually

PM. There are no CEMS for PM. There is no recent compliance test data. Thus, current actual emissions are hard to define. Most desirable approach for LCRA is to set final (BACT-based) equal to NSPS limit of 0.03 lb/mmBtu for all three units. This is a reduction in actual emissions for Units 1 and 2, but would be an increase for Unit 3, which is currently doing better than 0.03. Initial cap that will be in place prior to scrubbing Units 1 and 2 must be higher. Can we use a factor that allows some cushion and apply this factor to 12 month actual peak heat input and call this an actual emission rate? What about conflict with past EIQs? Will a compliance test be required when Flex permit is issued? Should LCRA consider testing now to determine what current emission rates are rather than rely on old test data?

Second, LCRA knowingly inflated the annual heat input for all three boilers, by "annualizing" the highest ever reported *daily* heat input, and purposely chose not to divulge this critical fact to the TCEQ permit engineers in 2002.

2. Use of max daily heat input to calculate final "BACT" caps. This has been presented to Erik and Randy. We asked if they were okay with the way the calculation was done (without specifically pointing out that max daily heat input exceeds design input), and they said yes. This is a state-only issue and should not impact EPA PAL requirements (even at the higher tpy

Additional LCRA internal documents from 2002 show that LCRA intentionally used these inflated annualized heat input rates to establish hourly and annual NOx caps "such that the magnitude of the PAL is never set at a level that would trigger PSD review."

Had LCRA been more honest, and informed TCEQ that the Flex Permit caps it was seeking (and got) in 2002 reflect hourly heat input rates at levels higher than LCRA had ever represented before – 30 percent higher for Unit 3 – then TCEQ would have been required to conduct a full impacts analysis and rigorous BACT analysis for all criteria pollutants. Instead, TCEQ focused primarily on the SO₂ reductions, but failed to require, for example, the top control technology (SCR) for NOx control.

Thus, not only did LCRA mislead TCEQ in its 2002 Permit Application, but also, preexisting permit limits, *including representations regarding operations and design of the boilers and pollution controls*, remain fully enforceable. Thus, for example, the Unit 3 boiler's maximum hourly heat input rate of 4,735 MMBTU/hour, was never amended, and thus should be included in the Draft Permit.

For these reasons, and also for the public health benefits that reduced emissions would bring, TCEQ should require the rigorous BACT and ambient impacts analyses required by the federal Clean Air Act for issuance of a new PSD permit to a major source that currently lacks a valid permit. If TCEQ is not willing to make LCRA meet today's BACT, then it should at least require 2002 BACT limits. The Draft Permit does not meet current-day BACT, and does not even meet 2002 BACT levels.

C. The Draft Permit Does Not Satisfy BACT

The emission limits contained in the Special Conditions and/or MAERT do not meet the definition of "best available control technology," which is defined as:

an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under Act which would be emitted from any proposed major stationary source or major modification which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.¹

TCEQ should establish BACT limits for boilers in pounds of any given pollutant per million British thermal units (lb/MMBTU). The pound per hour and ton per year limits contained in the MAERT might be sufficient to demonstrate compliance with NAAQS (a demonstration yet to be made), but they cannot be said to satisfy BACT. Pound per hour and TPY limits should be set at levels designed to avoid exceedances of the NAAQS. But lb/MMBTU limits are routinely used by TCEQ to reflect the performance of a pollution control device. A lb/MMBTU limit will require that the controls be operated at all times, including periods when the plant is at less than full load. However, without lb/MMBTU limits, the boilers could comply with lb/hr or TPY limit without operating the control devices. Thus, without lb/MMBTU limits, the Fayette power plant could circumvent the requirement to meet BACT on a continuous basis. In addition, the federal law requires BACT to be no less stringent than the limits established under Clean Air Section 111 (new source performance standards) and 112 (national emission standards for hazardous air pollutants) – standards that are expressed in lbs/MMBTU.

¹ 30 TEX. ADMIN. CODE §§ 116.111(a)(2)(C) & 116.160(c)(1)(A) (incorporating 40 C.F.R. § 52.21(b)(12) by reference)

In the PSD permit that existed prior to TCEQ's issuance of the Flex Permit in 2002, the Fayette power plant's three main boilers were limited to maximum hourly heat inputs. Units 1 and 2 were limited to a maximum hourly heat input of 6,000 MMBTU/hour, based on representations in numerous PSD applications. Unit 3 was limited to a maximum hourly heat input of 4,735 MMBTU/hour, which was expressly included in the Unit 3 original PSD permit, and represented as the maximum hourly capacity in all subsequent permit applications. The Draft Permit is deficient because it fails to include these limits.

In addition, Unit 3 has always had a federal PSD condition limiting the sulfur content of fuel to no more than 2.75 percent sulfur (dry weight basis). This federal limit should be included in the Permit, and TCEQ should consider additional fuel limitations (e.g., ash content) consistent with the definition of BACT.

Emission limits are only protective of health and the environment when they are based on short averaging periods (to avoid dangerous pollution spikes that can be "averaged out" over 30 days or a year), and reliable compliance methods. The Draft Permit should be changed to reflect BACT limits for the three main boilers, including limits expressed in lb/MMBTU, short-term averaging periods, and continuous or frequent compliance tests, as shown in the following tables.

Unit 1				
Pollutant	lb/MMBTU (Averaging period)	lb/hr	tons/yr	Compliance Method
CO	0.187 (1-hr)	1,122.0	4,128.6	CEMS
H ₂ SO ₄	0.006 (3-hr)	36.0	132.5	Method 8
NO _x	0.10 (1-hr)	600.0	2,207.8	CEMS
PM _{Total}	0.05 (3-hr)	300.0	1,103.9	Method 5, 201/202*
PM ₁₀ (total)	0.035 (3-hr)	210.0	772.7	Method 5, 201/202*
PM ₁₀ (filter)	0.025 (3-hr)	150.0	552.0	CEMS
SO ₂	95% Removal	315.0	1,159.1	CEMS
VOC	0.00375 (3-hr)	22.5	82.8	Method 25A

Unit 2				
Pollutant	lb/MMBTU (Averaging Period)	lb/hr	tons/yr	Compliance Method
CO	0.187 (1-hr)	1,122.0	4,187.6	CEMS
H ₂ SO ₄	0.006 (3-hr)	36.0	132.5	Method 8
NO _x	0.10 (1-hr)	600.0	2,239.3	CEMS
PM _{Total}	0.05 (3-hr)	300.0	1,119.7	Method 5, 201/202*
PM ₁₀ (total)	0.035 (3-hr)	210.0	783.8	Method 5, 201/202*
PM ₁₀ (filter)	0.025 (3-hr)	150.0	559.8	CEMS
SO ₂	95% Removal	315.0	1,175.7	CEMS
VOC	0.00375 (3-hr)	22.5	84.0	Method 25A

Unit 3				
Pollutant	lb/MMBTU	lb/hr	tons/yr	Compliance Method
CO	0.187 (1-hr)	885.4	3,531.1	CEMS
H ₂ SO ₄	0.006 (3-hr)	28.4	113.3	Method 8
NO _x	0.10 (1-hr)	473.5	1,888.3	CEMS
PM _{Total}	0.03 (3-hr)	142.1	566.5	Method 5, 201/202*
PM ₁₀ (total)	0.02 (3-hr)	94.7	377.7	Method 5, 201/202*
PM ₁₀ (filter)	0.015 (3-hr)	71.0	283.2	CEMS
SO ₂	90% Removal	497.2	1,982.7	CEMS
VOC	0.00375 (3-hr)	17.8	70.8	Method 25A

* Method 5, 201/202, modified as follows:

Year 1: Two stack tests w/in first year. Stack test to include at least five runs, each of at least two hours duration. At least two runs during cold startup. Stack test to measure PM_{Total}, PM₁₀ and PM_{2.5}. Operating conditions during stack test used to set CAM parameters.

Year 2 and beyond: Annual stack test; same as year 1. Condensable PM from stack test is added to filterables measured by PM CEMS to determine hourly concentration.

Mass determined by multiplying mmbtu * concentration.

D. The De-Flex Application and Draft Permit Are Vague and Confusing Regarding Emissions from Startup, Shutdown, Maintenance, and Malfunction

LCRA's Application for an Amendment to Permit No. 51770 & PSD-TX-486M3 (Fayette Power Plant's "De-Flex" Application) was processed separately from two related permitting actions: (1) LCRA's application for planned maintenance, startup, and shutdown ("MSS") emissions,² and (2) LCRA's "stand-alone PAL" permit.³

The Fayette power plant must meet BACT limits at all times, including any periods of reasonably foreseeable startup, shutdown, and maintenance. The Draft Permit's Special Condition 7 appears to exempt the plant from complying with federal opacity limits during "startup, shutdown, upset, or maintenance." This provision violates federal law and should be removed. If you disagree, please explain the legal and technical rationale for including this exemption in the permit. Special Condition 21 is vague and confusing surplusage, and should be removed. To the extent you disagree, please explain the purpose and meaning of Special Condition 21.

On January 4, 2011, LCRA submitted a permit application disclosing that PM emissions during startup, shutdown, and maintenance ("MSS") activities can reach "maximum" levels of 2,110.67 pounds per hour each at Units 1 and 2, and 2,752.74 pounds per hour at Units 3, and that these conditions can occur for up to 600 hours per year. These emissions must be considered as part of this Application and Draft Permit.

In addition, certain pound per hour limits in the Draft Permit appear unusually high for normal operations. Please explain whether any hourly limits in the Draft Permit's MAERT have been established at levels that take into account emissions during MSS. For example, the Draft Permit contains CO limits of up to 1,716 lbs/hr for Unit 3.⁴ It is unclear why the Unit 2 CO limit is so much higher than the hourly limit for the identical Unit 1; please explain. Hourly NOx limits for each boiler are also much higher than would be expected if based strictly on BACT and normal operations.

² LCRA's Application was submitted on January 4, 2011.

³ LCRA's Application was submitted on January 27, 2011; the Permit (PAL2) was issued by Executive Director on April 14, 2011. LCRA has missed the deadline set forth in TCEQ's rules for renewing its PAL Permit, and, therefore, we assume LCRA does not intend to renew its PAL permit. Please inform commenters on the status of LCRA's PAL Permit, including whether it will expire on its own terms in October 2012.

⁴ 1,296 lbs/hr for U1, and 920 lbs/hr for U3.

EPA has addressed MSS emissions from coal-fired power plants in the recent Mercury and Air Toxics Rule, by setting MSS requirements for coal plants based on the top performing 12 percent. This EPA rule should be used as the starting point for establishing BACT-level MSS emission limits and controls.

E. Certain Proposed Emission Limits Result in Significantly Higher Allowable Emissions Than Those Limits Contained Limits in Prior SIP-approved ("Legacy") Permits and the Flex Permit

Annual and hourly proposed carbon monoxide, VOC, lead, NOx, and PM limits are higher than previously authorized limits. In addition, some hourly or annual limits sum to higher than previously authorized Flex Permit caps. Also, certain pollutants are authorized, or proposed to be authorized, at levels higher than what LCRA has reported on past Emission Inventories. If the Draft Permit will authorize emissions at levels higher than previously emitted or authorized, this is yet one more reason to conduct a full impacts analysis and BACT review.

F. Interim and Final "Compliance Caps" Have no Basis in Law, and Perpetuate the Illegal and Problematic Flex Permit & PAL Caps

According to the TCEQ staff's Permit Amendment Source Analysis & Technical Review, the Draft Permit contains compliance caps "to ensure the permit action does not result in an increase in allowable emissions." There is no legal or technical basis for including these caps in the Draft Permit. Interim caps are completely irrelevant and should be deleted, because the Unit 3 scrubber upgrade and scrubbers for Units 1 and 2 have been complete and operational for over a year. In addition, the TCEQ's obligation is to ensure that this permit action could not result in increases in *actual* emissions (not Flex Permit allowables, which, as explained, are ridiculously inflated). Unit-specific, BACT-level emission limits should be set at levels to ensure the power plant could not emit more than past actuals.

G. The Draft Permit Should Contain a Heat Input Limit for Unit 3, or LCRA Must Apply for an Amendment and Demonstrate Compliance at the Higher Heat Input Levels.

LCRA should explain how its originally permitted 4,735 mmBtu/hour (maximum rated capacity) Unit 3 boiler has increased capacity by 30 percent. LCRA made conflicting representations in its 2002 Flexible Permit applications: on the one hand LCRA requested and received from the State emission caps based on a maximum heat input rate for Unit 3 that is roughly 30 percent greater than the pre-existing federally-enforceable (i.e., SIP-approved permit's) limit of 4,735 mmBtu/hour; but on the other hand, LCRA represented that the boiler operations and design (including the maximum capacity) was the same as when the unit was first authorized.

TCEQ and LCRA should explain why it is appropriate to base annual and hourly allowables on heat input rates far in excess of the maximum capacity represented in all pre-existing SIP-approved, PSD, or federally-enforceable permits. If LCRA seeks to increase maximum heat input capacity beyond previous maximum representations made in SIP-approved

PSD permits, then the Application should demonstrate that the plant meets BACT and does not violate ambient air quality standards.

H. The Application Contains no Ambient Impacts Analyses

TCEQ should require LCRA to submit modeling to demonstrate that its proposed emissions will not cause or contribute to air pollution.

I. Stack tests show LCRA Fayette Plant can meet lower emission levels

The Application incorrectly states that “[f]or SO₂ and PM/PM₁₀/PM_{2.5}, reduced emission limits are being proposed based on stack test data and/or ESP/scrubber data that was unavailable at the time of the original Flexible Permit application submittal.” (Application at 5-1). This statement is untrue, because stack test data was available at the time of the original Flex Permit application, showing that the power plant can emit at levels well below those incorporated in its Flex Permit, and that “front-half” (or filterable) PM is approximately half of “total” (filterable plus condensable) PM.⁵

J. LCRA’s Compliance History Necessitates a More Careful Review Before the Draft Permit Should be Issued

We have described above, and in previous letters (attached), LCRA’s misleading 2002 Application, which inflated actual capacity and emission rates to avoid PSD review during the life of the Flexible Permit. LCRA used inflated PM emission rates and heat input rates to obtain exceedingly high PM caps. LCRA’s internal 2002 documents demonstrate that LCRA knew that these calculations should also be used for compliance purposes and to determine actual emissions absent a stack test or continuous monitors. However, as soon as it obtained the Flex Permit in 2002, LCRA immediately relied on lower stack test data that it had called “unreliable” in the 2002 Flex Permit Application, both for compliance and for Emission Inventory purposes. Thus, LCRA reported less PM emissions than it should have, and this is not only a reporting violation but also resulted in substantial underpayment of fees. The attached compact disc contains summary data and calculations showing examples of LCRA’s PM emissions and fee underpayment.

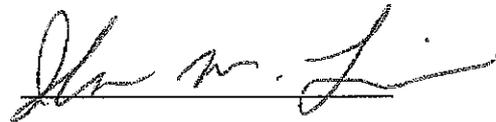
III. Conclusion

For the foregoing reasons, we believe the Application and Draft Permit do not live up to the laws and regulations designed to protect the public health and environment in communities around, and downwind of, the Fayette power plant. We have provided these comments and attachments for your consideration, and we look forward to your response to comments. In the

⁵ Stack test reports from 1979 to September 2002 present actual PM “front-half” emission levels of 0.01 lb/mmBtu (see, e.g., Unit 1, 1979 stack test); 0.02 (Unit 1 “front-half,” September 2002 stack test); 0.04 lb/mmBtu (Unit 1 “total” PM, September 2002 stack test); 0.02 (Unit 2, 1981 stack test); 0.01 lb/mmBtu (Unit 3, Aug. 1988 stack test).

event that you disagree with our comments and do not make the requested changes to the Draft Permit, we respectfully request a contested case hearing. While you are considering our comments, if you have any questions, please contact me at the phone number or email address below.

Sincerely,



Ilan Levin
Senior Attorney
Environmental Integrity Project
1303 San Antonio St., Ste 200
Austin, Texas 78701
(512) 637-9479
Fax: (512) 584-8019
ilevin@environmentalintegrity.org

w/ Attachments, including:

- PM Emissions and Fee Underpayment Analysis (compact disc)
- EPA May 20, 2011 letter
- EPA Dec. 5, 2010 letter
- Environmental Integrity Project letters to TCEQ (1/13/2011, 1/12/2011, 5/20/2011) and attachments
- Statements by EPA and State of Texas regarding Flex Permits and compliance with legacy permits
- Excerpts from LCRA permits and Applications
- Excerpts from LCRA internal communications and documents regarding Flex Permit Application and compliance with NSR

**Addendum to comments submitted by Environmental Integrity Project on behalf of Sierra Club and
Texas Campaign for the Environment**

The Draft Permit proposes an emission limit for fine particles that is based on multiplying 0.04 lb/mmBtu x the "maximum heat input" of Units 1 and 2, and 0.02 lbs/mmBtu x the maximum heat input for unit 3. The mass limits are 274 pounds per hour for Units 1, 276 pounds per hour for Unit 2, and 124 pounds per hour for unit 3 (rounded).

There is no basis for these limits, and no explanation provided in either the application or the draft permit. They do not reflect emission limits that could be achieved using best available technology, and neither LCRA nor the state have tried to make that argument.

Nor do they reflect current emissions. LCRA is apparently reporting emissions based on stack tests conducted in 2010 and 2011. The proposed permit limits are two and a half times higher than the highest hourly emissions reported by LCRA in 2011 for Units 1 and 2, and about 50% higher than the highest hourly emissions reported for Unit 3. LCRA has stated in an affidavit filed with the federal district court that stack tests are the best measure of actual emissions. If this permit is supposed to reflect "actual emissions," the proposed limits should be based on the most recent stack tests.

If LCRA can achieve its proposed emissions rate – for example, 0.04 lbs per mmBtu of heat input for Unit 1 – that emissions rate ought to be reflected in its permit. That matters because TCEQ has proposed hourly mass limits that assume LCRA is operating at its maximum heat input every hour of the year. That is physically impossible, and is simply a fiction used to inflate the permit limit for LCRA well beyond what it is capable of achieving. For example, the average hourly heat input for LCRA Unit 1 in 2010 was 5,468 pounds per hour, with many hours recording much lower heat input. With an emission limit of 0.04 lb/mmBtu, Unit 1 could not release more than 219 pounds of particulate matter to the air during an "average" hour of operation, or less than 1000 tons per year assuming round the clock operation. Instead, TCEQ has proposed allowing LCRA to release 274 pounds an hour, regardless of heat input, or more than 1200 tons per year. Why?

LCRA has never provided the state or the public with accurate or consistent reports of the amount of particulate matter it is actually releasing to the air. For example, LCRA released 2573 tons of particulate matter with a diameter less than ten microns in 2010, according to records of hourly emissions from the plant obtained by the Environmental Integrity Project. But LCRA reported only 1229 tons to the state's emissions inventory of the same pollutant, or less than half the amount it recorded. The same pattern can be seen in each of the last five years (See attached Compact Disk). The state's rules are clear – all emissions from all units and all activity throughout the plant, whether they result from normal operation or upsets, must be included in the emission inventory. Why hasn't LCRA done that, and why does the plant produce so many different estimates of actual emissions? TCEQ should reconcile this conflicting emissions data before issuing a final de-flex permit to LCRA.

The proposed de-flex permit doesn't include any emission estimates for maintenance, startup, and shutdown. In a separate permit application, LCRA has asked for permission to release over 2,000 pounds an hour from each of Units 1 and 2 for up to 600 hours a year during startup, shutdown, and maintenance activities, and more than 2,700 pounds an hour from Unit 3. TCEQ has authorized other plants in Texas to release this much.

- It's clear that LCRA isn't reporting these emissions today. For example, For example, LCRA reported releasing just 19 pounds of particulate matter from Unit 3 between 3 and 4 pm during a startup on February 8, 2011, when the Unit also reported very high opacity. Based on its permit application, the unit was much more likely to have released 2,750 pounds, or even more. (EXHIBIT B).
- By not including the emission limits that LCRA is seeking for MSS events in the proposed de-flex permit, TCEQ is misleading the public and hiding the full extent of the emission increases the facility is seeking.
- TCEQ cannot authorize the higher MSS emission limits that LCRA wants without first determining that the plant is using the best available technologies to prevent these emission spikes, which occur because the plant is burning coal during startup and shutdown at times when the plant's electrostatic precipitator is not working. EPA's final mercury standard makes clear that best practices require the use of clean fuels – which do not include coal – during startup or shutdown to minimize particulate matter emissions, and these need to be reflected in LCRA's de-flex permit.

The draft deflex permit assumes there is no difference in the size of particles released from the plant, i.e., that the total amount of particulate matter emitted from the boiler stacks and the amount of fine particles (smaller than 2.5 microns) are one and the same. There is no basis for that distinction, as both TCEQ and LCRA should know. In fact, LCRA has long distinguished between particle size in its annual emission inventory report to TCEQ, in which it provides separate emission estimates for PM-10 and PM 2.5. Federal rules have not allowed the use of "total" particulate matter as a surrogate for PM 2.5 for a long time, and no longer allow PM-10 to stand in for PM 2.5. The permit should be amended to set a separate limit for PM 2.5, which should be significantly lower than the limit for total particulates proposed in the draft de-flex permit. That limit can be determined through stack testing, or by using long available methods, such as AP-42 emission factors, to arrive at the appropriate standard.





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS TX 75202-2733

MAY 20 2011

Office of the Chief Clerk (MC-105)
Texas Commission on
Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

NSR
76973

OPA
MAY 25 2011
BY RL

TEXAS
COMMISSION
ON ENVIRONMENTAL
QUALITY
2011 MAY 25 AM 10:06
CHIEF CLERKS OFFICE

RE: Lower Colorado River Authority (LCRA) Sam Seymour Station Fayette Power Plant,
Fayette County, Texas - Prevention of Significant Deterioration (PSD) Permit No.
PSDTX486M3 and Flexible Permit 51770 - Review of January 31, 2011, Permit
Amendment Application

To Whom It May Concern:

We have reviewed the permit application to transition the LCRA Fayette Power Plant from a Subchapter G Flexible Permit No. 51770 to a Subchapter B permit. The permit application is dated January 31, 2011, and was received in our office on February 15, 2011. It was evaluated to ensure consistency with the Federal Clean Air Act (CAA) requirements and also to ensure a transparent lookback record. EPA has consistently recommended an approach to transition from a Subchapter G permit to a Subchapter B permit as laid out in an *Agreed Process for Transitioning Subchapter G Flexible Permits to State Implementation Plan (SIP) Approved Permits*. See http://www.epa.gov/region6/6xa/pdf/10-21-10_epa_letter_to_fha_with_all_transition_attachments.pdf.

The application submitted does not follow the recommended four step process referred to in the previous paragraph. It is important that all historical permit transactions are evaluated. We note that the first step of the process was not conducted by LCRA and instead they chose to submit a Subchapter B permit application without amending the Title V Permit through a minor permit revision to incorporate a term/condition assuring compliance with all federal applicable requirements during the transition process.

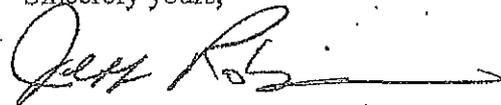
In addition, the application does not adequately justify whether the individually assigned limitations that were requested are appropriate. Specifically, Tables 7-1, 7-2, and Sections 8 and 9 of the application are inadequate in that they must contain information demonstrating whether the emission limits requested by LCRA are the appropriate limits based upon an analysis of historical permit authorizations which would include determining whether past authorizations should have undergone New Source Review (NSR) review. The application must also include a review and summary of all federal requirements under the CAA such as New Source Performance Standards (NSPS), Maximum Achievable Control Technology (MACT) Standards and SIP emission limits as they apply to each individual unit covered under the flexible permit.

In addition, the analysis must summarize all permit by rules (PBRs) that apply to, or authorize emissions from, emission units under the flexible permit cap. Title V Permit No. O21 issued September 21, 2009, incorporates by reference 11 PBRs. For each emission unit under the flexible permit cap that also has emissions authorized by a PBR, a review should be conducted to determine the total emission limit for the unit, considering all PBRs relevant to the unit. Specifically, did activities authorized by any the PBRs affect emission units under the flexible permit cap? If not, a statement should be made for the record that no emission units were affected.

We are also in receipt of the final Plantwide Applicability Limit (PAL) Separation and Permit Alteration dated April 14, 2011, which affects Permit Nos. 51770, PSDTX486M3, and PAL2. It is intricately linked to this amendment application. A comment letter is currently being prepared regarding that particular permit action and will be sent under separate cover.

We look forward to working with the TCEQ to resolve the issues identified in our comments and to ensure that the permit, when it is proposed, is consistent with the requirements of the Texas PSD State Implementation Plan (SIP). This letter is not a final position by the U.S. Environmental Protection Agency (EPA) concerning the disposition of the application and the subsequent draft permit. This concludes our review of the permit application as received. If you have any questions, please contact Stephanie Kordzi of my staff at (214) 665-7520.

Sincerely yours,



Jeff Robinson
Chief
Air Permits Section

cc: Mr. Steve Hagle
Texas Commission on Environmental Quality (MC-163)
Mr. Erik Hendrickson
Texas Commission on Environmental Quality (MC-163)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

December 6, 2010

Thomas G. Mason
General Manager and Chief Executive Officer
LCRA
P.O. Box 220
Austin, Texas 78767

Dear Mr. Mason:

My staff and I appreciated the opportunity to speak with LCRA and Austin Energy representatives on October 25, 2010, regarding LCRA's flexible and PAL air permit for the Fayette Power Plant (FPP). Thank you also for your letter to me dated November 18, 2010. We agree that the dialogue at the meeting was productive and believe that it was a positive step forward. We also appreciate the information presented by LCRA as it appears to show that emissions reductions are taking place.

In the Environmental Protection Agency's (EPA's) September 20, 2010 Opportunity to Confer letter, we outlined three acceptable options moving forward: EPA's Audit Program, direct negotiations with EPA on a streamlined enforcement path, and a flexible permit transition process consistent with the general elements of the four-step process that we jointly discussed with the Texas Commission on Environmental Quality (TCEQ) and stakeholders on September 16, 2010, or the Flint Hills Resources four-step process dated October 21, 2010. Each of these paths involves an enforceable commitment as well as an appropriate "look back" in order to arrive at federally enforceable unit-specific emission limits. As you are aware, completion of the Audit Program or a streamlined enforcement process also offers flexible permit holders a potentially significant release of liability. And as my staff discussed with Patti Hershey via telephone the week of October 25, given LCRA's potential New Source Review (NSR) exposure under the national enforcement initiative for NSR and coal-fired utilities, we encourage LCRA to reconsider moving forward with either the audit or a negotiated enforcement settlement.

In your November 18 letter, LCRA stated its intention to use a State Implementation Plan (SIP)-approved permit amendment process to convert FPP's flexible permit to a federally-approved permit (under 30 TAC Chapter 116, Subchapter B). The first step in your conversion process appears to be the submission of a permit amendment to TCEQ, pursuant to the recently adopted revisions to the TCEQ's public notice rules. While we appreciate your commitment to transition out of a flexible permit

through an amendment process with public notice, we have some concerns regarding elements of your proposed process.

First, we re-emphasize the importance of using a federally enforceable mechanism to memorialize your commitment and schedule for transitioning your flexible permit to a SIP-approved permit. We reiterate that there are several available mechanisms, such as a minor Clean Air Act (CAA) Title V permit modification (step one of the four-step transition process); a statement in the company's annual CAA Title V certification of compliance; or an Administrative Order on consent. We are open to discussing other enforceable mechanisms as well. Companies that do not make an enforceable commitment to obtain SIP-approved permits run the risk that, during the 6-12 month delay while the new Subchapter B permit application is being developed, EPA will decide (or be petitioned) to use its CAA Title V authorities to object to or reopen their permits on the basis that a facility is operating under a non-SIP compliant flexible permit.

Second, you state in your November 18, 2010 letter that LCRA's permit amendment process will be relatively straightforward, and may not require the rigor of analysis described in Step 2 of the four-step transition process. We are willing to discuss streamlining steps that are appropriate to your circumstances. For instance, EPA understands that establishing unit-specific limits for decommissioned units is not necessary, and that recently constructed equipment already with unit-specific limits may not have a long or involved permitting or operational history, and thus the limits can be identified more quickly. However, it is EPA's position that an essential component of the permit application is a thorough examination of the facility's permitting and operational history from the last SIP-approved permit to the new proposed permit revision. This is critical in order to ensure that future permits contain all SIP and federally applicable requirements, and that pre-flexible permit, SIP-approved permit conditions are either brought forward or their omission is justified. We are open to discussing an appropriate Step 2 analysis with you.

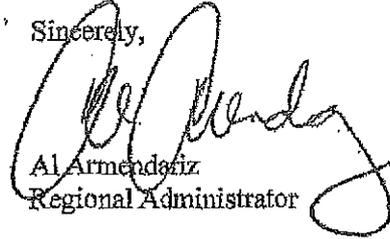
Third, we note that FPP's flexible permit is distinctive in that it incorporates a plantwide applicability limit (PAL) component. While the Opportunity to Confer letter did not specifically discuss the PAL, this is an issue of concern. You correctly note that EPA lent support in 2002 to the idea of piloting a PAL; however, the Agency has since issued federal PAL rules, and those rules have not yet been adopted by the State and included in the SIP. The PAL permit, like the flexible permit, is not a SIP-approved permit, and that situation needs to be addressed. Of course, you may wish to maintain the PAL as a State-only requirement in addition to SIP-approved unit-specific emissions limits required by federal law and, as we discussed on October 25, you may wish to consider including in your CAA Title V permit some alternative operating scenarios, which can provide LCRA with additional operational flexibility.

Finally, we would like to clarify that Region 6, through its September 20, 2010 letter, has, in fact, provided LCRA with notice of specific violations -- they are set out in the attachment to that letter. The Agency believes that LCRA can return to compliance by following any of the three paths described in this letter. The opportunity to confer

with EPA regarding those violations will remain open until December 22, 2010. Please do not hesitate to contact Patricia Welton if you would like to schedule another meeting.

Again, thank you for meeting with Region 6 and your willingness to obtain a SIP-approved authorization for the FPP. I am confident we can work together to resolve the flexible permit concerns as they relate to the Fayette Power Plant.

Sincerely,



Al Armendariz
Regional Administrator

cc: Joe Bentley, LCRA
Henry Eby, LCRA
Patti Hershey, LCRA
Pam Giblin, Baker Botts
Derek McDonald, Baker Botts
Matt Russell, City of Austin/Austin Energy



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January 13, 2011

La Donna Castañuela
Office of the Chief Clerk, MC-105
Texas Commission on Environmental Quality
12100 Park 35 Circle
Austin, TX 78753

via facsimile

Re: January 5, 2011 Application of the Lower Colorado River Authority for an Amendment to Flexible Permit Number 51770 and PSD-TX-486M3, Fayette Power Project (Sam Seymour power plant), La Grange, Texas

Dear Ms. Castañuela:

The Environmental Integrity Project ("EIP") and Texas Campaign for the Environment ("TCE") **request to be placed on the permanent mailing list** for the above-referenced permit.

In addition, we request a contested case hearing for LCRA's application seeking to authorize planned maintenance, startup, and shutdown emissions at the Fayette Power Project. Our preliminary concerns regarding this application are detailed below.

Requestors

The Environmental Integrity Project (EIP) (<http://www.environmentalintegrity.org/>) is a nonprofit organization dedicated to the enforcement of anti-pollution laws, including the Clean Air Act. EIP has offices at 1303 San Antonio Street, Suite 200, Austin, Texas, 78701, 512-637-9479, ilevin@environmentalintegrity.org. Members of EIP's staff live, work, and recreate downwind of the Fayette Power Project and are affected by air emissions from this coal-fired power plant.

Texas Campaign for the Environment (TCE) (<http://www.texasenvironment.org/>) is a nonprofit membership organization dedicated to informing and mobilizing Texans to protect their health, their communities and the environment. TCE has offices located at 3303 Lee Parkway #402, Dallas, TX 75219; 611 S. Congress #200-B, Austin, TX 78704; and 3100 Richmond #290, Houston, TX 77098. TCE members and staff live, work, and recreate in the vicinity and downwind of FPP.

Please address all correspondence regarding this letter to Ilan Levin, Senior Attorney, Environmental Integrity Project, 1303 San Antonio Street, Suite 200, Austin, Texas, 78701.

Initial Concerns

LCRA's application requests increases in hourly allowable emission rates for particulate matter and lead. Particulate matter is a mixture of small particles, including organic materials, metals, and ash, which can cause health and environmental problems. According to the U.S. EPA, once inhaled, PM can affect the lungs and pulmonary and respiratory systems, causing serious health effects such as "disease, cancer, and premature mortality." 52 Fed. Reg. 24,634, 24,663 (July 1, 1987). Numerous studies have linked PM exposure to increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; decreased lung function; aggravated asthma; development of chronic bronchitis; irregular heartbeat; heart attacks; and premature death in people with heart or lung disease. Additionally, PM can be carried long distances to settle over land or water, which may result in acidic lakes and streams, nutrient imbalances in aquatic systems, and damage to forests and farmlands.

According to the U.S. EPA,¹ lead is persistent in the environment and accumulates in soils and sediments through deposition from air sources. Ecosystems near point sources of lead demonstrate a wide range of adverse effects including losses in biodiversity, changes in community composition, decreased growth and reproductive rates in plants and animals, and neurological effects in vertebrates. Lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems and the cardiovascular system. Lead exposure also affects the oxygen carrying capacity of the blood.

The application does not contain any demonstration that the FPP will meet best available control technology for control of PM and lead emissions. The application states, "LCRA is proposing to minimize the duration of planned boiler startup and shutdown as described in section IX.C.1." Section IX.C.1. is not a BACT analysis. Among the basic preliminary questions that need to be answered as part of a BACT analysis are the following:

- Please explain why the Unit 3 scrubber cannot be brought online before startup.
- Please explain why the ESPs are unable to be brought online until after coal and fuel-oil are fired in the boilers.
- Please explain why natural gas is not BACT for a startup fuel. Natural gas lines are abundant in the La Grange area.
- Please explain the 30% PM control efficiency for Units 1 and 2 used in the calculation on startup for Units 1 and 2. AP-42 Table 1.1-5 states that 30% control of condensable PM emissions is a reasonable assumption for a PC boiler with FGD. Does a wet scrubber remove any filterable particulate matter during startup?

The application also fails to demonstrate that the requested increase in hourly emissions will not cause or contribute to an exceedance of any applicable ambient air standard, including NAAQS for PM and lead.

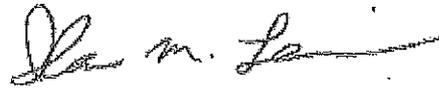
¹ <http://epa.gov/air/lead/health.html>

In addition, the application seeks to increase authorized emissions of hazardous air pollutants ("HAP"), and is subject to the federal Clean Air Act Section 112(g) requirement for maximum achievable control technology ("MACT").

Lastly, we request public notice, and the opportunities to file public comments and have a contested case hearing on LCRA's application.

Thank you for your attention to this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Ilan Levin". The signature is fluid and cursive, with a long horizontal stroke at the end.

Ilan Levin
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January 12, 2011

Mark R. Vickery, Executive Director
Office of the Executive Director MC-109
Texas Commission on Environmental Quality
12100 Park 35 Circle
Austin, Texas 78753

Re: Underpayment of Emissions fees for the Lower Colorado River Authority's Fayette Power Project

Dear Executive Director Vickery:

We are writing to inform you that the Lower Colorado River Authority ("LCRA") has underreported and underpaid fees for particulate matter ("PM") emissions from its Fayette Power Project power plant since at least 2003. LCRA's underpayment of emissions fees is a violation of TCEQ rules as well as the General Conditions of its Title V federal operating permit.¹ During the period from 2003-2010, LCRA has failed to report and pay for approximately 9,200 tons of PM emissions from its main boilers. The amount of unpaid fees for these emissions is approximately \$288,670.²

The Commission is required by federal law to obtain fees from industrial emitters sufficient to cover all reasonable costs required to develop and administer its Title V permitting program, including permit review, enforcement of permit requirements, emissions and ambient air monitoring, preparation of regulations and guidance, air quality modeling, and maintenance of emissions inventories.³ When a source fails to properly pay emissions fees, the TCEQ should undertake an enforcement action to recover unpaid fees and impose additional penalties where appropriate.⁴

Particulate matter generated by LCRA's main boilers is released into the air in filterable and condensable forms. *Filterable* PM consists of particles emitted by a source that exit the smokestack as a solid or liquid. *Condensable* PM refers to material that is vapor phase at stack conditions, but which reacts in ambient air to form solid or liquid PM after being discharged

¹ 30 TEX. ADMIN. CODE § 101.27; 30 TEX. ADMIN. CODE § 122.143(10).

² (Attachment 1). This spreadsheet is based on information in documents maintained and submitted to the TCEQ by LCRA. It calculates the difference between total PM emissions as reflected in LCRA's continuous compliance documents with reported total suspended particulate emissions numbers that LCRA used to calculate the fee basis for PM emissions from its main boilers. LCRA's continuous compliance document is (Attachment 2) to this letter and the LCRA fee and Emissions Inventory documents submitted to TCEQ are included as (Attachment 3).

³ 42 U.S.C. § 7661a(b)(3)(B).

⁴ For example, if an emitter's failure to pay emissions fees is knowing or intentional 30 TEX. ADMIN. CODE § 101.27(g) requires the Commission to impose criminal sanctions pursuant to TEXAS WATER CODE § 7.178. See also, TEXAS WATER CODE § 5.706 (Penalties and Interest on Delinquent Fees).

Environmental Integrity Project submitted a Public Information Act request to the Commission for all documents related to LCRA's payment of emissions fees and Emissions Inventory reporting from 2002 to the present. None of the documents released by the Commission in response to this request provide any explanation for this discrepancy. Therefore, we presume that LCRA has not provided any explanation for its use of different emission factors to demonstrate compliance with permit limits than it uses to calculate its fee payments. In the absence of information indicating that LCRA's stack test results were inaccurate, TCEQ's Emissions Inventory Guidelines indicate that stack tests emission factors should be used instead of generic emissions factors like those used by LCRA to calculate its fees for the condensable fraction of PM emissions from the Fayette boilers.¹³ LCRA was aware of the stack test results for condensable PM emissions and improperly disregarded that information in favor of less reliable emission factors that resulted in a lower fee basis.

LCRA may not explain this discrepancy by claiming that stack test results for condensable PM emissions are unreliable. If actual emissions of a regulated pollutant cannot be reliably measured, emissions fees must be based on allowable emissions.¹⁴ As TCEQ's Emissions Inventory Guidelines indicates, stack test emission factors are preferable to the generic emissions factors used by LCRA to calculate its emissions fees for the condensable fraction of its PM emissions.¹⁵ If LCRA became aware that the emissions factors it used to demonstrate compliance with its permit limits were inaccurate, and that alternative emission factors should be used, it should have so informed the TCEQ.

In light of LCRA's repeated failure to pay for all PM emissions from the Fayette power plant, we request that the Commission initiate an enforcement action to recover fees due to the agency. Additionally, we ask that the Commission review its Emissions Inventory and Emissions Fees procedures to ensure that a full and accurate accounting of total PM emissions consistent with Texas and federal law is made by all entities subject to these requirements.

Respectfully Submitted,

ENVIRONMENTAL INTEGRITY PROJECT

By:


Gabriel Clark-Leach
1303 San Antonio Street, Suite 200
Austin, Texas 78701
Phone: 512-637-9477
Fax: 512-584-8019
gclark-leach@environmentalintegrity.org

¹³ RG-360, *2010 Emissions Inventory Guidelines* at 57 and 59.

¹⁴ 30 TEX. ADMIN. CODE § 101.27(f).

¹⁵ RG-360, *2010 Emissions Inventory Guidelines* at 57 and 59.

Attachments

Attachment 1: Spreadsheet indicating amount of underreported PM emissions and underpaid emissions fees for Fayette power plant main boilers, 2003-2010.

Attachment 2: LCRA PM compliance record for Fayette main boilers.

Attachment 3: CD containing LCRA's Emission Inventory and Emissions Fees documentation, 2001-2010.

Attachment 4: Stack test summary, Fayette Unit 2, 1985.

Attachment 5: Stack test summary, Fayette Unit 3, 1988.

Attachment 6: Stack test summary, Fayette Unit 1, 2002.

Attachment 7: Sworn Affidavit of Joe Bentley.

Attachment 8: 2006 Emissions Inventory emissions calculations.

Attachment 9: Email from Joe Wegenhoft to Matoaka Johnson, November 26, 2007.

Year	Unit 1			Unit 2			Unit 3		
	Compliance			Compliance			Compliance		
	Records Total	PM10	Difference	EI TSP Reported	Total PM10	Difference	EI TSP Reported	Total PM10	Difference
2003	640.284	955	314.716	923.452	1580.1	656.648	199.755	345	145.245
2004	559.48	856.7	297.22	815.03	1415	599.97	220.96	370.2	149.24
2005	517.4098	891.8	374.39	845	1547.6	702.6	176.5334	301.8	125.266
2006	453.286	796.3	343.014	666.481	1305.9	639.419	191.805	339.7	147.895
2007	523.555	976	452.445	871.184	1691.08	819.896	184.741	348.97	164.229
2008	518.031	918.5	400.469	799.766	1518.3	718.534	202.957	363.8	160.843
2009	537.362	934	396.638	833.374	1528.6	695.226	173.821	337.4	163.579
2010	555.303	757.7	202.397	789.245	1200	410.755	277.172	395.9	118.728
Total:			2781.289			5243.048			1175.025

Year	Unreported PM	Rate Per Ton	Amount Underpaid
2003	1116.609	28.63	31968.51
2004	1046.43	29.18	30534.82
2005	1202.256	29.77	35791.16
2006	1130.328	30.9	34927.14
2007	1436.57	32.39	46530.5
2008	1279.846	32.73	41889.36
2009	1255.443	33.74	42358.65
2010	731.88	33.71	24671.67
Total	9199.362 tons		288671.81

PPM PM10 Emissions

Month	Heat Input (mmBtu)			PM10 (tons)			PM10 (lb/mmBtu)			Stack 12-month PM10 (tons)	Engines (tons)	Temp. Engines (tons)	Motor Sources (tons)	Welding Rods & Sandblasting (tons)	Total (tons)	PM10 Permit Limit (tons)
	Unit 1	Unit 2	Unit 3	Unit 1	Unit 2	Unit 3	Unit 1	Unit 2	Unit 3							
Oct-02	546,539	4,089,822	2,932,353	11.48	140.25	29.27	0.042	0.070	0.02	855.3	1,601.8	362.0	2,819.1	0.07	0.00	2,960.52
Nov-02	496,840	4,118,571	3,876,726	18.43	144.15	36.27	0.042	0.070	0.02	914.2	1,587.3	362.1	2,863.7	0.07	0.00	2,960.52
Dec-02	3,746,810	3,565,279	3,462,124	78.68	124.78	34.62	0.042	0.070	0.02	976.9	1,578.5	333.3	2,908.7	0.07	0.00	2,960.52
Jan-03	4,257,644	4,160,037	3,735,585	91.51	145.69	37.36	0.042	0.070	0.02	955.0	1,580.1	345.0	2,880.1	0.06	0.00	2,960.52
Feb-03	3,635,405	3,259,521	3,315,295	80.54	116.68	33.35	0.042	0.070	0.02	944.2	1,548.2	337.6	2,836.1	0.06	0.00	2,960.52
Mar-03	4,006,914	3,762,875	1,987,576	84.15	131.70	19.88	0.042	0.070	0.02	933.3	1,560.2	333.4	2,825.9	0.06	0.00	2,960.52
Apr-03	4,188,877	3,984,435	2,366,896	87.97	139.46	23.67	0.042	0.070	0.02	931.5	1,438.6	330.9	2,721.0	0.06	0.00	2,960.52
May-03	3,468,573	4,251,996	2,941,629	72.71	148.10	29.42	0.042	0.070	0.02	925.5	1,300.4	348.5	2,604.2	0.06	0.00	2,960.52
Jun-03	4,151,968	4,077,233	2,893,571	87.19	142.70	28.94	0.042	0.070	0.02	932.2	1,330.2	349.6	2,633.0	0.05	0.00	2,960.52
Jul-03	3,861,998	3,807,826	2,630,164	81.10	126.27	26.30	0.042	0.070	0.02	928.2	1,336.6	338.9	2,603.7	0.06	0.00	2,960.52
Aug-03	3,534,086	3,297,624	2,539,024	70.44	129.97	29.39	0.042	0.070	0.02	925.5	1,300.4	348.5	2,604.2	0.06	0.00	2,960.52
Sep-03	3,481,264	3,864,180	2,749,640	73.11	135.23	27.50	0.042	0.070	0.02	925.7	1,338.3	346.9	2,610.9	0.05	0.00	2,960.52
Oct-03	2,784,406	3,612,726	2,626,036	56.79	126.45	26.26	0.042	0.070	0.02	925.5	1,300.4	348.5	2,604.2	0.06	0.00	2,960.52
Nov-03	3,843,312	3,204,128	3,602,424	80.71	113.68	30.02	0.042	0.070	0.02	925.7	1,338.3	346.9	2,610.9	0.05	0.00	2,960.52
Dec-03	3,553,578	3,704,788	2,908,104	74.63	129.67	29.08	0.042	0.070	0.02	925.7	1,338.3	346.9	2,610.9	0.05	0.00	2,960.52
Jan-04	3,748,838	3,574,494	3,197,402	78.73	124.77	27.11	0.042	0.070	0.02	925.7	1,338.3	346.9	2,610.9	0.05	0.00	2,960.52
Feb-04	4,061,591	3,807,928	3,310,575	85.29	133.26	33.11	0.042	0.070	0.02	925.7	1,338.3	346.9	2,610.9	0.05	0.00	2,960.52
Mar-04	4,008,951	3,850,464	2,710,576	80.26	160.03	32.05	0.042	0.070	0.02	925.7	1,338.3	346.9	2,610.9	0.05	0.00	2,960.52
Apr-04	3,821,702	4,572,365	3,295,286	86.56	160.20	32.95	0.042	0.070	0.02	925.7	1,338.3	346.9	2,610.9	0.05	0.00	2,960.52
May-04	4,122,017	4,277,247	3,037,430	78.77	167.47	30.38	0.042	0.070	0.02	925.7	1,338.3	346.9	2,610.9	0.05	0.00	2,960.52
Jun-04	3,750,815	3,070,430	3,037,430	22.31	154.57	32.53	0.042	0.070	0.02	882.2	1,377.5	360.3	2,620.5	0.06	0.00	2,960.52
Jul-04	3,088,687	4,441,689	3,232,864	22.31	147.95	30.17	0.042	0.070	0.02	856.7	1,415.0	370.2	2,641.9	0.06	0.00	2,960.52
Aug-04	3,882,755	4,321,681	3,302,070	81.54	151.26	33.02	0.042	0.070	0.02	868.6	1,448.5	373.4	2,682.5	0.06	0.00	2,960.52
Sep-04	4,031,719	4,204,911	3,318,991	84.87	147.17	33.19	0.042	0.070	0.02	868.6	1,448.5	373.4	2,682.5	0.06	0.00	2,960.52
Oct-04	2,850,763	3,002,431	2,561,486	59.86	135.59	25.61	0.042	0.070	0.02	837.9	1,531.0	341.1	2,711.0	0.07	0.00	2,960.52
Nov-04	3,689,573	3,445,037	3,142,291	70.76	120.51	3.44	0.042	0.070	0.02	824.0	1,598.4	315.2	2,777.6	0.06	0.00	2,960.52
Dec-04	3,655,022	2,691,619	1,927,724	66.58	116.60	1.93	0.042	0.070	0.02	815.3	1,599.4	310.5	2,725.4	0.06	0.00	2,960.52
Jan-05	4,312,284	4,521,912	3,504,330	50.56	151.27	35.04	0.042	0.070	0.02	824.2	1,609.7	318.2	2,751.0	0.06	0.00	2,960.52
Feb-05	4,282,593	4,393,949	3,156,223	81.33	153.79	31.81	0.042	0.070	0.02	824.2	1,609.7	318.2	2,751.0	0.06	0.00	2,960.52
Mar-05	3,715,322	4,212,797	2,991,333	78.03	147.45	29.91	0.042	0.070	0.02	824.2	1,609.7	318.2	2,751.0	0.06	0.00	2,960.52
Apr-05	3,240,718	3,775,689	2,619,643	78.22	132.18	26.29	0.042	0.070	0.02	880.6	1,620.6	310.0	2,811.3	0.06	0.00	2,960.52
May-05	2,874,727	3,053,624	2,714,590	59.66	106.88	27.17	0.042	0.070	0.02	891.8	1,547.6	301.8	2,741.2	0.06	0.00	2,960.52
Jun-05	2,660,614	3,409,015	2,778,247	55.87	119.32	27.78	0.042	0.070	0.02	872.9	1,514.2	296.4	2,683.4	0.04	0.00	2,960.52
Jul-05	3,131,437	3,248,974	2,780,123	65.76	113.71	27.60	0.042	0.070	0.02	872.9	1,514.2	296.4	2,683.4	0.04	0.00	2,960.52

RPP PM10 Emissions

Month	Heat Input (mmBtu)			FMI0 (tons)			PM10 (lb/mmBtu)			Stack 12-month PM10 (tons)			Engines (tons)	Temp. Engines (tons)	Minor PM10 Sources (tons)	Welding Rods & Spoolblasting (tons)	Total (tons)	PM10 Permit Limit (tons)	
	Unit 1	Unit 2	Unit 3	Unit 1	Unit 2	Unit 3	Unit 1	Unit 2	Unit 3	Unit 1	Unit 2	Unit 3							Total
Jun-09	3,916,933	4,171,422	2,991,064	82.26	146.00	29.91	0.842	0.070	0.072	826.9	1,557.0	338.6	2,722.5	0.42	0.66	95.5	0.52	2,818.1	5,090.52
Jul-09	4,161,571	4,187,187	3,420,779	87.29	146.55	34.21	0.842	0.070	0.072	824.0	1,554.6	342.0	2,720.6	0.42	0.71	95.5	0.79	2,817.2	5,090.52
Aug-09	3,985,565	4,047,674	3,149,178	83.70	141.67	31.43	0.842	0.070	0.072	816.6	1,543.5	342.1	2,702.3	0.34	0.71	95.5	0.85	2,798.9	5,090.52
Sep-09	3,581,240	3,706,354	2,868,008	75.21	129.72	28.68	0.842	0.070	0.072	810.6	1,539.7	347.2	2,697.5	0.40	0.71	95.5	0.83	2,794.1	5,090.52
Oct-09	3,957,899	3,870,462	2,366,823	83.12	135.47	23.7	0.842	0.070	0.072	866.0	1,532.7	328.2	2,725.9	0.47	1.42	95.5	0.88	2,834.3	5,090.52
Nov-09	3,580,292	3,078,730	2,777,564	75.19	107.76	27.78	0.842	0.070	0.072	930.4	1,503.9	326.8	2,761.1	0.48	1.07	95.5	0.76	2,858.1	5,090.52
Dec-09	4,200,790	4,196,903	3,616,518	88.22	146.89	36.17	0.842	0.070	0.072	934.0	1,528.6	337.4	2,800.1	0.51	1.05	95.5	0.82	2,897.8	5,090.52
Jan-10	3,774,510	3,912,106	3,370,245	79.26	136.52	33.70	0.842	0.070	0.072	933.7	1,528.0	338.0	2,800.7	0.38	1.06	95.5	0.82	2,897.8	5,090.52
Feb-10	3,782,104	3,790,895	3,109,955	79.42	132.68	31.10	0.842	0.070	0.072	944.9	1,548.9	340.0	2,833.8	0.53	1.05	95.5	1.13	2,950.9	5,090.52
Mar-10	3,601,064	3,020,103	3,315,389	75.62	105.70	33.15	0.842	0.070	0.072	933.0	1,527.2	351.7	2,831.9	0.55	1.03	95.5	1.15	2,929.0	5,090.52
Apr-10	3,901,014	D	3,308,250	81.82	0.00	33.00	0.842	0.070	0.072	969.4	1,468.8	353.9	2,752.2	0.48	1.18	95.5	1.97	2,829.3	5,090.52
May-10	3,975,248	2,676,850	3,338,108	83.46	93.68	33.58	0.842	0.070	0.072	974.8	1,423.0	354.9	2,752.7	0.48	1.21	95.5	1.99	2,849.9	5,090.52
Jun-10	4,132,370	4,402,397	3,461,717	86.78	154.08	34.62	0.842	0.070	0.072	979.3	1,431.1	359.6	2,770.0	0.55	1.25	95.5	2.10	2,867.3	5,090.52
Jul-10	4,239,770	4,553,397	3,450,531	90.72	159.44	34.51	0.842	0.070	0.072	982.6	1,444.0	359.9	2,786.5	0.54	1.82	95.5	1.82	2,883.8	5,090.52
Aug-10	4,308,947	4,600,758	3,553,024	90.49	161.03	35.53	0.842	0.070	0.072	989.4	1,463.4	364.9	2,839.8	0.50	1.29	95.5	1.90	2,914.1	5,090.52
Sep-10	3,869,525	4,133,837	3,064,074	81.58	144.68	30.64	0.842	0.070	0.072	995.5	1,478.3	368.9	2,859.2	0.50	1.33	95.5	1.90	2,937.1	5,090.52
Oct-10	916,010	3,566,432	3,501,109	8.70	35.66	35.01	0.842	0.070	0.072	921.1	1,378.5	398.6	2,698.2	0.42	0.68	95.5	1.74	2,794.8	5,090.52
Nov-10	0	3,694,131	3,336,020	0.00	36.04	31.36	0.842	0.070	0.072	845.9	1,306.8	402.2	2,556.9	0.35	0.67	95.5	1.75	2,653.4	5,090.52
Dec-10	0	3,882,210	2,990,433	0.00	38.02	29.90	0.842	0.070	0.072	757.7	1,200.0	395.9	2,353.5	0.33	0.64	95.5	1.72	2,450.0	5,090.52

MULLINS ENVIRONMENTAL TESTING CO., INC.
P.O. Box 598
Addison, Tx 75001
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PERMANENT

Particulates
SOURCE EMISSIONS SURVEY
OF
LOWER COLORADO RIVER AUTHORITY
FAYETTE POWER PROJECT
UNIT NUMBER 2 STACK
LA GRANGE, TEXAS

*(Test Run: AUGUST 1985
Rouse, J. W. & Co. 4/3/85)*

FILE NUMBER 85-102

MULLINS ENVIRONMENTAL TESTING CO., INC.

METCO

SOURCE EMISSIONS SURVEY
LOWER COLORADO RIVER AUTHORITY
FAYETTE POWER PROJECT
UNIT NUMBER 2 STACK
LA GRANGE, TEXAS
FILE NUMBER 85-102

INTRODUCTION

Mullins Environmental Testing Co., Inc., Dallas, Texas, conducted a source emissions survey of the Lower Colorado River Authority, Fayette Power Project, located near La Grange, Texas, on August 20 and 21, 1985. The purpose of these tests was to determine the concentration of particulate matter being emitted to the atmosphere via the stack from Unit Number 2.

The sampling followed the procedures set forth in the Appendix to the Code of Federal Regulations, Title 40, Chapter I, Part 60.

METCO

SUMMARY OF RESULTS

Fayette Power Project
Unit Number 2 Stack

Run Number	1	2	3
Stack Flow Rate - ACFM	2,107,311	2,105,305	2,122,760
Stack Flow Rate - DSCFM*	1,261,775	1,269,978	1,259,361
% Water Vapor - % Vol.	11.13	10.19	10.56
% CO ₂ - % Vol.	12.6	12.7	12.6
% O ₂ - % Vol.	6.3	6.8	6.9
% Excess Air @ Sampling Point	42	47	48
Particulates Probe, Cyclone & Filter Catch grains/dscf*	0.0275	0.0102	0.0138
grains/cf @ Stack Conditions	0.0164	0.0062	0.0081
lbs/hr	296.9	111.4	148.4
Emission Rate calculated using an F factor of 9780 dscf/million Btu - lbs/million Btu	0.055	0.021	0.029
Emission Rate calculated using an F _c factor of 1800 scf CO ₂ /million Btu - lbs/million Btu	0.056	0.021	0.028
Process Input as calculated from coal analysis - million Btu/hr	-----	-----	-----
Emission Rate calculated using process input - lbs/million Btu	-----	-----	-----
Emission Limit 40 CFR 60 - lbs/million Btu	0.10	0.10	0.10
Boiler Production - megawatts	-----	-----	-----

* 29.92 "Hg, 68°F (760 mm Hg, 20°C)

COMPLIANCE
TEST REPORT
FOR
LCRA
FAYETTE POWER PROJECT
UNIT 3

August 18/21, 1988

88-088

PERMANENT

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100233

INTRODUCTION

This report presents the results of the compliance tests performed on Fayette Power Project, Unit 3 Lower Colorado River Authority.

The purpose of the tests was to determine the pollutant emissions of the unit for compliance. The results of the tests can be found in Section II of this report.

Tests were performed to determine the emission rates of the following pollutants: Particulates, SO₂, H₂SO₄, NO_x, CO, VOC's, Mercury and Beryllium. Opacity measurements were also taken.

The emissions testing was performed by Total Source Analysis, Inc., whose main office is located at 139 W. Herrick, Wellington, Ohio 44090.

The tests were performed on August 18/21, 1988. The testing was performed in accordance with EPA reference methods as published in the August 1, 1987 Federal Register, - "Standards of Performance for New Stationary Sources" and the Texas Air Control Board's Sampling Procedures Manual.

The testing equipment, sampling procedures and analytical procedures are described in Section III of this report. The raw field data, lab analysis reports and equations used in determining final results are presented in the Appendix.

SUMMARY OF TEST RESULTS

Attachment 6

Stack test summary, Fayette Unit 1, 2002



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02-240FPP1A



SUMMARY OF RESULTS

Fayette Unit Number 1 Stack

Run Number	"Front-Half" Particulate Matter Emissions			"Total" Particulate Matter Emissions		
	(gr/dscf)	(lbs/hr)	(lbs/million Btu)	(gr/dscf)	(lbs/hr)	(lbs/million Btu)
1	0.0126	149.55	0.026	0.0242	286.60	0.049
2	0.0092	109.87	0.019	0.0183	219.74	0.038
3	0.0082	101.03	0.017	0.0193	236.74	0.040
Average	0.0100	120.15	0.021	0.0206	247.69	0.042

* 29.92 "Hg, 68°F (760 mm Hg, 20°C)

Attachment 7

Sworn Affidavit of Joe Bentley

3. I have a Bachelor of Science degree in Mechanical Engineering from the University of Texas at Austin. I have worked in the environmental field since 1979, concentrating primarily in air quality matters.

4. In my position as Environmental Advisor, I am responsible for assisting LCRA's power generating stations in maintaining compliance with applicable federal and state environmental air quality laws and regulations. My responsibilities include ensuring that LCRA has the air quality permits that it must hold to construct and operate LCRA's electric generating units and assisting LCRA in complying with the terms and conditions of those permits, including associated emissions testing, recordkeeping and reporting obligations of the Texas Commission on Environmental Quality ("TCEQ") and the U.S. Environmental Protection Agency ("U.S. EPA"). I have also been responsible for managing the initial certification of over 15 continuous emission monitoring systems ("CEMS") and for directing air emissions stack testing as required under applicable air quality permits. Other responsibilities include coordinating CEMS quality assurance testing for all LCRA coal- and gas-fired boilers and combustion turbines and coordinating LCRA's sulfur dioxide ("SO₂") and nitrogen dioxides ("NO_x") allowance trading and annual reconciliation as part of the federal Acid Rain Program and Clean Air Interstate Rule.

5. One of LCRA's power generating stations is the Sam K. Seymour Generating Station located approximately seven miles east of La Grange, Texas, that is the subject of this litigation. Three coal-fired steam electric generating units known as Fayette Power Project ("FPP") Units 1, 2 and 3 are located at the Sam K. Seymour Generating Station. I regularly visit FPP Units 1, 2 and 3, and I am familiar with the design, operation, air emissions, and applicable air quality requirements of those units based on my environmental permitting and compliance work for LCRA.

A true and correct copy of the 2009 Operating Permit is attached as Exhibit A to LCRA's Response to Plaintiff's Motion for Partial Summary Judgment. EPA had the opportunity to review the 2009 Operating Permit and did not object to its issuance.

10. Title V Permit No. O21 sets forth all air quality requirements applicable to FPP. One of the air quality requirements applicable to FPP is the new source review construction authorization found in Construction Permit No. 51770/PSD-TX-486M3. See Exhibit A at 88. EPA reviewed and commented on Construction Permit No. 51770/PSD-TX-486M3 and specifically endorsed Construction Permit No. 51770/PSD-TX-486M3 at a press conference in Austin in July 2002. A true and correct copy of the version of Construction Permit No. 51770/PSD-TX-486M3 incorporated by reference in the 2004 Operating Permit is attached as Exhibit C to LCRA's Response to Plaintiff's Motion for Partial Summary Judgment. A true and correct copy of the version of Construction Permit No. 51770/PSD-TX-486M3 incorporated by reference in the 2009 Operating Permit is attached as Exhibit D to LCRA's Response to Plaintiff's Motion for Partial Summary Judgment. The 2004 Operating Permit and the 2009 Operating Permit did not incorporate by reference as an air quality requirement applicable to FPP Permit No. 9233 or any prior version of Permit No. PSD-TX-486M3. Because the versions of Construction Permit No. 51770/PSD-TX-486M3 that were incorporated by reference into the 2004 Operating Permit and the 2009 Operating Permit did not contain a unit-specific hourly emission limit for FPP Unit 3 of 142.1 pounds of PM per hour, there is no unit-specific hourly emission limit for FPP Unit 3 of 142.1 pounds of PM per hour that is incorporated by reference in the 2004 Operating Permit or the 2009 Operating Permit. See Exhibit A; Exhibit B. The unit-specific hourly emission limit for FPP Unit 3 of 142.1 pounds of filterable PM that Plaintiff

matter that are vapors or gases at stack temperature conditions but form solids or liquids upon cooling when released to the atmosphere. The emission limits in Construction Permit No. 51770/PSD-TX-486M3 that are enforceable by the 2004 and 2009 Operating Permits include both filterable and condensable PM or PM₁₀. Emission limits that include both filterable and condensable PM or PM₁₀ are sometimes referred to as total PM or total PM₁₀ limits.

13. Special Condition No. 20 of Construction Permit No. 51770/PSD-TX-486M3 requires LCRA to establish and maintain recordkeeping programs to demonstrate compliance with all authorized emission caps. Exhibit C; Exhibit D. Special Condition No. 20 further specifies that compliance with annual typ emissions shall be based on a 12-month rolling average, and that emission calculations for verifying compliance with emission caps shall be calculated at least once every month. Finally, Special Condition No. 20(E) states that "The permit holder shall keep records of process parameters necessary to demonstrate compliance with the emission caps for sources not equipped with a CEMS. Emission calculations and emission factors may be changed to reflect newer emission factors or emission factors that are based upon more recent stack sampling," *Id.*

14. LCRA established and maintained a recordkeeping program as required by Special Condition No. 20 of Construction Permit No. 51770/PSD-TX-486M3. LCRA performed emission calculations once every month from March 2006 until January 2010, to demonstrate compliance with the annual total PM and total PM₁₀ emission limits. Part of my job responsibilities for LCRA included the review and oversight of LCRA's recordkeeping program. True and correct copies of the contemporaneous compliance records established and maintained by LCRA are attached as Exhibit E. The records attached as Exhibit E are excerpts of records reflecting information compiled by LCRA and kept in the regular course of business of LCRA.

calculations for heat input were used by LCRA in performing the emission calculations under Special Condition 20.

18. An emission factor is a value that relates the quantity of an air contaminant released to the atmosphere with an activity associated with the release of that contaminant. An emission factor is usually expressed as the weight of an air contaminant divided by a unit weight, volume, or duration of the activity emitting the contaminant (e.g., pounds of PM emitted per heat input of coal burned). An emission factor facilitates the reliable estimation of emissions from various sources of air contaminants.

19. LCRA determined the emission factor for total PM and total PM₁₀ to use in its emission calculations by performing stack tests on the emissions from Unit 1, 2 and 3. A stack test is a procedure for sampling flue gas in the stack by using appropriate access ports and traverse points to obtain representative measurements of contaminant concentrations from a facility, unit, or pollution control equipment. It is used for compliance and to determine a pollutant emission rate, concentration, or parameter while the unit is operating at conditions that result in the measurement of the highest emission values or at other operating conditions approved by TCEQ. A test is typically comprised of three sampling runs for a specified sampling time that are then summed and divided by three to result in an emission rate that reflects the average of the three runs. The testing is performed by an independent source testing company using sampling and analytical procedures approved by TCEQ or the U.S. EPA for the specific contaminant. A stack test is also known as an emission test, compliance test, source test, or performance test.

20. Stack testing of Units 1, 2 or 3 was required under FPP's new source review Construction Permit and Title V Operating Permits. LCRA has contracted with

emitted from Units 1, 2 and 3 is reasonably assumed to be less than 10 microns in diameter, the emission factor for total PM and total PM₁₀ from Units 1, 2 and 3 is the same. For the period from March 2006 until January 2010, LCRA used the following stack test results to determine an annual emission factor for total PM/PM₁₀ from Units 1, 2 and 3:

Unit	Contaminant	Stack Test Results (average of 3 1-hour sampling runs)	Date of Most Recent Stack Test Prior to 2006 - 2010	Annual Emission Factor (Total PM/PM ₁₀)
1	PM/PM ₁₀	0.042 lb/mmBtu (Total PM)	September 2002	0.042 lb/mmBtu
2	PM/PM ₁₀	0.035 lb/mmBtu (Filterable PM)	August 1985	0.070 lb/mmBtu
3	PM/PM ₁₀	0.02 lb/mmBtu (Total PM)	August 1988	0.02 lb/mmBtu

The annual emission factors identified above were based on the then most recent stack testing of Units 1, 2 and 3 that occurred prior to the March 2006 to January 2010 period, in accordance with Special Condition 20 of Construction Permit No. 51770/PSD-TX-486M3. Because the stack testing requirements for Unit 2 in August 1985 only required measurement of the filterable PM from that Unit, and not the total PM emissions (which includes filterable and condensable PM emissions), LCRA had to determine from the available testing an appropriate emission factor for total PM/PM₁₀. The results of stack testing of Units 1 and 3 in 1988 and 2002 demonstrated that total PM emissions were approximately two times as much as the filterable PM emissions from those Units. Based on those results and the design and operational similarities between Unit 1 and Unit 2, I determined that the annual emission factor for total PM/PM₁₀ from Unit 2 should be two times the stack test results for filterable PM from Unit 2.

22. Attached to this Affidavit as Exhibit G-1 is a Table that I prepared that identifies the actual total PM/PM₁₀ emissions from Units 1, 2 and 3 that are reflected on the

following annual emission factors to allege an exceedence of the total PM and total PM₁₀ emission limits in Construction Permit No. 51770/PSD-TX-486M3:

Unit	Contaminant	Plaintiff's Annual Emission Factor (Total PM/PM ₁₀)
1	PM/PM ₁₀	0.1 lb/mmBtu
2	PM/PM ₁₀	0.1 lb/mmBtu
3	PM/PM ₁₀	0.03 lb/mmBtu

These emission factors are not based on the most recent stack testing of Units 1, 2 and 3 that occurred prior to the March 2006 to January 2010 period and are not appropriate for determining actual annual emissions of PM and PM₁₀ from Units 1, 2 and 3 during that period. In its Motion, Plaintiff does not identify or consider the results of any stack testing of Units 1, 2 or 3. This failure has caused Plaintiff to use annual emission factors that overstate the actual emissions of total PM and total PM₁₀ from Units 1, 2, and 3. Had the Plaintiff adjusted the annual emission factor that it erroneously used for Unit 1 to a value based on the September 2002 stack testing of Unit 1, that adjustment alone would show that the annual total PM/PM₁₀ emissions from FPP complied with the total PM/PM₁₀ emission limits in Construction Permit No. 51770/PSD-TX-486M3.

25. In its Motion Plaintiff argues that because LCRA had used these annual emission factors in a July 2002 permit application in order to identify total PM/PM₁₀ emissions in 1999 for TCEQ's consideration in setting future emission caps for FPP, LCRA must continue to use these annual emission factors when determining actual annual emissions of PM/PM₁₀ under its permit. Motion at 18. Plaintiff's argument is flawed.

28. Plaintiff's argument ignores this rationale as well as the results of all of the stack testing, including that performed on Units 1, 2 and 3 in 2002, 2010 and 2011 that were not available in July 2002. As described in Paragraphs 13-22 of this Affidavit, LCRA established and maintained a recordkeeping program that demonstrates compliance with the total PM and total PM₁₀ emission limits set forth in Construction Permit No. 51770/PSD-TX-486M3.

29. Neither TCEQ nor the U.S. EPA has alleged that LCRA has exceeded the total PM or total PM₁₀ emission limits that are enforceable under the 2004 Operating Permit or the 2009 Operating Permit. LCRA has an obligation to identify instances of non-compliance with Title V Permit No. O21 on a semi-annual basis in its Title V deviation reporting. LCRA has not identified any non-compliance with or deviation from the total PM or total PM₁₀ emission limits that are enforceable under the 2004 Operating Permit or the 2009 Operating Permit.

30. Based on my work for LCRA, my training and experience in air quality compliance, and the records and data described in my Affidavit, it is my opinion that LCRA's annual actual emissions of total PM and total PM₁₀ did not exceed the total PM and total PM₁₀ emission limits that are enforceable under the 2004 Operating Permit or the 2009 Operating Permit as alleged by Plaintiff, and that LCRA has at all times from the period March 2006 until January 2010, maintained compliance with the applicable annual total PM emission limit of 5,155.16 tpy and the applicable annual total PM₁₀ emission limit of 5,090.52 tpy.

Attachment 8

2006 Emissions Inventory emissions calculations

lbs/ton; VOC = 0.06 lbs/ton) and Fuel oil (CO = 5 lbs/1000 gal; VOC = 0.76 lbs/1000 gal)

Annual Emissions = Emissions from Coal + Emissions from Fuel Oil

If 2,000,000 tons of coal is burned annually and 600,000 gallons of fuel oil is burned in the same year, annual CO emissions would be:

CO (tons) = ((AP-42 Coal Emission Factor (lbs/ton) x Coal Burned (tons)) + (AP-42 Fuel Oil Emission Factor (lbs/ton) x Fuel Oil Burned (gal))) / 2000

$$\text{CO (tons)} = ((0.5 \text{ lbs/ton} \times 2,000,000 \text{ tons/yr}) + (5 \text{ lb/1000 gal} \times 600,000 \text{ gal/yr})) / 2000$$

$$= \underline{501.5 \text{ tons/yr}}$$

PM

Particulate matter (PM) emissions factors for coal are obtained through stack testing at the plant. The emissions factors used are: Coal (0.021 lb/mmBtu for Unit 1; 0.035 lb/mmBtu for Unit 2; and 0.01 lb/mmBtu for Unit 3). For fuel oil, emission factors are obtained from AP-42 Table 1.3-1. The emission factor used is 2 lb/1000 gal for Units 1, 2, & 3. The annual emissions are calculated by multiplying the given emission factor by the total amount of coal and fuel oil burned in each unit in a calendar year. Divide by 2000 to convert pounds to tonnage. For example, for Unit 1, if 2,000,000 mmBtu of coal is burned annually and 600,000 gallons of fuel oil is burned in the same year, annual PM emissions would be

$$\text{PM (tons/yr)} = ((0.021 \text{ lbs/mmBtu} \times 2,000,000 \text{ mmBtu/yr}) + (2 \text{ lbs/1000 gal} \times 600,000 \text{ gal/yr})) / 2000$$

$$= \underline{21.6 \text{ tons/yr}}$$

Cl and HCl

For chloride and HCl emissions for Units 1&2 first calculate the chloride emissions by multiplying the total dry tonnage of coal burned per calendar year by the dry concentration of chlorine in fuel and the HCl removal efficiency across electrostatic precipitator. Divide by 1 million to convert to ppm. For example, if given the following numbers:

Coal Burned in FPP-1 = 1,706,129 dry tons

Concentration of Chlorine in Fuel = 185.2 ppm (dry)

HCl Removal Efficiency Across Electrostatic Precipitator = 20%

(Reference: EPRI Fraction to Air Factor for HCl gas = 20%)

percentage that bypasses the scrubber is used instead of the percentage that is scrubbed. Also, the removal efficiency is the same as that used for Units 1 & 2 because emissions that bypass the scrubber only have a removal efficiency across electrostatic precipitator.

Emissions of Chloride Bypassing Scrubber:

$$\begin{aligned} E(\text{Cl}) &= \text{Dry Coal (tons)} * \text{Conc. (ppm)} * (1.0 - \text{BSP Eff./100}) * (\% \text{ Unscrubbed}) \\ &= 1,469,177 \text{ tons} * 185.2 \text{ ppm} * 0.2 * 0.23 / 1,000,000 \\ &= \underline{12.5 \text{ tons/yr}} \end{aligned}$$

Emissions of HCl:

$$\begin{aligned} \text{Tons (HCl)} &= E(\text{HCl}) * 1.028 \\ &= 12.5 \text{ tons/yr} * 1.028 \\ &= \underline{12.9 \text{ tons/year}} \end{aligned}$$

For total emissions the tons scrubbed is added to the tons bypassed.

$$\begin{aligned} \text{Total HCL Emitted} &= \text{Tons Scrubbed and Tons Bypassed} \\ \text{Total HCl (tons/yr)} &= 6.5 \text{ tons} + 12.9 \text{ tons} \\ &= \underline{19.4 \text{ tons/year emitted}} \end{aligned}$$

H2SO4

First SO2 production must be estimated

For Units 1 and 2, SO2 production is estimated from CEM data using the following equation:

$$E2 = E3 * [1 - ((C1 * R^2 + C2 * R) / 100)]$$

Where:

E2 = SO2 production, tons/yr

E3 = CEM SO2 production, tons/yr

C1 = 0.0264 (non-axial flow bias correction)

R = Stack/Duct swirl angle, degrees = 3.92 for Unit 1, 8.7 for Unit 2

C2 = 0.183 (non-axial flow bias correction)

So if CEM SO₂ production data for Unit 1 was 15,930.6 tons/yr then H₂SO₄ released is:

$$E_2 = 15930.6 * [1 - ((0.0264 * 3.92^2) + (0.183 * 3.92)) / 100] = 15751.69 \text{ tons/yr}$$

$$E_1 = 3063 * 0.000556 * 0.9 * 0.5 * 15751.69 = \underline{12071.51 \text{ lb/yr or } 6.04 \text{ tons/yr}}$$

Diesel Industrial Engines

Emissions of SO₂, NO_x, CO, PM, and VOCs are calculated using the October 1996 emission factors listed in AP-42, Table 3.3-1. The emission factors used are as follows: SO₂ = 2.05 E-03 lb/hp-hr; NO_x = 0.031 lb/hp-hr; CO = 6.68 E-03 lb/hp-hr; PM = 2.20 E-03 lb/hp-hr; and TOC (exhaust) = 2.47 E-03 lb/hp-hr.

To calculate emissions for each pollutant, the given emission factor is multiplied by the hours of operation, and the rated horsepower of each engine. The diesel engines at the Fayette Power Project power plant are only operated one half hour a week for testing. This product is then multiplied by the appropriate emission factor and divided by 2000 to determine annual tons emitted.

For example, EG-1&2 has a rated horsepower of 1425 hp, so the calculation for NO_x would be:

$$0.5 \text{ hr} \times 52 \text{ weeks} = 26 \text{ hr/yr}$$

$$\begin{aligned} \text{NO}_x_{\text{EG-1\&2}} &= 26 \text{ hr/yr} \times 1425 \text{ hp} \times 0.031 \text{ lb/hp-hr} \times 1 \text{ ton} / 2000 \text{ lb} \\ &= \underline{0.5743 \text{ ton/yr}} \end{aligned}$$

Storage Tanks

Fixed roof tanks are calculated using Equation 1-1 (September 1997) in Chapter 7 of AP-42, Volume I, Fifth Edition. The standing and working losses are calculated using Equation 1-2 and 1-23, respectively.

For example, for diesel tank AOF140A, the standing storage losses are estimated from the following equation:

$$L_s = 365 V_v W_v K_B K_S$$

where:

$$V_v = \text{vapor space volume, ft}^3 = 77,390.39 \text{ (from equation 1-3)}$$

Paved road emissions (PM and PM-10) are estimated using Equation 1 and Tables 13.2.2-2 of the September 1998 AP-42 emission factors. The size-specific emission factors calculated from equation 1 are as follows:

$$E = k(s/12)^a (W/3)^b / (M/0.2)^c$$

where:

E = particulate emission factor for PM or PM-10, lb/VMT

k(lb/VMT) = base emission factor for various particle sizes (PM and PM-10),
k = 2.6 for PM-10 and 10 for PM

s = surface material silt content (%) = 5.1 (default value)

a = 0.8 for all particle sizes

b = 0.4 for PM-10 and 0.5 for PM

c = 0.3 for PM-10 and 0.4 for PM

W = mean vehicle weight (tons) = 2.2 (default value)

M = surface material moisture content (%) = 0.2 (default value)

Therefore for PM-10, the emission factor would be calculated as follows:

$$\begin{aligned} E &= (2.6) (5.1/12)^{0.8} (2.2/3)^{0.4} / (0.2/0.2)^{0.3} \\ &= 1.16 \text{ lbs/VMT} \end{aligned}$$

For PM, the emission factor is calculated as follows:

$$\begin{aligned} E &= (10) (5.1/12)^{0.8} (2.2/3)^{0.5} / (0.2/0.2)^{0.4} \\ &= 4.32 \text{ lbs/VMT} \end{aligned}$$

So if the total miles traveled between storage, coal, flyash 2, flyash 3, and sludge is 9,000 miles for the year then:

$$\begin{aligned} \text{PM-10} &= 9,000 \text{ miles/yr} \times 1.16 \text{ lbs/VMT} \times 1 \text{ lb}/2000 \text{ tons} \\ &= \underline{5.22 \text{ tons/yr}} \end{aligned}$$

$$\begin{aligned} \text{PM} &= 9,000 \text{ miles/yr} \times 4.32 \text{ lbs/VMT} \times 1 \text{ lb}/2000 \text{ tons} \\ &= \underline{19.44 \text{ tons/yr}} \end{aligned}$$

General Surface Coating

ITEM	DENSITY (lb/gal)	VOLATILE PERCENT (%)
SOLVENT	6.5	100
MXD PT	7.7	30.52
THINNER	6.5	100

FPP uses a variety of paints, paint thinner, and solvents as part of the routine maintenance activities at the plant. Emissions resulting from the use of these products are calculated by multiplying the annual quantity used (in gallons) by the total volatiles (as weight percent) of each product and by the product density. The densities and volatile percentages are obtained from product MSDS sheets. A representative value for the percentage of volatiles in the paint is 30.52% and a representative density is 7.7 pounds per gallon. If the total volume of paint used was 57.6 gallons, then annual emissions are calculated as follows:

$$\begin{aligned} \text{VOC (tons/yr)} &= 57.6 \text{ gal/yr} \times 30.52/100 \times 7.7 \text{ lbs/gal} \times 1 \text{ ton}/2000 \text{ lbs} \\ &= 0.068 \text{ tons/yr} \end{aligned}$$

Fugitives For Fuel

EPN	COMPONENT	AP-42 TABLE 9.1-2 (lb/hr-source)	NUMBER OF COMPONENTS *
FOHANDLE	VALVES	0.0055	212
	FLANGES	0.000243	306
	PUMP SEALS	0.02866	10
	PRESSURE RELIEF DEVICES	0.0165	1
	OPEN-ENDED LINES	0.00309	57
	>2" SCREW-PIPE CONNECT.	0.0165	31

The number of each type of source (i.e., valve, flange, and pump seal) used in fuel oil service are counted throughout the plant. The emission factors are found in a TCBQ guidance document on equipment leak fugitives. To find the annual emissions the emission factor is multiplied by the element count, then multiplied by the number of hours operated for the year. For example, if 212 valves at the facility were in operation

3-4F	3-4F	90	1	0.04	0.51
3-5F	3-5F	99	2	0.04	1.00
3-6F	3-6F	99	4	0.04	1.00
3-7F	3-7F	99	2	0.04	1.00
3-8F	3-8F	99	1	0.04	1.00
3-9F	3-9F	99	1	0.04	1.00
3-10F	3-9F	99	2	0.04	1.00
3-11F	3-8F	99	2	0.04	1.00
3-13F	3-13F	99	1	0.04	1.00
3-14F	3-13F	99	1	0.04	1.00
3-15F	3-15F	100	1	0.04	1.00
3-16F	3-16F	99	1	0.04	1.00
3-17F	3-17F	98	1	0.04	0.51

Reference for Emission Factors: Technical Guidance for Control of Industrial Process Fugitive Particulate Emissions, EPA-450/3-77-010, U.S. EPA, Office of Air and Waste Management, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, 27711.

For all FIN numbers in table above:

$$\text{Annual Emission Rate} = \text{Uncontrolled Emission Factor (lb/ton)} * \text{Throughput (tons/yr)} * (100 - \text{Control efficiency}/100) * 1 \text{ Ton}/2000 \text{ lb}$$

$$\text{Maximum Yearly Emissions} = \text{Uncontrolled Emission Factor (lb/ton)} * \text{Maximum Throughput (tons/yr)} * (100 - \text{Control efficiency}/100) * 1 \text{ Ton}/2000 \text{ lb}$$

$$\text{Uncontrolled Emission Factor (lb/ton)} = \text{PM Emission Factor} * \text{Number of Transfers}$$

Example:

If 3-5F had a throughput of 1,507,899 tons/year out of a maximum of 6,600,000 tons/year and had 2 transfers, yearly emissions would be calculated as follows:

$$\text{Uncontrolled Emission Factor (lb/ton)} = .04 \text{ lb/ton} * 2 \text{ transfers} = \underline{0.08 \text{ lb/ton}}$$

$$\begin{aligned} \text{Annual Emission Rate} &= .08 \text{ lb/ton} * 1,507,899 \text{ tons/yr} * (100 - 99/100) * 1 \text{ ton}/2000 \text{ lb} \\ &= \underline{.0604 \text{ tons/year}} \end{aligned}$$

$$\text{Maximum Yearly Emissions} = .08 \text{ lb/ton} * 6,600,000 \text{ ton/yr} (100 - 99/100) * 1 \text{ ton}/2000 \text{ lb}$$

	FACTOR (lb/ton)	(%)
COAL1	0.001	90.0
COAL2	0.04	99.0
COAL3	0.04	99.0
COAL4	0.04	75.0
COAL5	0.04	99.0
COAL6	0.08	99.0
COAL7/COAL8	0.08	99.0

Annual PM Emission Rate = Uncontrolled Emission Factor (lb/ton) * Throughput (ton/yr) * (100 - Control efficiency/100) * 1 Ton/2000 lb

$$PM_{10} = 0.51 * PM \text{ (tons)}$$

So, if COAL 1 had a throughput of 6,826,259 tons/yr then:

$$PM \text{ (tons/yr)} = (6,826,259 \text{ tons/yr} \times 0.001 \text{ lbs/tons} \times (100-90/100)) / 2000$$

$$= \underline{0.34 \text{ tons/yr}}$$

$$PM_{10} \text{ (tons/yr)} = 0.51 * 0.34 \text{ tons/yr}$$

$$= \underline{0.17 \text{ tons/yr}}$$

Flyash - 1 thru 4

A baghouse is used to control flyash emissions. The uncontrolled emission rate is 0.04 lb/ton and control efficiency is 99%. To calculate the emissions, the number of vents is multiplied with the uncontrolled emission rate, the amount of ash handled per calendar year, and control efficiency. Divide by 2000 for tonnage. Due to the baghouse, PM 10 is equal to PM.

Each has one vent, so if 200,639 tons of ash are handled in a calendar year, emission calculations for each flyash would be:

$$\text{Annual controlled PM} = \text{Number of Vents} * \text{Uncontrolled Emission Rate (lb/ton)} * \text{Annual Ash Handled} * (100-99/100)$$

$$PM = 1 * 0.04 \text{ lb/ton} * 200,639 \text{ tons} * (100-99/100) / 2000$$

$$= \underline{0.04 \text{ tons/yr}}$$

Limestone FIN 3-1L thru 3-6L

Emission factors and control efficiencies are listed in the following table. These factors were obtained from Development of Emission Factors For Fugitive Dust Sources.

Attachment 9

Email from Joe Wegenhoft to Matoaka Johnson, November 26, 2007



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February 11, 2011

Mr. Steve Hagle, P.E., MC-163
Director, Air Permits Division
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

Re: Lower Colorado River Authority Fayette Power Plant's Application regarding Permit Amendment ("De-Flex") for Flexible Permit and Plantwide Applicability Limit (TCEQ Permit No. 51770/PSD-TX-486M3)

Dear Mr. Hagle:

We are writing to express our concern with the January 31, 2011 Lower Colorado River Authority (LCRA) Application requesting an amendment to convert their existing Flexible Permit to a SIP-compliant, Subchapter B, air permit ("De-Flex" Application).

The LCRA Fayette power plant is the only operating coal-fired power plant with its main boilers covered under a Flexible Permit. Evidence suggests that LCRA violated new source review requirements and has used its Flex Permit to circumvent NSR. The LCRA Fayette plant has increased its capacity and increased its emissions, and has used its Flexible Permit to avoid and postpone the installation of BACT on its three coal-fired units for roughly a decade. Amazingly, LCRA continues to seek "interim" emission limits, which simply proves the point that the plant has delayed promised cleanup that was required to be implemented long ago under any reasonable interpretation of new source review standards. LCRA's promises of future reductions, already delayed for more than a decade, do not meet BACT.

Based on our preliminary review of LCRA's De-Flex Application, we are concerned that the Application contains numerous errors and omissions. The Application is also confusing, and appears to confirm LCRA's Clean Air Act circumvention. Some of our initial concerns include the following:

1. The De-Flex Application is one of three separate, but inextricably connected, applications recently filed by LCRA. One application, filed on January 5, 2011, requests authorization for planned startup, shutdown, and maintenance emissions ("planned MSS")¹; a second application seeks a separate Plantwide Applicability Limit ("PAL") permit; and of course the third application seeks to convert the Flex Permit to a Subchapter B Permit.

¹ Please see our January 13, 2011, letter to LaDonna Castanuela, regarding the MSS Application, attached.

These three separate permitting actions should be combined into a single application, so that the plant's emissions and ambient impacts can be adequately and fully considered.

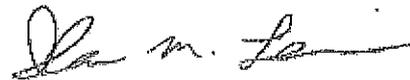
2. LCRA's January 31, 2011, De-Flex Application requests a so-called "no-increase amendment." This process essentially cuts out public participation. TCEQ should ensure that the affected public be given a meaningful opportunity to review, comment, and participate in LCRA's De-flex permit process. Given the complicated nature of this permit, the relatively huge amount of emissions being authorized, and the ongoing interests of the environmental stakeholders in LCRA's Fayette plant, TCEQ should, at the very least, allow a 90-day comment period once a Draft Permit and complete Application materials are made available for public comment. An extended comment period will serve the interests of all parties, and may allow errors and omissions to be adequately explained or addressed without the need for a contested case hearing.
3. Table 5-1 of LCRA's De-Flex Application seeks to "incorporate by reference" dozens of permits-by-rule ("PBRs") and standard permits. LCRA should include the emissions increases associated with each of these authorizations in its application, and include these emissions in ambient impacts analyses.
4. The Application contains no explanation of the chosen BACT limits, or why the chosen emission rates represent BACT. In addition, the Application contains no explanation as to why PM limits are downwardly adjusted, and why 0.04 and 0.02 lbs/mmBtu, represent BACT for PM for Units 1/2 and Unit 3, respectively. Also, the Application is vague and confusing as to whether the proposed PM limits are for Total PM, PM₁₀, or PM_{2.5}. The Application should justify all proposed limits, contain separate limits for all regulated pollutants, and specify the monitoring method used for compliance with those limits.
5. Certain proposed emission limits are significantly higher than the emission limits contained in LCRA's prior SIP-approved ("legacy") permit. For example, annual and hourly proposed carbon monoxide limits are far in excess of previously authorized SIP-approved permit limits; annual and hourly proposed lead limits are higher than previously authorized SIP-approved limits; hourly and annual proposed interim PM limits are higher than previously authorized SIP-approved emission limits.
6. Putting aside LCRA's bases for selecting BACT emission rates, the requested hourly and annual allowable limits are too high because they are based on inflated firing rates (as compared to represented maximum firing rates in prior permitting actions). For example, Unit 3 hourly and annual emission rates are calculated based on a heat input rate of 6,184 mmBtu/hour. LCRA should explain how its 4,735 mmBtu/hour (maximum rated capacity) Unit 3 boiler has 30 percent more heat input capacity than originally permitted. LCRA should also explain why it is appropriate to base annual and hourly allowables on heat input rates far in excess of the maximum capacity represented in all its legacy permits. Table 6 in the De-Flex Application, for Units 1, 2, and 3, represent fuel composition and boiler design markedly different from the Table 6 representations in the legacy permits. LCRA should explain these differences.

7. Lastly, TCEQ should require LCRA to submit modeling to demonstrate that its proposed emissions will not cause or contribute to air pollution. This demonstration is all the more important given that LCRA has also applied for two related permits (for planned MSS emissions, and for a PAL). Taken together, these three permit Applications seek authorization of new emissions not previously authorized and, therefore, warrant a high degree of scrutiny.

In closing, we urge TCEQ to carefully scrutinize the LCRA's Fayette Power Project De-Flex Application to ensure that any new Subchapter B permit is fully compliant with the SIP and that LCRA demonstrates that emissions will not cause exceedences of air quality standards.

We look forward to working with you, as well as with LCRA and EPA, on this important permitting action. Please include us on all public notices related to this permitting action and the related MSS and PAL Applications, so that we can fully participate in the permit processes.

Sincerely,



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CC (Via email):

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Deputy Director, Office of Permitting and Registration
TCEQ

Mr. Larry Starfield
Deputy Regional Administrator
USEPA R6

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May 20, 2011

Ms. LaDonna Castañuela
Office of the Chief Clerk, MC-105
TCEQ
P.O. Box 13087
Austin, TX 78711-3087

Re: Comments, Request for Public Meeting, and Request for Contested Case Hearing on Lower Colorado River Authority's Application for an Amendment to Permit No. 51770 & PSD-TX-486M3 (Fayette Power Plant's "De-Flexing" Application)

Dear Ms. Castañuela:

On behalf of the Sierra Club, we are submitting these comments, a request for a public meeting, and request for contested case hearing in response to the Notice of Receipt of Application and Intent to Obtain Air Permit, dated April 15, 2011, and published on April 22, 2011.

The Lower Colorado River Authority's (LCRA) has filed an Application to convert its existing illegal Flexible Air Permit for the Fayette (a.k.a. Sam Seymour) power plant to a federal Clean Air Act-compliant air permit. As discussed below, this Application contains errors and omissions and fails to comply with federal Clean Air Act standards. The Application fails to demonstrate how the proposed emission limits meet the *best available control technology* ("BACT") standard. The Application fails to demonstrate that the emissions will not cause or contribute to violations of health-based ambient air quality standards. The LCRA Fayette plant is currently operating in violation of the federal Clean Air Act because the plant is a major stationary source that is currently operating without the required federal Clean Air Act *prevention of significant deterioration* ("PSD") permit.

LCRA touts its long-delayed scrubber installations, which will thankfully reduce sulfur dioxide emissions, yet LCRA has steadfastly refused to reduce dangerous particulate matter ("PM") emissions to the maximum achievable levels.

Unless corrected as described below, the Application should not be granted.

I. Request for Contested Case Hearing

We request a contested case hearing. The requestor is the Sierra Club. The Sierra Club is one of the oldest and largest grassroots environmental organizations in the country. Sierra Club is a nonprofit corporation with offices, programs and members in Texas. Sierra Club's Austin, Texas offices are at 1202 San Antonio Street, Austin, Texas 78701, (512) 477-1729

(phone), (512) 477-8526 (fax). Among the goals of the Sierra Club are preserving and enhancing the natural environment and protecting public health. The Sierra Club has the specific goal of improving outdoor air quality. The Sierra Club and its members have a significant interest in ensuring that the LCRA Fayette plant complies with the Clean Air Act and reduces air emissions that endanger public health and property. Sierra Club has an interest in ensuring that the LCRA's Fayette power plant air pollution permit, at issue here, complies with the federal and Texas Clean Air Act and is protective of public health and the environment.

Sierra Club members own property, reside, and/or recreate nearby and downwind of the power plant. One such Sierra Club member is Ms. Carol Daniels. Ms. Daniels resides at 3701 FM 609, La Grange, Texas, 78945. This is approximately 10 miles, as the crow flies, from the power plant. Ms. Daniels is a retired nurse. Ms. Daniels is concerned about air quality and wants the Fayette power plant to comply with anti-pollution laws and have an air pollution permit that protects public health and the environment. Ms. Daniels has standing to request a hearing in her own right.

Please direct all communications or questions regarding this request to Ilan Levin, Senior Attorney, Environmental Integrity Project, at (512) 637-9479, or ilevin@environmentalintegrity.org

II. Request for a Public Meeting

We request a public meeting.

III. Comments

A. General Comments

TCEQ's Flexible Permit program has never been approved as part of the Texas State Implementation Plan, and thus it has never been a legal mechanism to change or void pre-existing construction permits.¹ This means that LCRA's Fayette power plant is currently operating in violation of the federal Clean Air Act and the Texas State Implementation Plan ("SIP"), because the power plant is required to have a federal Clean Air Act prevention of significant deterioration ("PSD") permit, but does not have one. To remedy this serious violation, TCEQ should require LCRA to demonstrate that the plant meets current best available control technology, and that maximum allowable emissions will not cause an exceedance of any national ambient air quality standard.

¹ See, Letter from David Neleigh, US EPA Region 6, to Steve Hagle, TCEQ Air Permits Division, regarding EPA's Comments on Texas' SIP Revisions for Flexible Permits, April 11, 2006 ("EPA's long-held position is that these [Title I, or SIP-approved permits] must remain in effect because they are the legal mechanism through which the underlying PSD or NSR requirements become applicable, and remain applicable, to individual sources." "Terms and conditions of construction permits are permanent and remain effective unless changed using title I procedures or a new construction permit is issued." (Attachment A)

Evidence suggests that LCRA violated new source review requirements and has used its Flex Permit to circumvent NSR. For example, recently-obtained documents from U.S. EPA, in response to a Freedom of Information Act request, contain references to a “boiler tube” issue² that was discussed during a meeting between representatives of LCRA, Austin Energy, and U.S. EPA on October 25, 2010.³ TCEQ should conduct a thorough examination of the Fayette plant’s permitting and operational history, from the last SIP-approved permit to the new proposed permit, in order to ensure that LCRA has not circumvented the federal or Texas Clean Air Acts or triggered New Source Review without meeting *best available control technology* (“BACT”).

In the alternative, if TCEQ is unwilling to require the rigorous BACT and ambient impacts analyses required by the federal Clean Air Act for issuance of a new PSD permit to a major source that currently lacks a valid permit, then TCEQ should require emission limits *no less stringent than* those contained in the following tables.

² Boiler tube replacement is a common power plant major modification that triggers the Clean Air Act’s “New Source Review,” which requires the power plant to meet modern emission standards and best available control technology. See, *United States v. Ohio Edison Co.*, 276 F.Supp.2d 829 (S.D. Ohio 2003) (holding that replacement of boiler tubes was not routine maintenance.) See also, Consent Decree (*U.S. v. Illinois Power Company*), which settles EPA’s NSR claim for modifications including boiler tube replacement at Baldwin station; available at: <http://www.epa.gov/compliance/resources/decrees/civil/caa/dmgfinal-cd.pdf>. See also, Consent Decree in *U.S. v. AEP*, settling NSR claim for major modifications including boiler tube replacement at several coal-fired power plants; available at: <http://www.epa.gov/compliance/resources/decrees/civil/caa/americanelectricpower-cd.pdf>.

³ Email from Al Armendariz, EPA Regional Administrator, to Larry Starfield, EPA Region 6, et al, Re: LCRA, October 25, 2010 (“Based on what we heard at the meeting about boiler tubes, call LCRA and give them a frank discussion about the agency’s ongoing national enforcement initiative for NSR and coal-fired EGUs,...”), Attachment B.

Unit 1				
Pollutant	lb/MMBTU (Averaging period)	lb/hr	tons/yr	Compliance Method
CO	0.187 (1-hr)	1,122.0	4,128.6	CEMS
H ₂ SO ₄	0.006 (3-hr)	36.0	132.5	Method 8
NO _x	0.10 (1-hr)	600.0	2,207.8	CEMS
PM _{Total}	0.05 (3-hr)	300.0	1,103.9	Method 5, 201/202*
PM ₁₀ (total)	0.035 (3-hr)	210.0	772.7	Method 5, 201/202*
PM ₁₀ (filter)	0.025 (3-hr)	150.0	552.0	CEMS
SO ₂	95% Removal	315.0	1,159.1	CEMS
VOC	0.00375 (3-hr)	22.5	82.8	Method 25A

Unit 2				
Pollutant	lb/MMBTU (Averaging Period)	lb/hr	tons/yr	Compliance Method
CO	0.187 (1-hr)	1,122.0	4,187.6	CEMS
H ₂ SO ₄	0.006 (3-hr)	36.0	132.5	Method 8
NO _x	0.10 (1-hr)	600.0	2,239.3	CEMS
PM _{Total}	0.05 (3-hr)	300.0	1,119.7	Method 5, 201/202*
PM ₁₀ (total)	0.035 (3-hr)	210.0	783.8	Method 5, 201/202*
PM ₁₀ (filter)	0.025 (3-hr)	150.0	559.8	CEMS
SO ₂	95% Removal	315.0	1,175.7	CEMS
VOC	0.00375 (3-hr)	22.5	84.0	Method 25A

Unit 3				
Pollutant	lb/MMBTU	lb/hr	tons/yr	Compliance Method
CO	0.187 (1-hr)	885.4	3,531.1	CEMS
H ₂ SO ₄	0.006 (3-hr)	28.4	113.3	Method 8
NO _x	0.10 (1-hr)	473.5	1,888.3	CEMS
PM _{Total}	0.03 (3-hr)	142.1	566.5	Method 5, 201/202*
PM ₁₀ (total)	0.02 (3-hr)	94.7	377.7	Method 5, 201/202*
PM ₁₀ (filter)	0.015 (3-hr)	71.0	283.2	CEMS
SO ₂	90% Removal	497.2	1,982.7	CEMS
VOC	0.00375 (3-hr)	17.8	70.8	Method 25A

* Method 5, 201/202, modified as follows:

Year 1: Two stack tests w/in first year. Stack test to include at least five runs, each of at least two hours duration. At least two runs during cold startup. Stack test to measure PM_{Total}, PM₁₀ and PM_{2.5}. Operating conditions during stack test used to set CAM parameters.

Year 2 and beyond: Annual stack test; same as year 1. Condensable PM from stack test is added to filterables measured by PM CEMS to determine hourly concentration.

Mass determined by multiplying mmbtu * concentration.

B. The De-Flex Application is one of three separate, but inextricably connected, permitting actions that should be considered together

LCRA's Application for an Amendment to Permit No. 51770 & PSD-TX-486M3 (Fayette Power Plant's "De-Flexing" Application) is being processed separately from two related permitting actions. These two related actions are: (1) LCRA's application for planned maintenance, startup, and shutdown ("MSS") emissions,⁴ and (2) LCRA's "stand-alone PAL" permit.⁵

Together, these three separate permitting actions will establish the maximum allowable emission limits of air contaminants, and these three permitting actions should be combined into a single application, so that the plant's emissions and ambient impacts can be adequately and fully considered.

⁴ LCRA's Application was submitted on January 4, 2011.

⁵ LCRA's Application was submitted on January 27, 2011; the Permit (PAL2) was issued by Executive Director on April 14, 2011; A motion to overturn the Executive Director's action is currently pending before the commission.

i. LCRA's MSS Application Cannot be Severed from the De-Flex Application

LCRA's MSS Application requests particulate matter startup emissions of *3,002 pounds per hour* each for Units 1 and 2, and *2,739 pounds per hour* for Unit 3, for *up to 600 hours per year*. If LCRA obtained these limits, the Fayette power plant could emit a maximum combined total of 2,622 tons of particulates during MSS events. The current Flex Permit authorizes up to 5,171 tons annually, which means that under the preceding scenario, LCRA could emit no more than 2,533 tons the rest of the year. The plant is now authorized to emit 1,441 pounds an hour, but if the MSS emissions that LCRA is requesting are accurate, then the plant would be limited to an average of no more than 602 pounds per hour during "normal" operations. LCRA's MSS Application cannot be considered in a vacuum, given that it requests emission limits that would consume more than half of the plant's annual allowable emissions during less than ten percent of operating hours. The scenario gets even more pronounced under the "final" Flex Permit cap, which limits PM emissions to 4,363 tons per year, and no more than 1,060 pounds per hour. If LCRA's MSS emissions approach the levels for which it is seeking a permit (600 hours x the maximum hourly emissions per unit), the plant could average no more than 426 pounds an hour for the remainder of the year, less than half the Flex Permit's final cap.

Therefore, if TCEQ takes the MSS Permit Application into consideration, as law and common sense dictate, then LCRA would receive significantly lower PM limits as part of this amendment. Put another way, TCEQ should establish substantially lower PM emission limits for "normal operations" than the limits LCRA seeks in this permit amendment.

ii. LCRA's recently issued PAL Permit Cannot be Severed from the De-Flex Application

There is absolutely no question that, in 2002, when TCEQ originally issued Permit No. 51770/PSD-TX-486M3 (the "Flex Permit" that contained the PAL), the two concepts were inseparably bound together. At that time, there was no federal PAL rule or a Texas PAL rule. The TCEQ clearly stated, when it issued this permit in 2002, that: "TCEQ implement[ed] the federal PAL concept through the flexible permit program pursuant to Texas air quality regulations."⁶ Even the venerable law firm currently representing LCRA, Baker Botts, admitted that TCEQ's "legally questionable" PAL rule "is a hybrid PAL approach, modeled on TCEQ's existing flexible permit program."⁷

As EPA noted in its December 6, 2010 letter to Thomas Mason, LCRA General Manager, "FPP's flex permit is distinctive in that it incorporates a plantwide applicability limit (PAL) component... The PAL permit, like the flexible permit, is not a SIP-approved permit, and that situation needs to be addressed." Attachment D. Issuing a stand-alone PAL permit – an action

⁶ Permit No 51770 and PSD-TX-486M, Technical Review Document prepared by the TCEQ's permit engineer, 2002.

⁷ Letter from Matthew Paulson, Baker Botts, LLP, to Ms. Joyce Spencer, TCEQ, regarding Comments of the Texas Industry Project on Proposed NSR Reform Rule, October 31, 2005. Attachment C.

that is currently the subject of a pending motion to overturn – simply perpetuates many of the same problems that exist under the Flex Permit. One example is that the PAL, just like the Flex Permit, is based on allowable emissions rather than actual emissions.

TCEQ can remedy these problems by overturning the Executive Director's April 14, 2010 issuance of Permit No. PAL2, and considering LCRA's requests for any site wide caps under the federal PAL rules. This analysis should be done as part of this permit amendment process (i.e., it cannot be severed and issued as a stand-alone PAL).

C. LCRA's De-Flex Application seeks to "incorporate by reference" dozens of permits-by-rule ("PBRs") and standard permits

LCRA should include the emissions increases associated with each of these authorizations in its application, and include these emissions in ambient impacts analyses.

D. The Application contains no explanation of the chosen BACT limits, or why the chosen emission rates represent BACT

PM limits are particularly troubling and confusing. The Application should justify all proposed limits, contain separate limits for all regulated pollutants, and specify the monitoring method used for compliance with those limits.

E. Certain proposed emission limits are significantly higher than the emission limits contained in LCRA's prior SIP-approved ("legacy") permit

Annual and hourly proposed carbon monoxide limits are far in excess of previously authorized SIP-approved permit limits. Annual and hourly proposed lead limits are higher than previously authorized SIP-approved limits. Hourly and annual proposed interim PM limits are higher than previously authorized SIP-approved emission limits.

F. LCRA Must Explain How Capacity for Unit 3 Was Able to Creep Up by 30 Percent

LCRA should explain how its 4,735 mmBtu/hour (maximum rated capacity) Unit 3 boiler was able to grow into a boiler with 30 percent more capacity than originally permitted. LCRA made conflicting representations in its 2002 Flexible Permit applications: on the one hand LCRA requested and received from the State emission caps based on a maximum heat input rate for Unit 3 that is roughly 30 percent greater than the pre-existing federally-enforceable (i.e., SIP-approved permit's) limit of 4,735 mmBtu/hour; but on the other hand, LCRA represented that the boiler operations and design (including the maximum capacity) was the same as when the unit was first authorized.

TCEQ and LCRA should explain why it is appropriate to base annual and hourly allowables on heat input rates far in excess of the maximum capacity represented in all pre-existing SIP-approved, PSD, or federally-enforceable permits. If LCRA seeks to increase maximum heat input capacity beyond previous maximum representations made in SIP-approved

PSD permits, then the Application should demonstrate that the plant meets BACT and does not violate ambient air quality standards.

G. The Application contains no ambient impacts analyses

TCEQ should require LCRA to submit modeling to demonstrate that its proposed emissions will not cause or contribute to air pollution.

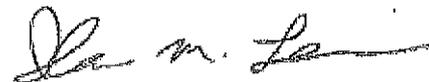
H. Stack tests show LCRA Fayette Plant can meet lower emission levels

The Application incorrectly states that “[f]or SO₂ and PM/PM₁₀/PM_{2.5}, reduced emission limits are being proposed based on stack test data and/or ESP/scrubber data that was unavailable at the time of the original Flexible Permit application submittal.” (Application at 5-1). This statement is simply untrue, because stack test data was available at the time of the original Flex Permit application, showing that the power plant can emit at levels well below those incorporated in its Flex Permit, and that “front-half” (or filterable) PM is approximately half of “total” (filterable plus condensable) PM.⁸

Given LCRA’s inconsistent statements, and considering the available stack test data, TCEQ should impose PM emission limits that meet BACT.

Thank you for your attention to this matter.

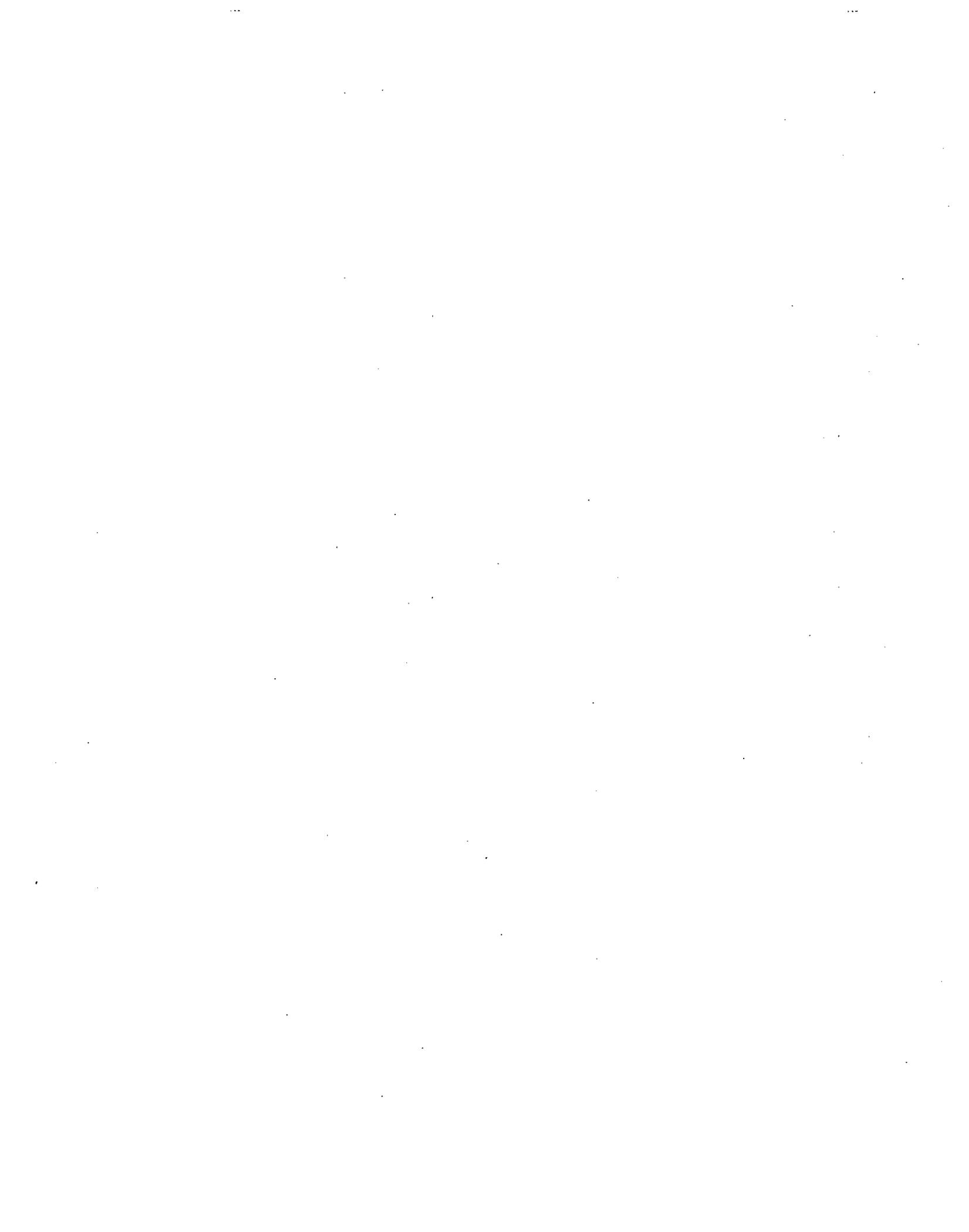
Sincerely,



Ilan Levin
Senior Attorney
Environmental Integrity Project
1303 San Antonio St., Ste 200
Austin, Texas 78701
(512) 637-9479
ilevin@environmentalintegrity.org

⁸ Stack test reports from 1979 to September 2002 present actual PM “front-half” emission levels of 0.01 lb/mmBtu (see, e.g., Unit 1, 1979 stack test); 0.02 (Unit 1 “front-half,” September 2002 stack test); 0.04 lb/mmBtu (Unit 1 “total” PM, September 2002 stack test); 0.02 (Unit 2, 1981 stack test); 0.01 lb/mmBtu (Unit 3, Aug. 1988 stack test).

ATTACHMENT A



APR 11 2006

Mr. Steve Hagle
Special Assistant
Air Permits Division (MC-163)
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

RE: U.S. Environmental Protection Agency (EPA) Comments on Texas' State
Implementation Plan (SIP) Revisions for Flexible Permits

Dear Mr. Hagle:

This letter is a follow-up to our meeting in Austin on October 12, 2005, and subsequent discussions concerning revisions to the Texas SIP related to Flexible Permits, Subchapter G of Chapter 116 of Title 30 of the Texas Administrative Code (30 TAC). We have reviewed the rules and identified the items of concern that are described in the Enclosure. We request that you address these concerns and respond to us concerning how these rules meet Federal requirements or identify changes you will make to address our concerns. We will review and take action on these rules prior to taking final action on your New Source Review (NSR) Reform regulations.

If you have any questions, please call Mr. Stanley M. Spruiell of my staff at
(214) 665-7212.

Sincerely yours,

Originally Signed
by David Neleigh

David Neleigh
Chief
Air Permits Section

Enclosure

Spruiell/ss:6PD-R:x7212/4/6/06\Comments.Fp.wpd(Spruiell #2 Disk)

Comments on Texas SIP revisions, Subchapter G, Chapter 116, Flexible Permits

1. General Comment

We understand that the Flexible Permit rules apply to major and minor sources and that the rules are designed to provide an exemption from minor NSR requirements if sources do not exceed an allowable emissions cap. In general, the allowable emissions cap assumes Best Available Control Technology (BACT) emission rate plus up to 9% for all units under the permit. Partial Flexible Permits are allowed. We reviewed the Flexible Permit rule as it applies to major sources for consistency with Federal major NSR regulations and 40 CFR 51.160 and 51.161. Texas adopted the Flexible Permit rules prior to finalization of Federal NSR Reform regulations. The final Federal regulations measure emissions increases which result from a modification at existing major sources using the baseline actual-to-projected actual applicability test. The final rules also provide an exemption from the definition of major modification for sources with an actual Plantwide Applicability Limit (PAL). The Court in *New York v. EPA*, 413 F.3d 3, (D.C. Cir. June 24, 2005) struck down provisions of the regulations that provided for exemptions from major NSR applicability that were not based upon actual emissions. The Court held that the NSR modification requirement, which incorporates by reference Clean Air Act (Act) § 111(a)(4), "unambiguously defines 'increases' in terms of actual emissions." Therefore, many of our comments relate to how Flexible Permits are consistent with Federal major NSR requirements.

We have reviewed the Flexible Permit rules as they apply to minor sources and minor modifications for consistency with 40 CFR 51.160 and 51.161.

2. Voiding of Existing SIP-approved Permits

The Texas Commission on Environmental Quality (TCEQ) has stated that all existing permits applicable to the permittee are voided upon issuance of a Flexible Permit. The Flexible Permit becomes the controlling authority for the site, as explained at 10 TexReg 7336:

The applicant for a flexible permit may combine existing permitted facilities, grandfathered facilities, and new facilities into the flexible permit. The flexible permit will then become the controlling authorization for all facilities included in the permit, replacing any existing permits that may have been applicable to all or part of these facilities.

The rules provide for initial issuance of a flexible permit "as an alternative to obtaining a new source review permit" where the source triggers major NSR requirements. We understand that the resulting BACT or Lowest Achievable Emission Rate limits are not enforceable at the new or modified source. Nonattainment NSR (NNSR), prevention of

significant deterioration (PSD) or air quality, minor NSR permits, and permit application representations incorporated by reference into the permits previously issued under the Texas SIP are voided upon issuance of the Flexible Permit. We also understand that these permits are voided without public participation in many cases.

Please explain the legal authority under which TCEQ voids existing federally enforceable NNSR, PSD, and minor NSR permits.

Title I of the Act requires permitting authorities to establish in permits source specific terms and conditions necessary for sources to comply with the requirements of the PSD and NSR programs of parts C and D of the Act. EPA's long-held position is that these permits must remain in effect because they are the legal mechanism through which the underlying PSD or NSR requirements become applicable, and remain applicable, to individual sources.¹ 40 CFR 70.1 requires that each title V source permit assures compliance with all applicable requirements, including any term or condition of any preconstruction permit issued pursuant to programs approved or promulgated under title I of the Act. Amendments to PSD or NSR or minor NSR permits must be made in accordance with the SIP and approved permitting programs. Terms and conditions of construction permits are permanent and remain effective unless changed using title I procedures or a new construction permit is issued. The Federal PAL rule provides a procedure, including public participation, for the elimination of permit limits that were taken to avoid applicability of major NSR applicability and are replaced by a PAL. Federal NSR regulations do not provide for a blanket elimination of emission limits at individual units. Operational flexibility under Federal regulations and policy can be obtained by preapproving future modifications or by setting an actual PAL in order to avoid major NSR netting.

The preamble to the final PAL rule provides:

Can a PAL Eliminate Existing Emission Limitations? An actuals PAL may eliminate enforceable permit limits that a source may have previously taken to avoid the applicability of major NSR to new or modified emissions units. Under the major NSR regulations at §§ 52.21(r)(4), 51.166(r)(2), and 51.165(a)(5)(ii), if you relax these limits, the units become subject to major NSR as if construction had not yet commenced on the source or modification. Should you request a PAL, today's revised regulations allow the PAL to eliminate annual emissions or operational limits that you previously took at your stationary source to avoid major NSR for the PAL pollutant. This means that you may relax or remove these limits without triggering major NSR when the PAL becomes effective. Before removing the limits, your reviewing authority should make sure that you are meeting all other regulatory requirements and that the removal of the limits does not adversely impact the National Ambient Air Quality Standards (NAAQS) or PSD

¹See EPA Memorandum from John Seitz, to Robert Hodanbosi, dated May 20, 1999.

increments. We are not taking a position on whether compliance with requirements contained in a PAL permit could serve to demonstrate compliance with certain pre-existing requirements on individual units. The reviewing authority may assess on a case-by-case basis whether any streamlining would be appropriate in the title V permit consistent with part 70 procedures and our existing policies and guidance on permit streamlining.

See also the Federal PAL rule:

40 CFR 52.21(aa)(1) - Applicability, "(iii) Except as provided under paragraph (aa)(1)(ii)(c) of this section, a major stationary source shall continue to comply with all applicable Federal or State requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL."

The same requirement is found in 40 CFR 51.165(f)(1)(iv) and 51.166(w)(1)(iii).

The EPA has also addressed supersession of existing NSR permit requirements by title V permits. See May 20, 1999, letter to Robert Hodanbosi:

It is the Agency's view that title V permits may not supersede, void, replace, or otherwise eliminate the independent enforceability of terms and conditions in SIP-approved permits. To assure compliance with "applicable requirements" such as SIP-approved permits and conditions, title V permits must record those requirements, but may not eliminate their independent existence and enforceability under title I of the Clean Air Act (i.e., may not supersede them).

See also White Paper for Streamlined Development of part 70 permit Applications, Lydia Wegman, July 1995, (White Paper #1) which recommends an efficient procedure for revising NSR permits during title V review to eliminate obsolete or environmentally insignificant terms in NSR permits. See also, Approval of Wisconsin Construction Permit Permanency SIP Revision 71 FR 9934, April 28, 2006, and Notice of Deficiency for Clean Air Act Operating Program in Wisconsin, 69 FR 10167, March 4, 2004.

Our review of the Flexible Permit rules indicates that the voided NSR permits are federally enforceable terms and conditions which may be revised only through approved SIP procedures.

3. Definition of Modification

Please distinguish between the definition of "major modification" at 30 TAC 116.12(11) in Subchapter A, Nonattainment and Prevention of Significant Deterioration Review

Definitions, and the definition of "modification of an existing facility" at 30 TAC 116.10(11) of Subchapter A, General Definitions. The definition of "modification of existing facility" states:

Any physical change in, or change in the method of operation of, a facility in a manner that increases the amount of any air contaminant emitted by the facility into the atmosphere or that results in the emission of any air contaminant not previously emitted. The term does not include:

a physical change in, or change in the method of operation of, a facility where the change is within the scope of a flexible permit or a multiple plant permit;
or

Under the current Texas SIP, a permit amendment is required in order to vary from any representation or permit condition if the change will cause: (A) a change in the method of control of emissions; (B) a change in the character of the emissions; or (C) an increase in the emission rate of any air contaminant.

Please clarify whether the exemptions from the requirement to obtain a permit amendment in the submitted definition of "modification of an existing facility" apply to significant project emission increases or significant net emission increases at major sources or major modifications. Please explain how exemptions in the definition of "modification of an existing facility" relate to major modifications. We believe these definitions as written are vague and may be interpreted to provide an exemption to major NSR applicability.

4. Consistency with Federal Major NSR Requirements

Because Flexible Permits become the controlling authorization for major sources and authorize the source to make modifications without a permit amendment as required by the current SIP, the rules, as they are applicable to major sources, must be consistent with Federal NSR requirements and the PAL rule. We note that the rules eliminate permitting vehicles necessary to demonstrate netting for major sources. We have identified the following list which discusses some of the inconsistencies between the Flexible Permit rules and Federal regulations. Please provide information to explain how the following requirements are met under the Flexible Permit rules:

- A Please explain how the revisions meet the requirements of 40 CFR 51.160 to provide procedures that enable TCEQ to determine that modifications authorized under these rules will not result in (1) a violation of applicable portions of control strategy; or (2) interference with attainment or maintenance of a national standard in the State in which the proposed source (or modification) is located or in a neighboring State.

- B. The Flexible Permit emission cap is based upon allowable emissions rather than actual emissions. There are no regulatory requirements that the cap be set below actual emissions. The rules do not ensure that the emissions cap will be set at a level that does not trigger major NSR applicability for major sources or major modifications based upon the baseline actual to projected actual calculation in the State's NSR rules. Please explain how the flexible permit rules are inconsistent with the Federal PAL rule at 40 CFR 52.21(aa)(6).
- C. The rule allows an implementation schedule to install required BACT controls which may last for many years. The rule also allows sources to increase the emission cap for sources that "fail to install the additional control equipment as provided by the implementation schedule." How does the rule ensure that the emission cap is set below actual emissions during these periods? Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(6) and (11). Please explain whether a Flexible Permit always assumes current BACT in calculating the emission cap.
- D. The Flexible Permit authorizes modifications that do not exceed the emission cap. NSR compliance is required only upon initial issuance of the permit. Please explain how the rule ensures that modifications subject to major NSR and the public participation requirements of Part 51 are reviewed. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(5) and (11); and 51.161.
- E. For sources without a PAL, major NSR applicability must be determined by monitoring actual emissions on a unit by unit basis (rather than by compliance with the emissions cap) consistent with TCEQ's major NSR rules for baseline actual to projected actual emissions calculations. Please explain how the rule ensures that major sources determine major NSR applicability on a unit by unit basis. Our review indicates that the monitoring requirements from the Flexible Permit rule at §116.715(c)(6) requires "information and data sufficient to demonstrate continuous compliance with the emission caps and individual emission limitations contained in the flexible permit shall be maintained in a file at the plant site and made available at the request of personnel from the commission or any air pollution control program having jurisdiction." Please explain how the rule provides for monitoring, recordkeeping and reporting necessary to determine project emission increases and to enforce major NSR requirements on a unit by unit basis. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(a)(2)(iv)(a) through (d), and (f); 52.21(aa)(12) through (14).
- F. Please explain how the public participation requirements of Part 51 and the PAL rule are met by the Flexible Permit rules. Under Chapter 39 of the TAC,

initial issuance of and amendments to flexible permits are exempt from public notice requirements unless the action involves new construction or a modification that results in emissions increases above Texas' permits by rule limits (250 tons per year (tpy) of carbon monoxide, 250 tpy of nitrogen oxides, 25 tpy of volatile organic compounds, sulfur dioxide, or particulate matter less than 10 micrometers, or any other air contaminant except carbon dioxide, water, nitrogen, methane, ethane, hydrogen and oxygen). These provisions are inconsistent with Federal requirements which require modifications of existing sources to be subject to a 30-day notice and comment period and for the permitting authority to provide public information including the agency's analysis of the effect of the construction or modification on ambient air quality, including the agency's proposed approval or disapproval. These requirements apply to major and minor sources. Please provide a rationale for exemptions from these requirements and the current SIP. Please explain how the Flexible Permit rules are consistent with 40 CFR 51.161 and 52.21(aa)(5) and (11).

- G. The Flexible Permit rules allows sources to exclude units at a facility from the permit. Federal rules do not allow for partial PALs. Note that the Federal PAL rule requires that all units at a facility must be subject to the plantwide limit. See 40 CFR 52.21(aa)(6)(i) through (ii). Emission increases and decreases at all units at the facility must be considered to determine major NSR applicability. How does the Flexible Permit provide that increases and decreases are quantified, determined to be contemporaneous, and made practically enforceable for sources that are not subject to a PAL? Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(a)(2)(iv)(a) through (d) and (f).
- H. There is no requirement in the Flexible Permit rules that startup, shutdown and malfunction emissions must be included in determining compliance with the emission cap. This is inconsistent with the Federal PAL rule. Please explain how the Flexible Permit rules can ensure that non-routine emissions are not masked by the emission cap. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(7)(iv).
- I. There is no requirement in the Flexible Permit rules that compliance with the emission cap is determined on a 12-month rolling average, as required by the Federal PAL rule and EPA policy. We have reviewed Flexible Permits that base compliance on a calendar basis. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(4)(i)(a). Please explain how enforcement of Flexible Permits on a calendar year basis is enforceable as a practical matter.
- J. There is no requirement in the Flexible Permit rules that the owner or operator

must convert monitoring data to monthly and annual emission rates based upon a 12-month rolling average for each month. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(4)(i)(a) and 52.21(aa)(7)(vi).

- K. There is no requirement in the Flexible Permit rules that monitoring to determine compliance with the cap must be based upon continuous emissions monitoring systems, continuous emissions rate monitoring systems, predictive emissions monitoring system, continuous parameter monitoring system, or emission factors, or an equivalent method as approved by the permitting authority, as is required by the Federal PAL rule. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(12)(ii)(a) through (d).
- L. There are no requirements in the Flexible Permit rule for semi-annual reports or deviation reports as required by the Federal PAL rule. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(14)(i) through (ii).
- M. The record retention requirement in the Flexible Permit rules is for two years. This is inconsistent with the Federal PAL rule and title V which require five year recordkeeping. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(13)(ii).
- N. Are short-term limits under the emission cap required by the Flexible Permit rules? Please explain how short-term limits are calculated and how they ensure attainment and maintenance of the NAAQS. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(1)(iii).
- O. The Flexible Permit emission cap may be increased by 9% of total emissions, called an Insignificant Emissions Factor. The Flexible Permit rule in § 116.718 states, "An increase in emissions from operational or physical changes at an existing facility covered by a flexible permit is insignificant, for the purposes of state new source review under this subchapter, if the increase does not exceed either the emission cap or individual emission limitation. This section does not apply to an increase in emissions from a new facility nor to the emission of an air contaminant not previously emitted by an existing facility." Please explain how this definition is distinguishable from the terms "significant" and "insignificant" used elsewhere in your rules. We believe these terms must be clearly distinguishable to facilitate compliance and enforcement of the rules. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(b)(23) and 52.21(aa)(6)(i).

5. Minor Sources

We have reviewed the Flexible Permit rules as they apply to minor sources for

ATTACHMENT B



Carl Edlund/R6/USEPA/US
10/25/2010 07:26 PM

To: Al Armendariz/R6/USEPA/US@EPA
cc: Thomas Diggs/R6/USEPA/US@EPA, Lawrence
Starfield/R6/USEPA/US@EPA
bcc:
Subject: Re: LCRA

I wasn't at the meeting but a couple of thoughts:

- LCRA partnered with EPA and TCEQ to explore options for permit flexibility before federal rules were established.
 - Therefore OAQPS may be very sensitive about correspondence..recommend running it by Harnett.
- Sent by EPA Wireless E-Mail Services
Al Armendariz

----- Original Message -----

From: Al Armendariz
sent: 10/25/2010 07:42 PM EDT
To: Lawrence Starfield; "Carl Edlund" <edlund.carl@epa.gov>; Thomas Diggs;
Jeffrey Robinson; "John Blevins" <blevins.john@epa.gov>; "Suzanne Murray"
<murray.suzanne@epa.gov>; Suzanne Smith; David Garcia; "Layla Mansuri"
<mansuri.layla@epa.gov>
Cc: "David Gray" <gray.david@epa.gov>
Subject: LCRA

Larry,

I think we should respond to LCRA about today's meeting, with a letter addressed from me to their CEO, with a cc: to Henry and their other attendees.

It sounds like Pam is advising them not to perform an examination of their operational and permitting history since getting a flex permit. Nor to get the commitment to get into the SIP memorialized in their title v permit.

I suppose that isn't surprising, considering that in her role representing BCCA and other folks suing us, Pam is in charge of making arguments that there is nothing wrong with flexible permits.

In the letter to LCRA, we should thank them for the meeting, say that it was a positive step forward, and acknowledge that LCRA presented information that appears to show that emissions reductions are taking place.

At the same time, I think we need to make clear that all companies need to be in an enforceable mechanism to true-up their permits,

We should then state that there are three routes available right now for this to happen: our audit, acceptance of the FHR process, direct negotiations with John under the enforcement side of the house.

Permit holders not on one of these paths, really soon, will be subject to Title V and enforcement tools, perhaps as soon as by the end of the year.

We might want to stress the rather quick nature of the Title V minor revision. Perhaps, if they prefer, we can offer to memorialize the same commitment to true-up in an AO from EPA to LCRA.

Also, we can remind them that those companies that follow the process we have worked out with FHR or follow the federal audit will continue to have TCEQ serve as their permitting authority under both NSR and Title V, and they get protection if we are petitioned to reopen their Title V permit.

For companies not on an enforceable path, they run the risk of EPA having to use its Title V authorities, which could make EPA the Title V permitting authority for the facility.

Also: John-- did they have internal counsel at the meeting? You and Suzanne might want to pull LCRA's materials you collected under the 114s, and spend an hour looking them over. Based on what we heard at the meeting about boiler tubes, call LCRA and give them a frank discussion about the agency's ongoing national enforcement initiative for NSR and coal-fired EGUs, and perhaps suggest that there are huge NSR benefits to coming in under the audit. With a stroke of a pen, all that tube nonsense can go away.

Thanks to all.

Al

Al Armendariz
Regional Administrator
U.S. EPA
Region 6
armendariz.al@epa.gov
office: 214-665-2100

ATTACHMENT C

BAKER BOTTS LLP

005580.0135

October 31, 2005

Ms. Joyce Spencer, MC 205
Texas Register Team,
Office of Legal Services,
Texas Commission on Environmental Quality
P.O. Box 13087
Air Permits Program
Austin, Texas 78711-3087

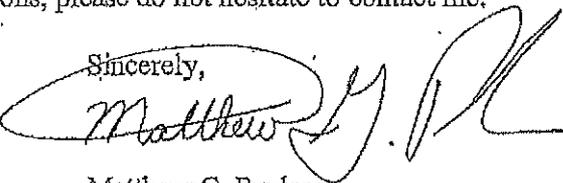
1500 SAN JACINTO CENTER AUSTIN
98 SAN JACINTO BLDG. DALLAS
AUSTIN, TEXAS DUBAI
78701-4078 HONG KONG
HOUSTON
LONDON
MOSCOW
NEW YORK
RIYADH
WASHINGTON

Matthew G. Paulson
TEL +1 512.322.2682
FAX +1 512.322.8329
matthew.paulson@bakertbots.com

Re: Comments of the Texas Industry Project
Proposed NSR Reform Rule
Rule Project Number 2005-010-116-PR

Enclosed please find the comments of the Texas Industry Project ("TIP") on the above proposal. Attachment A is a list of TIP-member companies. We have also included more detailed comments in Attachments B and C. TIP appreciates the opportunity to comment on the proposed rule. If you have any questions, please do not hesitate to contact me.

Sincerely,



Matthew G. Paulson
For the Texas Industry Project

Enclosure

cc: Susan Moore
Steve Hansen
Matt Kuryla

October 31, 2005

**TEXAS INDUSTRY PROJECT
COMMENTS ON TCEQ PROPOSED FEDERAL NSR REFORM RULE**

Rule Project Number 2005-010-116-PR

The Texas Industry Project ("TIP")¹ appreciates the opportunity to submit these comments on the Texas Commission on Environmental Quality's ("TCEQ's") proposed rules implementing the federal New Source Review Reform ("Federal NSR Reform") rule promulgated by the U.S. Environmental Protection Agency ("EPA"). 67 Fed. Reg. 80,186 (December 31, 2002). TIP strongly supports the goals of Federal NSR Reform, and urges TCEQ to integrate all features of the EPA rule, including the federal approach to the Plantwide Applicability Limit ("PAL") flexibility option. TIP's detailed comments are set forth below, and in the attached redline markup of TCEQ's proposed rule language (Attachment B).

I. General Comments

A. TCEQ Has Historically Followed EPA Rules and Guidance in Applying Federal NSR, and Should Continue this Approach in Implementing Federal NSR Reform

1. Federal NSR is an EPA permitting process imposed on new air emitting sources and modifications that exceed EPA's major source thresholds. EPA's Federal NSR Reform streamlined the way that plant modifications are evaluated against EPA's thresholds. Nothing in EPA's Federal NSR Reform package would alter the comprehensive and protective Texas NSR program administered by TCEQ under the Texas Clean Air Act ("TCAA").
2. All projects, both those that trigger Federal NSR and those that do not, are subject to the TCAA air quality permitting rules, which independently apply the TCAA requirements of Best Available Control Technology ("BACT") and protection of human health and the environment, and which contain a well-developed system of incentives for better operation and emissions control.
3. Federal NSR applicability has traditionally been kept separate from the TCAA review process. TCEQ rules, guidance and interpretations regarding Federal NSR have remained consistent with federal rules, guidance and interpretations on the separate issue of which projects trigger Federal NSR.

¹TIP is composed of 53 companies in the chemical, refining, oil and gas, electronic, forest products, terminal, electric utility and transportation industries with operations in Texas. A list of TIP member companies is attached (Attachment A).

4. TCEQ can and should continue to address Federal NSR in a manner consistent with EPA's approach.

B. Substantive Departures from EPA's Federal NSR Rules Introduce Confusion and Inconsistency in Applying EPA Guidance

1. Many companies with operations in Texas also have operations in other states. Substantive changes from Federal NSR Reform will create confusion in applying a large body of EPA guidance, and inconsistencies for companies with multi-state operations.
2. There is no basis for rejecting EPA's reforms, developed with comment in over 50 stakeholder meetings across the country. Introducing different, less flexible triggers for Federal NSR generates an inherent competitive disadvantage for companies with multi-state operations who choose to operate in Texas.

C. The D.C. Circuit's Approval of EPA's Federal NSR Reforms is Strong Support for Implementation of the Reforms in Texas Without Substantive Changes

1. In *State of New York, et al. v. EPA*, No. 02-1387, June 24, 2005, the U.S. Court of Appeals for the D.C. Circuit upheld EPA's actual to Actual-to-Projected Actual test and Plantwide Applicability Limit ("PAL") reforms, among others. The court rejected EPA's Pollution Control Project and Clean Unit tests, and these rejected reforms have properly been omitted from the TCEQ proposal.
2. The D.C. Circuit's independent judicial validation of EPA's remaining reforms creates strong support for implementation of Federal NSR Reform in Texas without substantive changes.

II. Specific Comments

A. TIP Supports the Decision to Include the Actual-to-Projected Actual Test in the Proposed Rule

1. The TCEQ rule package includes an Actual-to-Projected-Actual test for triggering federal NSR at all sites. Previously, this test was restricted to electric generating facilities under TCEQ's informal application of EPA's 1992 "WEPCO" rule. TIP strongly supports TCEQ's decision to include the Actual-to-Projected-Actual test in the proposal.
2. Implementing the Actual-to-Projected-Actual test will help focus federal NSR on truly significant emission increases, and eliminate many of the anomalies with addressing "paper increases" via the existing Actual-to-Potential test.

B. TCEQ Should Adopt the Federal Plantwide Applicability Limit Option Without Substantive Revision

1. The Federal PAL option provides operational flexibility and regulatory certainty while encouraging emissions reductions and pollution prevention.
 - a. A PAL is a plantwide cap (thus, "*Plantwide*" Applicability Limit) that allows sites to replace the case-by-case NSR applicability analysis of physical or operational changes in favor of a simple plantwide emissions cap that functions as a trigger level for Federal NSR.
 - b. As part of the public process establishing Federal NSR Reform, EPA reviewed the environmental benefits associated with Federal PAL through several pilot permitting projects. *See 67 Fed. Reg. 80,186; 80,207 (Dec. 31, 2002).*
 - i. EPA concluded that significant environmental benefits occurred for each of the permits reviewed. *Id.*
 - ii. According to EPA, growth in emissions will tend to shift to cleaner units under the Federal PAL. *Id.*
 - c. Adding the Federal PAL will encourage innovations by simplifying authorizations. Sites with a Federal PAL will still obtain TCAA authorization for any changes, or apply qualified facility flexibility, a flexible permit or another TCAA mechanism.
 - d. The United States Court of Appeals for the D.C. Circuit specifically upheld the Federal PAL in *State of New York, et al. v. EPA*, No. 02-1387, noting that the petitioners failed to refute EPA's assessment of the environmental benefits of the federal PAL.
2. Implementing the Federal PAL is consistent with, and would not conflict with, other aspects of the state NSR permit program.
 - a. The federal PAL only addresses the narrow issue of triggering Federal NSR in connection with a project. All Texas air quality permitting requirements would remain unchanged.
 - b. Existing MAERT limits in permits would continue in effect and attainment requirements would continue to apply, including federal rules, area-specific Mass Emissions Cap and Trade ("MECT") caps, HRVOC caps, Chapter 117 requirements, and all other targeted control programs.
3. The proposed BACT criterion for a PAL defeats the purpose of a simple Federal PAL, requires split procedures for assessing Federal NSR, and is legally questionable.

- a. TCEQ's proposal is a hybrid PAL approach, modeled on TCEQ's existing flexible permit program. Under the proposal, sites would be required to apply BACT controls to any facilities entering a PAL cap.
 - b. *Plantwide* applicability limits are intended to operate site-wide. Few Texas sites have been able to secure full plant-wide BACT determinations. Many flexible permits exist, but few flexible permits cover an entire plant-site, in large part due to the practical difficulty of applying BACT across an entire plant-site. This concern is especially true in the case of larger, more complex plant-sites with a wide array of source types.
 - c. EPA has raised concerns on recent proposed permits regarding the approval of PALs covering less than a complete plant-site.
 - d. As a consequence of the proposed hybrid approach, the proposed rule contains a provision (Section 116.12(16)) subjecting to a traditional Federal NSR applicability review those portions of a project outside of the PAL coverage, while portions of the project within the PAL would be evaluated under the separate PAL provisions. There is no legal authority, and no practical guidance, for applying the netting, actual-to-actual, or other Federal NSR applicability tools to a portion of a plant-site or project.
 - e. The hybrid approach introduces a significant practical uncertainty into the process, and is legally questionable in light of the D.C. Circuit's recent affirmance of EPA's structure and the ambiguous status of split sites and projects. Under the federal rule, PALs operate plantwide. TCEQ should not turn the federal PAL into a complex and uncertain program that splits sites and projects for purposes of Federal NSR.
4. The proposal allows PAL applicants who are current flexible permit holders to use up to 10-year BACT. New PAL applicants, however, are required to use current BACT. This distinction introduces a strong inequity. If the PAL-wide BACT concept included in the proposed rule were retained, 10-year BACT, not current BACT, would be the proper standard for *all* applicants. 10-year BACT represents the well-controlled facility test established by the Texas Legislature for Qualified Facility Flexibility, a similar permit streamlining mechanism. Tex. S.B. 1126, 74th Leg., R.S. (1995). Moreover, the December 31, 2006 deadline for current flexible permit holders to apply for a PAL based on their earlier BACT review may not be sufficient, depending on the timing of rule adoption.

ATTACHMENT D

EPA letter to TCEQ

Q3: Compliance with "legacy permits": EPA's letter states that it expects our facility to comply with the SIP-approved permit conditions and terms that existed prior to issuance of our flexible permit. What does that mean for my facility?

Response: EPA maintains that SIP permits issued to a source remain effective until amended, modified, or revoked in accordance with the SIP-approved methods for effecting such permit changes. This means that all SIP permit conditions and terms, including any representations upon which the SIP permit was issued, are not and have not been superceded, voided, or replaced by the terms, conditions, or permit application representations associated with a flexible permit. Owners and operators of sources included in a TCEQ flexible permit should review their previously issued SIP permits ("legacy permits") to ensure that they are complying with those terms, conditions, and representations. To the extent that such conditions, terms and representations were rolled over into the flexible permit, then there should be no issue associated with compliance obligations and the source should simply continue to comply with those requirements. However, EPA understands that there may be some instances where specific terms, conditions, or representations made in the legacy permits have been "modified" or "changed" by the flexible permit. Therefore, in accordance with EPA's policy entitled "Revised Guidance on Enforcement During Pending SIP Revisions." (<http://www.epa.gov/compliance/resources/policies/civil/ea/stationary/enf-siprev-rpt.pdf>) dated March 1, 1991, EPA will assess its enforcement options on a case-by-case basis.

EPA 2007 letter to flexible permit holders
(excerpt)

well as the representations on which they are based, can be amended through the permitting process. See 30 TEX. ADMIN. CODE § 116.116(b). This does not indicate the improper elimination of major NSR permit terms, but rather appropriate amendment following case-by-case review.

Intervenors further allege that this and other Flexible Permits void the *terms* of pre-existing permits. Intervenors Br. at 24. They do not. It is common for a newly-issued permit, whether it be a traditional NSR permit or a Flexible Permit, to aggregate several pre-existing permits. When consolidating the pre-existing permits, TCEQ will void pre-existing permit *numbers*. However the *terms* of those pre-existing authorizations and the representations on which they are based persist—unless they are amended. See 30 TEX. ADMIN. CODE § 116.116(b). TCEQ does not and cannot void the *terms* of the pre-existing permits. Intervenors are correct that the voiding of pre-existing permit terms (*i.e.*, eliminating a term without a proper amendment) would violate Texas's SIP-approved regulations. See Intervenors Br. at 24 (citing 30 TEX. ADMIN. CODE § 101.221(d)); see also 30 TEX. ADMIN. CODE § 116.116(b). This proves Texas's point, that the Program does not allow for the elimination of major NSR permit terms except as properly authorized through amendment.

State of Texas et al v. US EPA,
Case No. 10-60614 (Fifth Circuit),
Reply Brief for Petitioners State of
Texas (March 17, 2011) (excerpt)

Mr. Hendrickson
August 20, 2003
Page 2

LCRA is also requesting that previously issued permits 3010 and 9233 be voided. Permit 3010 authorizes FPP Units 1 and 2 and the associated fuel handling system. Permit 9233 authorizes the operation of FPP Unit 3. With the issuance of flexible permit numbers 51770 and PSD-TX-486M3, which include a plant-wide applicability limit for the entire facility, the maximum allowable hourly and annual emission rates for the emission sources contained in permits 3010 and 9233 are no longer applicable. The flexible permits, which include new maximum allowable hourly emission rates from all boilers, material handling, and permit-by-rule authorizations, as well as new annual caps for all boilers and material handling emission sources, combine all point sources into one hourly and annual emission limit. In addition, the previous special conditions, operational requirements, fuel specifications, and recordkeeping and reporting requirements in permits 3010 and 9233 have been included in the flexible permits. Thus, the flexible permits make the conditions and emission limits in permits 3010 and 9233 obsolete.

Thank you for your assistance in this matter. If you have any questions or a need for additional information, please contact Joe Bentley at (512) 473-3272 or Monte Gottier at (979) 349-8340.

Sincerely,



Dudley C. Piland, Jr., P.E.
Executive Manager, Wholesale Power Services

Attachments

cc: David Neleigh, EPA Region 6
Barry Kalda, TCEQ Region 11

LCRA 2003 letter to TCEQ requesting
alteration re "voiding" of prior permits
(excerpt)



TEXAS AIR CONTROL BOARD

A CONSTRUCTION PERMIT
IS HEREBY ISSUED TO

LOBER, COLORADO-RIVER AUTHORITY

AUTHORIZING CONSTRUCTION OF

4735 MW Steam/Light Fired Steam Generator
Unit #3

TO BE LOCATED AT

Labrange, Fayette County, Texas
Lat. 30°55'02" LONG. 96°46'02"

and which is to be constructed in accordance with and subject to the Texas Clean Air Act, as amended (Article 4477-1, V.A.T.S.) and all Rules, Regulations and Orders of the Texas Air Control Board. Said construction is subject to any additional or amended rules, regulations and orders of the Board adopted pursuant to the Act, and to all of the following conditions.

1. This permit may not be transferred, assigned, or conveyed by the holder and applies only to the location specified herein.
2. This permit is automatically void if construction is not begun within one year of the date of issuance.
3. This permit is automatically void when an operating permit is issued or denied.
4. The facility covered by this permit shall be constructed as specified in the application for permit to construct.
5. The Board shall be notified prior to the start-up of the facility authorized by this permit in such a manner that a representative of the Texas Air Control Board may be present at the time of start-up.
6. The Board shall be notified prior to the start of any required monitoring of the facility authorized by this permit in such a manner that a representative of the Texas Air Control Board may be present during monitoring.
7. This permit is not a guarantee that the facility will receive an operating permit at the end of the construction period; nor does it absolve the holder from the responsibility for the consequences of non-compliance with all Rules and Regulations and orders of the Texas Air Control Board or with the requirements of the Texas Clean Air Act.
8. Emissions from this facility must not cause or contribute to a violation of the prohibition as defined in Section 4477-1.02 of the Texas Clean Air Act or violate Section 4477-1.03 of the Texas Clean Air Act, Article 4477-1, V.A.T.S., if the Executive Director of the Texas Air Control Board determines that such a violation or violations occur, the holder shall implement, at his/her own expense, whatever measures are necessary to control or prevent the condition or violation.
9. Special Provisions: See attachments labeled "General Provisions C-9233" 1-5, and "Special Provisions C-9233" 1-5. Acceptance of this permit constitutes an acknowledgment and agreement that the holder will comply with all Rules, Regulations and Orders of the Board issued in conformity with the Act and the conditions precedent to the granting of this permit. Failure to comply with all special provisions of this permit will subject the holder to the enforcement provisions of the Texas Clean Air Act, Article 4477-1, V.A.T.S.

PERMIT NO. C-9233 DATE 12-22-83

[Signature]
 EXECUTIVE DIRECTOR
 TEXAS AIR CONTROL BOARD
[Signature]
 Deputy Director
 Control & Prevention



A PERMIT IS HEREBY ISSUED TO
Lower Colorado River Authority
AUTHORIZING THE CONSTRUCTION AND OPERATION OF A
Sam Seymour (Fayette Power Project)
LOCATED AT
La Grange, Fayette County, Texas
LATITUDE 29° 55' 03" LONGITUDE 096° 45' 03"



1. Facilities covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendments is approved. [Title 30 Texas Administrative Code § 116.116 (50 TAC § 116.116)]
2. **Voiding of Permit.** A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of date of issuance, discontinues construction for more than 18 consecutive months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant a 60-day 18-month extension of the date to begin construction. [30 TAC § 116.116(b)(2)(A)]

Permit No. 51770/PSD-TX-486M3 (2002)
(excerpt)

additional post-combustion controls. Thus, the final hourly cap should only reflect the burner modifications required for the SIP and the interim caps.

5.4 PM/PM₁₀ Caps

5.4.1 Annual Caps

The Unit 1 and 2 boilers are subject to NSPS Subpart D, and the Unit 3 boiler is subject to NSPS Subpart Da, which have 0.10 and 0.03 lb/mmBtu PM limits, respectively. The test method specified by EPA for determining compliance with these limits does not include the back-half PM catch; however, the TNRCC requires the back-half to be included in the emission limit in the air permit, including emissions caps for flexible permits. No stack test data exists for Unit 1 and 2 that includes back-half PM. The initial compliance test for Unit 3 included back-half PM, but no recent test data exists. The front-half data that does exist shows compliance with the applicable NSPS with a margin of about a factor of two for all three units. The combined front and back-half PM is estimated to be about twice the front-half alone, or approximately equal to the NSPS levels. Thus, the NSPS limits have been used to provide the best estimate of current actual front-half plus back-half PM/PM₁₀ emissions from the FPP boilers. These factors were applied to the actual heat input for each unit for the 12-month period ending November 1999, then summed to calculate current actual PM/PM₁₀ emissions for the three units combined. A 14 tpy insignificant factor (the PSD PM₁₀ significance level of 1.5 tpy - 1 tpy) was then added to the actual emissions rate to obtain the initial annual cap.

FPP PM Cap for Flexible/RAL Permit 028902

Annual Caps:

1. Insufficient PM stack test data is available to calculate a reliable actual emission rate for use as a permit limit. Data is dated and does not include back-half for Units 1 & 2. Therefore, actual emissions are based on actual firing rate and NSPS limits, which is the best estimate of actual emission rates (front + back half).
2. For Units 1 and 2, use NSPS D limit of 0.1 lb/mmBtu applied to actual 12-month heat input for period ending Nov. 1999.
3. For Unit 3, use NSPS Dc limit of 0.04 lb/mmBtu applied to actual 12-month heat input for period ending Nov. 1999.
4. 14 tpy insignificant amount added to cap.

PM Cap contributions (current actual emissions):

Unit 1:	44,155,272 mmBtu/yr x 0.1 lb/mmBtu x 11m/2000lb =	2,237.8 tpy
Unit 2:	44,786,985 mmBtu/yr x 0.1 lb/mmBtu x 11m/2000lb =	2,239.2 tpy
Unit 3:	37,766,075 mmBtu/yr x 0.03 lb/mmBtu x 11m/2000lb =	565.5 tpy
Total Actual:		5,013.7 tpy

Initial Cap = 2,207.8 + 2,239.3 + 565.6 + 14 = 5,027.7 tpy

We could have the same issue for PM/PM 10. And that cap will be much higher, with only a 14 pp addition to the points to determine the cap. That will equate to less than a 1% increase over past actual. You will have to calculate compliance with the PM cap using an emission factor applied to the heat input since there is CEMS. Until the scrubbers are installed on Units 1 and 2, unless you make some other physical change that would improve the control efficiency, I would assume you may be using the same emission factor to calculate compliance with the cap that you use to calculate the cap itself. With those calculations are for "actual" emissions, so it would be hard to justify anything else. Since the 14 pp that we can add to actual is negligible in this instance, this could restrict actual firing rates to exactly the rates used to calculate the cap. Perhaps there is a strategy that can be used to provide a little relief here. Otherwise, PM could be the most restrictive cap, in which case, you would want to pick a 12 month period that maximizes PM emissions. And that makes it all the more important that this be a 12 month basis rather than a 24 month basis.

Email from Steve Langevin, URS
Corp, to Joe Bentley, LCRA (4/26/02)
(Dkt. 43-2, p. 6) (excerpt)

LCRA FFP PAL Emission Limit Determination Issues

1. Actual emission rates used to determine PAL must be based on same 12 month (or 2 year) period for all facilities (per TNRCC PAL proposal).

I would interpret this to also mean we must use the same year for all pollutants. In other words, we can't use 1999 for all facilities for SO₂ and 2000 for all facilities for CO. If peak year is based on heat inputs, we don't have an issue with this. If peak years are determined from CEMS data, it may not match peak heat input years. And this requirement specifically states we can't use one peak heat input year for Unit 1 and then another year for Unit 2 and/or 3. Thus we will need to select the year with the highest site-wide heat input. Still it is possible, due to differences in emission rates among the three units, that the peak heat input year will not result in peak emission rates for all pollutants. Because the capacity factors are similar for all three units, we can probably ignore this difference.

2. The PAL cannot exceed the current actual emission rates by more than the PSD significance levels for each pollutant.

LCRA has reported actual emission rates to TNRCC each year in its annual Emissions Inventory for FFP. There could be an issue with claiming an actual rate for the PAL that exceeds these previously reported levels. For example, we may wish to permit PM emissions based on the NSPS limit of 0.03 lb/mmBtu, and in previous EIQs, Unit 3 emissions have been reported based on stack test data which shows 0.01 lb/mmBtu. After scrubbers are installed on Units 1 and 2, PM emissions will likely come down, eventually eliminating this concern. However, this will not occur until several years into the life of the PAL permit. LCRA may want to consider doing a stack test to determine current PM levels since no recent test data exists.

3. Emission rates (PAL) must be reduced by any control requirements found in the SIP in nonattainment areas.

Although this says "in nonattainment areas", this requirement is based in part on federal PSD requirements, and it is not limited to nonattainment areas. As such, I think we can assume that the Chapter 117 NO_x limit that applies to FFP is covered by this requirement. Thus, I would interpret this to mean that we would need to apply the NO_x SIP limit of 0.165 lb/mmBtu to the annual heat input selected from the peak operating year. The NO_x cap would then not be allowed to exceed this level. However, the final cap must be set based on the BACT level of 0.11 lb/mmBtu specified by TNRCC. And prior to the proposed burner work and/or the effective date of the Chapter 117 limit, NO_x emissions will not meet a cap based on 0.165. Thus, we will likely need to calculate at least 3 NO_x caps: pre-Chapter 117, post-Chapter 117, and final BACT cap.

4. All facilities must be upgraded to BACT and must be capable of operating at the previous activity level.

The requirement to upgrade to BACT is not effective immediately, and BACT can be phased in. We have preliminary agreement with TNRCC on an approximate schedule for BACT. My interpretation of the second part of this requirement is to mean that you cannot inflate the activity level (e.g., heat input) used to calculate the cap to an unrealistic level in order to inflate the cap to a level that could allow circumvention of the BACT requirement. First, I believe this is an issue only for those pollutants that will require BACT upgrades. If there are no BACT upgrades (i.e., emission reductions) for a pollutant, and we set the PAL based on a peak short term heat input, the resulting PAL would far exceed highest 12 month actual emission rate, which is not allowed. Once again, the primary pollutant of concern is NO_x. TNRCC has given some indication that they will allow the "BACT emission rate" (this would be the final NO_x PAL) to be determined based on the historical maximum daily heat input for each unit. I believe the initial (prior to controls being implemented) NO_x caps would need to be based on actual peak annual heat input such that the magnitude of the PAL is never set at a level that would trigger a PSD review.

5. Installation of controls required by SIP allows for collateral increases in other pollutants.

LCRA anticipates that CO emissions may increase as a result of the burner work being done to reduce NOx emissions for SIP purposes. Both TNRCC and EPA allow for this increase to be exempt from PSD review. At the same time, the PAL requirements dictate that the PAL be set at current actual emission rates (plus an insignificant amount, or 100 tpy for CO) unless the applicant elects to go through a PSD permit review for that pollutant. Considering these two conflicting requirements, how will we set the CO PAL? The best case would be to choose a ppm level projected to be needed or guaranteed by ALSTOM, convert it to a lb/mmBtu equivalent, and then apply it to the agreed to peak 12 month annual heat input. Because there are no additional BACT requirements expected for CO, and the PSD exemption does not eliminate the need to demonstrate that the CO increase will not cause a NAAQS violation, TNRCC may agree to this approach. I don't see any other easily workable method to set the CO PAL.

6. Additional Pollutant-Specific Issues and Conclusions:

NOx. Since the initial NOx cap, prior to controls, will need to be set higher than either the interim (SIP-based) or final (BACT-based) caps, how will we determine this value? Will we strictly look at CEMS data and then set the PAL at this level plus 39 tpy? Or can we select an emission factor and apply it to the actual 12-month peak heat input, which would likely give an annual emission rate that exceeds the rate indicated by the CEMS.

SO2. The same issue exists for the initial SO2 cap as for NOx. Prior to installing the scrubbers on Units 1 and 2, the SO2 cap must be set at past actual levels plus an insignificant amount (39 tpy). Will this be strictly based on CEMS data for the selected peak year(s)? If TNRCC allows the peak daily heat input to be used to calculate the final (BACT-based) NOx PAL, I assume we would propose to use this rate for the final SO2 PAL. We can use this higher heat input for the final PAL because the additional controls will still result in an emission limit that is less than the current actual 12-month peak rates. However, this peak daily heat input cannot be used for the initial (prior to control) PAL because it would result in an allowable emission rate that would exceed the current actual 12-month peak rates and thus trigger a PSD review.

PM. There are no CEMS for PM. There is no recent compliance test data. Thus, current actual emissions are hard to define. Most desirable approach for LCRA is to set final (BACT-based) equal to NSPS limit of 0.03 lb/mmBtu for all three units. This is a reduction in actual emissions for Units 1 and 2, but would be an increase for Unit 3, which is currently doing better than 0.03. Initial cap that will be in place prior to scrubbing Units 1 and 2 must be higher. Can we use a factor that allows some cushion and apply this factor to 12 month actual peak heat input and call this an actual emission rate? What about conflict with past EIQs? Will a compliance test be required when Flex permit is issued? Should LCRA consider testing now to determine what current emission rates are rather than rely on old test data?

CO. All CO issues discussed above under collateral increases.

VOC. Permitted VOC emissions are relatively low, such that a 39 tpy insignificant increase represents a significant increase in operating rates (relative to other criteria pollutants). Probably not a significant issue.

All Pollutants. An alternative to setting PALs at past 10 year actual level is to undergo a PSD permit review for any pollutant that needs a higher limit. For CO and VOC, this is a possible approach if actual levels present operational problems because PSD review would not result in need to add controls for these pollutants. Hourly caps must also be established for each pollutant. At this time, no specific problems are envisioned; however, there has been not discussion with TNRCC as to how much flexibility exists in setting these limits.

06/04/02

TALKING POINTS FOR FLEX PERMIT

- EPA and DOJ have filed lawsuits against 11 coal-fired utility companies over the past few years for violation of New Source Review (NSR) rules. Approximately 50 other utilities have received notices of violation (NOV) or requests for information concerning past capital projects. In Texas, Alcoa has received a NOV from EPA/TNRCC and Marathon Oil is negotiating a flex permit.
- EPA claiming widespread non-compliance involves making "non-routine" modifications resulting in an increase in air emissions without the utility first obtaining permits. Settlement penalties include adding SO₂, NO_x, and PM controls as well as several million dollars in civil penalties and other environmental projects.
- Bush administration ordered 90-day review of NSR last spring but still no reforms announced. Any attempt to relax NSR would be very unpopular with Congress and some states. Legislative NSR reform may be tied to multi-pollutant strategy announced in February (Bush administration's Clear Skies Initiative).
- FPP is seeking a "safe harbor" from NSR enforcement action for future maintenance (superheater replacement) and efficiency improvement projects. FPP activities fit the profile of projects EPA has said triggers NSR (due to cost, frequency, purpose, and nature and scope).
- Permitting tool available at federal level is Plantwide Applicability Limit (PAL). "Flexible" permit is available at State level. A PAL doesn't require emission controls; just setting new limits based on recent emission history. The TNRCC doesn't like the PAL process because doesn't result in "well controlled" unit. It is just a paper reduction. TNRCC will throw in a federal PAL with a state flexible permit though.
- Flex permit is similar to a PAL in that in consideration for future emission reductions, pre-approved maintenance and efficiency improvement projects over a 10-year period will not trigger NSR. Flex permit establishes an emission "cap" for all units based on the highest emissions during any 12-month period over the last 10 years. After 10 years, facility must meet Best Available Control Technology (i.e., SO₂ scrubbers) to establish "well controlled" status.
- Flex permit benefits: (1) eliminates case-by-case project review and establishes "bright line" NSR test; (2) time frames for emission reductions in flex permit may be similar to requirements of other federal legislation (Clear Skies); (3) early SO₂ reduction could generate revenue by selling excess SO₂ allowances (over \$8 million banked already); (4) demonstrates environmental leadership.
- The cost for scrubbing FPP Units 1 and 2 to BACT levels is approximately \$100 million. The level of NO_x reductions required by a flex permit will be available in about 10 days.

Joe Bentley - NOx Cap Calculation

From: <Steve_Langevin@URSCorp.com>
 To: <joe.bentley@lcra.org>
 Date: 4/26/02 10:11 AM
 Subject: NOx Cap Calculation

Joe

I put together a spreadsheet calculating NOx caps with different alternatives. First, I took your spreadsheet that had 1995 through 2001 NOx emission rates in tpy and lb/mmBtu factors shown. I used these two numbers to back calculate mmBtu/yr for each year for each unit. I'm sure there is some round off error due to round off in the two digit lb/mmBtu factors in your spreadsheet, so if you can send me the actual heat inputs, I can refine this.

I assumed that we would need 3 NOx caps: Initial cap, cap after SIP controls are installed, and final cap to meet BACT.

For the initial cap, we have 4 possible options to calculate the cap. First, we must pick a peak period. As I had suspected, the peak emissions periods based on CEMS data is not the same as the peak heat input period. But you may choose either period. If we were only concerned with NOx, obviously you would choose the year with peak emissions. However, we have other pollutants to consider, and for some of those, like PM, where there is no CEMS, we will need to calculate the cap by applying an emission factor to historical heat inputs. So, for PM you would want to use the period with the peak heat input. But as I indicated in my memo that I e-mailed to you yesterday, I believe we are required to use the same period for all pollutants and all 3 units. Then there is the question of whether we can use the highest 12-month out of 10 years or do we have to use the highest 2 year average out of the last 5 years. So this gives 4 possible ways to calculate the initial caps. My spreadsheet includes all 4. There is about a 300 tpy spread from highest to lowest, which is only 1.5% of the value of the cap. And the difference between using the max year vs. the max 2-year is even less. I should point out also that if we are allowed to use the highest 12-months, that could give a slightly higher value than the highest calendar year. If the data is not readily available by month, considering the small difference between the 1-year vs. 2-year, this difference should be even less, and not worth pursuing.

For the Cap after SIP controls, I assumed that we would calculate the cap based on the required SIP level of 0.165 lb/mmBtu rather than the ALSTOM guarantee. You don't know what you will get exactly, and you don't have a guarantee for Unit 3 yet. And the difference is also not great. As the spreadsheet shows, the big decrease is getting from current levels to the SIP levels. I have assumed for this calculation that the cap cannot exceed the prior "actual" NOx emission rate that the facility would have had if it was operating at the SIP levels. This is a typical PSD applicability requirement imposed to prevent facilities from taking credit for decreases due to required SIP controls. I don't see it presenting any real constraints because it is calculated based on 0.165 while we assume you will meet 0.15 lb/mmBtu. I show the maximum expected NOx emissions after controls (from your spreadsheet) and it provides a comfortable margin of compliance with this interim cap.

Finally, I show the final cap. This is simply the number from your spreadsheet that is calculated based on the historical daily maximum from each unit. When we last talked, I said I thought we would be required to use the historical daily maximum from the same year for each unit. But I'm not sure I still think that. That requirement is tied to the PSD requirement that says that we can't increase emissions by more than 40 tpy above prior actual rates. And that has nothing to do with how TNRC allows you to calculate the BACT level.

Take a look at the spreadsheet and call me with anything you want to discuss. If you can provide me with stack test data for other pollutants (perhaps that only means PM) and actual heat input (rather than my back calculation), I will put together some similar spreadsheet for the other criteria pollutants. I think I have SO2 CEMS data.

(See attached file: NOx Cap Calculation.xls)

Joe Bentley - More on NOx and SO2 caps

From: <Steve_Langevin@URSCorp.com>
To: <joe.bentley@lcra.org>
Date: 4/26/02 2:29 PM
Subject: More on NOx and SO2 caps

Joe

I did a little more with the cap investigation using the baseline NOx and SO2 emissions spreadsheet that you sent me some time ago. Got some pretty interesting results. These were monthly emissions data, so that allowed calculation of 12 month rolling totals and not just the calendar year totals. Even looking at the 24-month averages that you already had calculated, we get some pretty significant differences. For NOx, the peak 12 month average emission rate is over 21,000 tpy, which is more than 1100 tpy greater (about 5%) than the calendar year maximum. And it's also 900 tpy more than the peak 24-month average in your spreadsheet. The difference for the SO2 data is also about 5%.

Another thing I did with this is I noted on the SO2 sheet which 12-month period was maximum for NOx and vice versa. They don't coincide, and this comparison shows you how much you lose from one pollutant when you select the peak period based on another pollutant. You loose about 1000 tpy of NOx (5%) if you select the peak 12 months based on the SO2 maximum. I think it's a little less for SO2, but still significant. Since this is significant, I'd like to get month by month heat inputs as well.

These are significant differences since they effectively make a 5% difference on the annual operating rate. So, that tells us we don't want to just use the 24-month average out of last 5 years if we don't have to. So we should push TNRCC to push EPA to agree to this part of the PAL Proposal.

(See attached file: baseline.xls)

Thanks
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Joe Bentley - VOC

From: <Steve_Langevin@URSCorp.com>
To: <joe.bentley@lcra.org>
Date: 4/26/02 5:24 PM
Subject: VOC

Joe

The Unit 3 renewal uses a VOC factor of 0.06 lb/ton. Is this the same factor used for Units 1 and 2? Have you ever tested for VOC, and if so, can you provide the data? Even though I ask that, I'd prefer to use the emission factor (assuming it is higher) to establish the cap. VOC emissions aren't high, so I don't think TNRCC is going to pay a lot of attention to it.

I had some thoughts on this as well. For VOC, if we use an emission factor to calculate actual emissions to set the cap, and then you determine compliance with the cap using the same emission factor, basically, there is no room to increase the operating rate by keeping the emissions low, since the emissions factor is assumed to never change.

For VOC, this may not be a problem. If the emission factor is the same for units 1 and 2, we will have actual VOC emissions of around 500 tpy. So the cap would be 500 tpy plus 39 tpy. In the case of VOC, that represents an 8% increase in operating rate compared to past actual. That might be better than we have for most.

We could have the same issue for PM/PM10. And that cap will be much higher, with only a 14 tpy addition to the actuals to determine the cap. That will equate to less than a 1% increase over past actual. You will have to calculate compliance with the PM cap using an emission factor applied to the heat input since there is CEMS. Until the scrubbers are installed on Units 1 and 2, unless you make some other actual physical change that would improve the control efficiency, I would assume you may be using the same emission factor to calculate compliance with the cap that we use to calculate the cap itself. Both these calculations are for "actual" emissions, so it would be hard to justify anything else. Since the 14 tpy that we can add to actual is negligible in this instance, this could restrict actual firing rates to exactly the rates used to calculate the cap. Perhaps there is a strategy that can be used to provide a little relief here. Otherwise, PM could be the most restrictive cap, in which case, you would want to pick a 12 month period that maximizes PM emissions. And that makes it all the more important that this be a 12 month basis rather than a 24 month basis.

Thanks
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Joe Bentley - Resolved/Unresolved from yesterday's PAL meeting

From: <Steve_Langevin@URSCorp.com>
To: <joe.bentley@lcra.org>, <Henry.Eby@lcra.org>
Date: 5/13/02 9:57 AM
Subject: Resolved/Unresolved from yesterday's PAL meeting

Joe and Henry

I thought it would be good to write down what we got agreement on and what is still open after yesterday's meeting. I think we all agreed that everything we heard was pretty positive, but we don't have final answers on everything, and on some things, we will probably just need to propose what we want in the application, and it will be reviewed at the time. And I'd like to think that means that if we present a good basis for what we want, it will be approved. Let me know if I missed anything.

1. No further direction on 12 month vs. 24 month for basis of current actual emissions calculation. TNRCC supports this, but EPA hasn't signed off. Plan is to proceed with 12-month basis until/unless we are told otherwise.
2. Use of max daily heat input to calculate final "BACT" caps. This has been presented to Erik and Randy. We asked if they were okay with the way the calculation was done (without specifically pointing out that max daily heat input exceeds design input), and they said yes. This is a state-only issue and should not impact EPA PAL requirements (even at the higher tpy this gives us, we are still below past actual rates, even after adjustment to SIP level of 0.165 lb/mmbtu).
3. Current actual PM/PM10 emissions (for initial cap) have been calculated using NSPS limits applied to actual firing rates due to lack of reliable actual data for front half plus back half PM. Final BACT cap is based on all units meeting 0.03 lb/mmbtu. Erik and Randy focused primarily on this final BACT number, which they considered to be on the low side, so they had no problem with the initial cap basis. This is a federal PSD issue, and I don't believe it is a real TNRCC concern. EPA could take issue with it during their review. Plan for now is to move forward with the calculation as is. (On the final BACT cap, LCRA should confirm that Units 1 and 2 can meet 0.03 (including back half) after scrubbers are added.)
4. Annual SO2 BACT cap. Erik and Randy kept flip-flopping on this. We used 90% control of current annual average uncontrolled (per Unit 1/2 CEMS) to calculate the annual SO2 cap. Erik seemed okay with 90%. Randy was leaning toward 95%. He seemed to prefer 95% for Units 1 and 2 and 85% for Unit 3. The basis for this is that Units 1 and 2 will have new scrubbers and should reflect today's BACT. Unit 3 is currently achieving about 85%, so perhaps that could stay as is as BACT. This would give a little higher than 90% for the average removal. This was left open for LCRA to make their case in the permit application.
5. CO Cap. CO will increase due to NOx work. This is allowed by PSD rules since it is for required pollution control. Erik and Randy had no problems with using the 200 ppm ALSTOM guarantee as cap basis. (May need to correct existing calc for 3% O2).
6. H2SO4 and Pb. Erik and Randy felt our numbers looked low for both of

these. Randy initially felt that we needed to address BACT and determine the caps for these on this basis. He was concerned that adding the PSD insignificance levels to actual emissions more or less ignored BACT requirements. Erik seemed to feel differently. He just didn't see issues with these pollutants. Final resolution seemed to go with Erik's view. But we should probably confirm that the proposed caps are not too low. There was some discussion around not having a cap for Pb and H₂SO₄. I felt the caps were needed to avoid having to deal with PSD applicability for each new project. Erik agreed. Henry and Joe indicated that EPA is okay with an actual to future actual calculation for PSD applicability, and as long as this type of calculation is not expected to trigger PSD review, then perhaps we don't want to have a cap. Further discussion between URS and LCRA is probably needed.

7. We do not need hourly caps, but we cannot leave current hourly limits as is unless they represent BACT. Erik and Randy indicated that we could propose a higher max hourly basis than used for annual BACT levels to calculate max hourly rates. No specific guidance was given. We need to propose something and provide justification. I believe this primarily applies to NO_x and SO₂. CO hourly basis should probably be the same as annual (unless ALSTOM indicates that the 200 ppm level is not a short term max). Other pollutants will not have CEMS, and compliance will be based on one time stack tests. Therefore, there is no real way to demonstrate compliance with a lower annual average limit, so no point in using a different basis for other pollutants. TNRCC (and I) suggest that hourly caps be established, even though not required, because there will be hourly limits, and the cap would simply be the sum of the individual unit limits, which provides more flexibility than individual limits.

8. We briefly discussed the timing on interim and final caps. Only NO_x will have an interim cap that is different from initial and final. We proposed that the interim NO_x cap, based on 0.165 lb/mmBtu (SIP limit) become effective May 2005 when SIP controls must be in place. Thus, the interim short term NO_x levels would become effective at that time. However, the first actual compliance demonstration date for the interim annual cap would be May 2006 since any 12-month average prior to that could include months prior to installation of interim NO_x controls. Final caps for SO₂, PM, and NO_x would all become effective around 2010.

9. We also discussed what was needed for BACT support in the permit application. Erik didn't want us to submit cost information. We should mainly rely on qualitative arguments. He suggested looking at what was in Clearinghouse and in the data he compiled and do a little bit of a statistical analysis of the control levels and show how we fit in.

Thanks
Steve Langevin
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(512) 454-8807 (fax)

Henry Eby - Re: Resolved/Unresolved from yesterday's PAL meeting

From: <Steve_Langevin@URSCorp.com>
To: "Henry Eby" <Henry.Eby@lcra.org>
Date: 5/13/02 1:03 PM
Subject: Re: Resolved/Unresolved from yesterday's PAL meeting
CC: <Joe.Bentley@lcra.org>

Thanks.

I think the next step for NOx hourly limits is to look at the variation that you currently have. I realize that we will have a whole different animal after the burner work is done, but it's a start. And, as I said, we can do that if we have the hourly data, or a summary of it. Another thing to look at for NOx is what ALSTOM has to say. Do they give any absolute maximum NOx guarantee, or just a long term average? Even if they don't give a guarantee, I would think that they can provide some input on what kind of variation to expect. If you give us an okay to call them to discuss this and let them know we will be calling, I can do that also.

On the SO2, I could talk to Greg Brown here about expected variation, but my understanding is that for what we are proposing, worst case SO2 removal will be better than the annual level that we want to permit for. But I'll talk to him anyway about variation if modules are down. For Unit 3, we could also do the same thing I'm suggesting for NOx, and look at historical variation. Again, I would need more data. This might be a reasonable approach for Unit 3, especially if we propose a lower (same as currently achieved) removal efficiency than for the other units. We could base the max hourly on the 70% removal that I think you indicated is the current permit basis.

As for the 95/95/85 vs 90/90/90 bases for annual SO2, I really think TNRCC would sign off on either. The 95/95/85 is a little more stringent, so that TNRCC would like it better and may help negotiations on other limits that you may have more concern with. I think we should also make sure we are taking into account all possible fuel scenarios. Even with the current PRB coal, if you look at the upper end of the range of possible sulfur content, rather than what you've been burning, assuming there is a difference, what kind of removal efficiency does our currently proposed tpy cap correspond to? Or what would the cap be assuming 90% removal with worst case coal? That might also be part of the basis for the peak hourly rate (max sulfur content).

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"Henry Eby"
 <Henry.Eby@lcra.org>
 To: "Joe Bentley" <Joe.Bentley@lcra.org>,
 <Steve_Langevin@URSCorp.com>
 cc:
 05/13/2002 10:27 AM Subject: Re: Resolved/Unresolved from yesterday's PAL meeting

Steve,
Great job summarizing the meeting and remaining issues. I don't think your missing anything. What's our next step for firming up our position on the outstanding issues, e.g. SO2 BACT, hourly caps...

Thanks,

Henry

>>> <Steve_Langevin@URSCorp.com> 05/13/02 09:50AM >>>

Joe and Henry

I thought it would be good to write down what we got agreement on and what is still open after yesterday's meeting. I think we all agreed that everything we heard was pretty positive, but we don't have final answers on everything, and on some things, we will probably just need to propose what we want in the application, and it will be reviewed at the time. And I'd like to think that means that if we present a good basis for what we want, it will be approved. Let me know if I missed anything.

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Thanks
Steve Langevin
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(512) 419-5332 (voice)
(512) 454-8807 (fax)

**AIR OPERATING PRACTICES AND PROCEDURES MANUAL
FOR
LCRA'S
FAYETTE POWER PROJECT**



Submitted For:

**LCRA
3701 LAKE AUSTIN BLVD.
AUSTIN, TX 78703**

Submitted By:

**ZEPHYR ENVIRONMENTAL CORPORATION
1515 CAPITAL OF TEXAS HIGHWAY SOUTH, SUITE 300
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(512) 329-5544**

DECEMBER 2010



Air Operating Practices and Procedures Manual

Fayette Power Project

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7. _____ By: _____

8. _____ By: _____

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Submitted For:

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DECEMBER 2010



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AIR OPERATING PRACTICES AND PROCEDURES MANUAL
LCRA – FAYETTE POWER PROJECT

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AIR OPERATING PRACTICES AND PROCEDURES MANUAL
LCRA – FAYETTE POWER PROJECT

Significant deterioration is said to occur when the amount of new pollution would exceed the applicable PSD increment. Currently, there are no Class III increment areas in Texas and only one Class I area (Big Bend National Park). The remainder of the state is classified as Class II. The PSD permit program is a federal program that has been delegated to the TCEQ; therefore, the TCEQ now issues these permits, after review and comment by EPA. Applications for PSD permits are discussed in Section 8.0--Permit Applications, Renewals and Amendments.

Maximum Increments by Area Classification			
Pollutant	Maximum allowable increase (micrograms per cubic meter)		
	Class I	Class II	Class III
Particulate matter:			
PM-10, annual arithmetic mean	4	17	34
PM-10, 24-hr maximum	8	30	60
Sulfur dioxide:			
Annual arithmetic mean	2	20	40
24-hr maximum	5	91	182
3-hr maximum	25	512	700
Nitrogen dioxide:			
Annual arithmetic mean	2.5	25	50

FPP is currently exempt from the provisions of State and Federal NSR provided a modification does not cause the emissions from the facility to exceed the emissions limit in the flexible permit and does not result in the emissions of an air pollutant not previously emitted. The FPP flexible permit also includes a plant-wide applicability limit. This flexible permit, issued in October 2002, authorizes all modifications for a period of ten years. In exchange for this NSR certainty, FPP is required to meet BACT by the time the permit expires in 2012. This will include the installation of flue gas desulfurization equipment on Units 1 & 2.

In addition to the PSD or NA permits, all major sources are required to obtain a Federal Operating Permit (also referred to as a Title V permit). The Title V permit records in one document all of the air pollution control requirements that apply to the source and requires the source to certify each year whether or not it has met the air pollution requirements in its Title V permit. Associated with the Title V Operating Permit is an Acid Rain permit, which limits the amount of SO₂ and NO_x emitted from a facility.

In addition to the three federal permit programs discussed above, the Texas Clean Air Act requires all new and modified sources, regardless of size or location, to obtain a TCEQ new source review permit or qualify for a Permit-By-Rule (PBR) (formerly known as a standard exemption). FPP has the flexible permit discussed above, several standard exemptions, a Title V permit, a PSD permit, and an Acid Rain permit. FPP's permits contain conditions establishing emission limits and standards, monitoring and testing requirements, and recordkeeping, reporting and notification requirements. These permit conditions are outlined in the tables contained in Sections 4.0 through 6.0 of this manual. Section 8.0 of this manual includes a discussion of the types of activities that may trigger the need for a new source review permit after the flexible permit expires.

8.0 PERMIT APPLICATIONS, RENEWALS AND AMENDMENTS

The discussion below is a summary of new source review rules and would generally apply to FPP. However, as discussed in earlier section, FPP is exempt from NSR under the flexible permit as long as plant-wide emissions remain below established caps. The information below will apply to FPP after the flexible permit expires and is not renewed.

Before a new facility can be constructed or an existing facility modified, TCEQ Regulation VI (30 TAC Chapter 116) requires that LCRA first obtain a permit, amend an existing permit, or qualify for a Permit by Rule (PBR). Facilities constructed before September 1, 1971 are considered "grandfathered" and not subject to the permit requirements unless they are modified after that date. Furthermore, section 382.0518(g) of the Texas Clean Air Act includes as grandfathered facilities those for which a contract to construct was executed before September 1, 1971. If the new facility or modification is large enough to be considered a major source or a major modification under EPA's Prevention of Significant Deterioration (PSD) permit program, the requirements for a PSD permit must also be met (40 CFR 52). The PSD program has been delegated to TCEQ, which means that TCEQ issues the permit.

8.1 NEW SOURCE REVIEW / PSD PERMITS

A physical change or change in the method of operation at FPP that results in a "significant" increase in air emissions is considered a major modification and subject to PSD permit review. An increase is considered significant for the following pollutants at the listed levels:

<u>Pollutant</u>	<u>Emission Rate (tons/year)</u>
Carbon monoxide	100
Nitrogen oxides	40
Sulfur dioxide	40
Particulate matter (PM/ PM ₁₀)	25/15
Ozone (VOC)	40
Sulfuric acid mist	7
Hydrogen sulfide (H ₂ S)	10
Total reduced sulfur compounds (including H ₂ S)	10

If a PSD permit is required, FPP may have to collect continuous ambient monitoring data as part of the air quality analysis for any criteria pollutant (ozone (VOC), PM₁₀, SO₂, NO_x, CO) that FPP proposes to emit in significant amounts: If, however, either (1) the predicted ambient impact, i.e., the highest modeled concentration for the applicable averaging time, caused by the proposed new source or modification is less than the significant emissions increase (or significant net emissions increase), or (2) the existing ambient pollutant concentrations are less than the prescribed significant monitoring value (see Table 8-1), the TCEQ has discretionary authority to exempt FPP from this ambient data collection requirement. If these data are required, they generally must be gathered over a period of at least 1 year and represent at least the 12-month period immediately preceding receipt of the PSD application.

Wholesale Power Services NSR Checklist Form

PROJECT INFORMATION	
Today's Date: <u>11/29/2006</u>	Date work is scheduled to begin: <u>Mar-08</u> Facility: <u>FFP</u>
Project Manager: <u>Gary PaValock</u>	Expansion: <u>3574</u> Unit(s): <u>2</u>
Project Name: <u>FFP Unit 2 Upper Arch Replacement</u>	
Project Description: <u>Project will replace all 260 furnace upper arch tubes in kind from just below the seal box below the hanger tube down to the center of the vertical section of the nose.</u>	
<u>Project will also replace the side waterwall tube panels along the length of the replaced upper arch at least one foot immediately above the upper arch.</u>	

SECTION I

PLEASE ANSWER YES OR NO TO THE FOLLOWING QUESTIONS: <i>To be completed by project manager or designer</i>		Yes	No																																				
1.	Will the project result in a physical change to the plant? (i.e., replacing equipment, installing new equipment, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>																																				
2.	Will the project result in a change in the method of operation of the plant or a change in the method of controlling emissions?	<input type="checkbox"/>	<input checked="" type="checkbox"/>																																				
3.	Will the project involve the replacement of equipment with identical parts that must be routinely changed for plant operations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>																																				
4.	Is this a capital project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>																																				
5.	Will the project cost greater than \$100,000 to implement?	<input checked="" type="checkbox"/>	<input type="checkbox"/>																																				
6.	Will the project involve the replacement of an item that normally lasts greater than 3 years?	<input checked="" type="checkbox"/>	<input type="checkbox"/>																																				
7.	Will the project include replacement, partial replacement, modification or overhaul of any of the following items?	<input type="checkbox"/>	<input type="checkbox"/>																																				
	<table border="1" style="width: 100%; border-collapse: collapse; margin: 0 auto;"> <thead> <tr> <th style="width: 15%;"></th> <th style="width: 10%;">Yes</th> <th style="width: 10%;">No</th> <th style="width: 15%;"></th> <th style="width: 10%;">Yes</th> <th style="width: 10%;">No</th> </tr> </thead> <tbody> <tr> <td>Boiler Tubes</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Condenser Tubes</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td>Steam Drum</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Coal Pulverizer</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td>Economizer</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Burners</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td>Turbine Blades</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Boiler Feed Pumps</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td>Furnace Walls</td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Forced Draft or Induced Draft Fans</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </tbody> </table>		Yes	No		Yes	No	Boiler Tubes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Condenser Tubes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Steam Drum	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Coal Pulverizer	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Economizer	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Burners	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Turbine Blades	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Boiler Feed Pumps	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Furnace Walls	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Forced Draft or Induced Draft Fans	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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8.	Will the project cause the fuel firing rate or material throughput to increase?	<input type="checkbox"/>	<input checked="" type="checkbox"/>																																				
9.	Is one purpose of the project to reduce the number of forced outages?	<input checked="" type="checkbox"/>	<input type="checkbox"/>																																				

10.	Is the project intended to eliminate safety concerns related to condition of the subject equipment?		X
11.	Is the project intended to address reliability problems posed by the present condition of the equipment to be worked on?	X	
12.	Is the project intended to correct unit problems that are resulting in a unit de-rating or capacity limitations on the unit?		X
13.	Does the project involve the addition or replacement of pollution control equipment?		X

SECTION 2

To be completed by WPS Environmental Program Manager

1. Indicate the reasons why the proposed Project is not a physical or operational change within the meaning of the "modification" rule under the PSD and/or NSR regulations.

- Renning maintenance, repair, or replacement
- Pollution control project
- Increase in production rate or hours of operation
- Switch to Alternative Fuels
- Other exclusions

Please Specify: The project does not trigger New Source Review due to the provisions in the FPP Flexible Permit authorizing modifications to the three units as long as the changes do not result in an exceedance of the plantwide hourly and annual emissions caps in the permit. Adequate cushion was included in the cap calculations to guard against potential exceedances of the emission limits that may be associated with this type of project. All emissions will continue to be tracked and reported to demonstrate compliance. In addition, due to the Flexible Permit, it is not necessary to perform the pre- and post-change emission test below.

2. Calculate the unit's average annual actual emissions rate (expressed in tons per year) for each regulated air pollutant during the representative baseline period prior to the construction start date of the project. This representative baseline period may be any single 24-month period within five (5) years prior to the planned construction start date. Calculate the unit's future actual emissions, on an average annual basis measured in tons per year, based on the projected Btu heat input and actual emissions rates that are expected to be actually achieved after the completion date of the project. This calculation should equal average annual rate (expressed in tons per year) at which the unit is projected to emit after completion of the project.

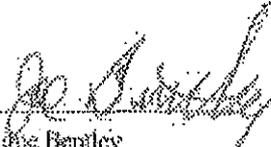
Pollutant	Representative Baseline Emissions	Projected Future Actual Emissions (TPY)		
	Average Annual Emissions Rate in Baseline Period (TPY)	BTU Input	Average Lbs/mmBTU	Projected Future Actual (TPY)
NO _x				
SO ₂				
PM				
Other				

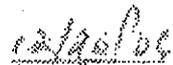
Note: Please note that election of this emissions test for PSD/NSR applicability will require LCRA to track actual emissions after completion of the project. Actual emissions (on a twelve (12) month rolling average) should not exceed the baseline levels above the applicable de minimis levels for any regulated pollutant. Such tracking of actual emissions should be undertaken for at least five (5) years to confirm the projected emission calculations.

De Minimis Emission Increase Levels Under PSD Regulations

Regulated Pollutant	De Minimis Emissions Rate
Carbon Monoxide	100 tpy
Nitrogen Oxide	40 tpy
Sulfur Dioxide	40 tpy
Particulate Matter	25 tpy (particulate emissions) 15 tpy (PM10)
Lead	0.6 tpy
Fluorides	3 tpy
Sulfuric Acid Mist	7 tpy

Additional Information/Comments: The project will not trigger revised New Source Performance Standards since the project will not cause the fuel firing rate or material throughput to increase. A project does not trigger NSPS without an actual increase in the maximum hourly emissions from the unit as a direct result of a project.


Joe Bentley
Environmental Program Manager


Date

Marisa Weber

From: PUBCOMMENT
Sent: Friday, June 15, 2012 8:05 AM
To: PUBCOMMENT-OCC2
Subject: FW: Public comment on Permit Number 51770

*NSR
76973*

H

From: PUBCOMMENT-OCC
Sent: Friday, June 15, 2012 7:16 AM
To: PUBCOMMENT
Subject: FW: Public comment on Permit Number 51770

From: jeffreygcook@verizon.net [mailto:jeffreygcook@verizon.net]
Sent: Thursday, June 14, 2012 4:15 PM
To: donotReply@tceq.state.tx.us
Subject: Public comment on Permit Number 51770

REGULATED ENTY NAME LCRA SAM SEYMOUR FAYETTE POWER PROJECT

RN NUMBER: RN100226844

PERMIT NUMBER: 51770

DOCKET NUMBER:

COUNTY: FAYETTE

PRINCIPAL NAME: LOWER COLORADO RIVER AUTHORITY

CN NUMBER: CN600253637

FROM

NAME: Jeff Cook

E-MAIL: jeffreygcook@verizon.net

COMPANY:

ADDRESS: 712 N MAIN ST
LA GRANGE TX 78945-1636

PHONE: 9799682346

FAX:

mw

COMMENTS: Dear commisioners I would like to request a contested case hearing regarding permit number 51770. thanks for your consideration jeff cook

Am formal oral comment (10)

**TCEQ Public Meeting Form
June 14, 2012**

**Lower Colorado River Authority
Air Quality Permit
Permit Number 51770 and PSDTX466M3**

PLEASE PRINT

Name: Jeffrey COOK

Mailing Address: 712 N. Main

Physical Address (if different): _____

City/State: La Grange Texas Zip: 78945

This information is subject to public disclosure under the Texas Public Information Act

Email: jeffreygcook@verizon.net ✓

Phone Number: 979-968-2346 ✓

• Are you here today representing a municipality, legislator, agency, or group? Yes No
If yes, which one? _____

Please add me to the mailing list.

I wish to provide formal *ORAL COMMENTS* at tonight's public meeting.

I wish to provide formal *WRITTEN COMMENTS* at tonight's public meeting.

(Written comments may be submitted at any time during the meeting)

Please give this form to the person at the information table. Thank you.

mw

Marisa Weber

From: PUBCOMMENT
Sent: Thursday, June 14, 2012 4:47 PM
To: PUBCOMMENT-OCC2
Subject: FW: Public comment on Permit Number 51770

*MSR
76973*

H

From: PUBCOMMENT-OCC
Sent: Thursday, June 14, 2012 1:56 PM
To: PUBCOMMENT
Subject: FW: Public comment on Permit Number 51770

From: midbosque@gmail.com [mailto:midbosque@gmail.com]
Sent: Thursday, June 14, 2012 1:32 PM
To: donotReply@tceq.state.tx.us
Subject: Public comment on Permit Number 51770

REGULATED ENTY NAME LCRA SAM SEYMOUR FAYETTE POWER PROJECT

RN NUMBER: RN100226844

PERMIT NUMBER: 51770

DOCKET NUMBER:

COUNTY: FAYETTE

PRINCIPAL NAME: LOWER COLORADO RIVER AUTHORITY

CN NUMBER: CN600253637

FROM

NAME: Jeffrey Fritz Crunk

E-MAIL: midbosque@gmail.com

COMPANY:

ADDRESS: 9012 SOMMERLAND WAY
AUSTIN TX 78749-4269

PHONE: 5128099555

FAX:

MW

COMMENTS: Texas Commission on Environmental Quality Office of the Chief Clerk, MC-105 P.O. Box 13087, Austin, Texas 78711-3087 , re: Notice of Application and Preliminary Decision for an Air Quality Permit, Permit Number: 51770 and PSDTX486M3 Dear TECQ, On behalf my family and my community in Austin, Texas, I am submitting these comments and a request for a contested case hearing in response to the Notice of Application and Preliminary Decision for an Air Quality Permit that LCRA has applied for the Fayette Power Plant (FPP). As a resident of South Austin, Texas, I have a vested interest in the FPP and have standing to request a contested case hearing. TECQ and EPA precedent establish my stakeholder status. FPP emissions, including particulate matter, have been documented by EPA to travel hundreds of miles. TECQ has relied on promised emissions reductions from the FPP in generating it's "Early Action Compact" regime regarding ozone and nonattainment status. Comments The Issue at Hand: Permitting the FPP The Fayette Power Plant is not now in compliance with the law in its emissions. I'm pleased TECQ is holding these permit hearings on best policy to redress decades of non-compliance. However, the draft permit TECQ has put together contains errors and omissions that, were it to be adopted, would result in continued non-compliance with federal standards under the Clean Air Act. Consider the following: 1) The draft permit does not meet the Clean Air Act's BACT standards. The draft permit gives no explanation or justification for why the chosen limits do not reflect BACT. 2) The permit should contain lower emission limits than the inflated figures used in the past. 3) The permit should reflect the fuel the FPP really uses, which is not "100 lignite" as authorized by the draft. 4) The draft permit contains no limits for heavy metal air toxics like mercury. This contravenes new federal rules requiring all coal-fired power plants to meet the Clean Air Act's MACT level for toxics. 5) The permit should mandate LCRA to provide TECQ with air dispersion modeling demonstrating that emission from the FPP will not cause or contribute to air pollution out of compliance with national health-based ambient air quality standards. One is left to agree with the conclusion expressed by the EPA in a May 2011 letter to LCRA. The "de-flex" application is not consistent with EPA's recommendations for correcting the FPP's non-compliance under the illegal Flex Permits regime. The new authorization permit should be re-drafted in compliance with the full letter of federal air quality rules under the Clean Air Act. These omissions and errors are ample grounds for granting a contested case hearing for this permit. The Issue TECQ Should be Addressing: Is Coal Affordable? I want to include in my comment on the Fayette Power Plant another issue which I'll frame as a question. Should utility operators have confidence in the future of coal? If the answer is yes then the considerable sums that must be invested in the FPP in order for it to meet environmental programs and upgrades for transmission and generation reliability are justified. However, it's getting harder every day to find an analyst not in the employ of the coal sector to agree with that proposition. Coal today has dramatically rising costs. It also faces increasingly competitive alternatives. And it's facing unprecedented environmental constraints, particularly related to water, that threaten it's historically demonstrated strong-suit – reliable baseload power. The Dallas Observer noted that in January of 2012, coal-fired power plants in Texas accounted for some 30 percent less electricity than they did a year earlier because it literally didn't pay to keep them running. Generating costs were greater than the market wholesale price for power. Their operators idled them rather than run them at a loss.¹ Across the country plummeting prices for natural gas are putting even new coal plants out of business. The Fayette Power Plant is not immune from higher operating costs. Rather than pass costs to rate payers who might follow Georgetown and a dozen or so other customers who, quite sensibly, have chosen to contract for less expensive gas or wind power, the LCRA opted for a round of cost-reductions, the majority coming from some 240 staff reduction in force.² This can only be a stop-gap measure. This past week Moody's Investor Service downgraded coal. In 2010 coal produced around 45 percent of U. S. electricity. This spring that figure is closer to 35 percent. Moody's forecasts coal to continue to decline to around 30 percent by 2020. Natural gas prices would have to rise considerably for coal to regain it's competitive stance. In this unlikely event, however, Moody's report anticipates utilities to preference wind, solar, and other green power sources instead.³ The price points of renewables continues to fall annually (solar dropped by 60 percent in three years). Also, customers want power that doesn't poison them today and jeopardize the future of all life on the planet. As someone with two youngsters myself, that seems like a perfectly reasonable consideration. Which is just to remind that coal's market costs don't always reflect externalized cost drivers. There is widespread grassroots opposition to continued reliance on coal, the number one driver of anthropogenic climate change from CO2 emissions. And, as always, coal power's historically externalized costs to human health and productivity are know quantities,

which include severe environmental degradation on the production end, thousands of deaths and illnesses nationally on the consumption end. Given all this, now is the time for the TECQ, ERCOTT, and LCRA to seriously consider whether spending hundreds of millions of dollars on two thirty-year old coal plant generators is a sound investment, or, throwing good money after bad. Now usually changes in the utility industry are slow. This change is happening fast. A Black & Veatch report surveying industry opinion captures one measure of that change in the attitudes of utility leaders. In 2011, 81.5 percent said they believed there is a future for coal in the U. S. One year later, less than 60 percent believe that statement. Nationally, concern about coal stemmed foremost from carbon emission legislation followed by water supply concerns. However, the report noted that in Texas water supply was the top concern.⁴ In fact no place is the energy-water nexus more acute than in Texas. In the wake of last year's drought several of the state's thermal coal plants dialed back their operations owing to water scarcity for operations or high water temperatures. Finally, water plants are notoriously thirsty, using as much or more water than is used for irrigation in agriculture. When evaluating the future of the FPP, policy makers and utility operators need to anticipate that higher seasonal temperatures and water shortages due to climate change are going to become the norm, not the exception. That new normal will adversely affect power production from water-cooled thermal plants just as they did in the summer of 2011. Summary In conclusion, while we have coal plants they should be held to the highest permissible air quality standards. That is why I ask that the TECQ grant a contested case hearing for this permit. However, striving to meet environmental compliance standards is yesterday's issue with coal. Literally, the FPP is decades late in meeting it's statutory obligations under federal Clean Air law, a fact that is lamentable and shameful, but also, less relevant to the question of coal in 2012. Coal is on it's way out. It does not have a future in the United States. It does not have a future in Texas. It's increasingly expensive. It's increasingly unreliable. For those reasons, the social compact between consumers of coal electricity and utilities that utilize is irrevocably changing. If policy does not now recognize and adjust to the new realities of the power marketplace then taxpayers and ratepayers are subsidizing inefficient, dirty coal power at a time when the marketplace offers superior alternatives. The best policy option for the Fayette Power Project is not to retrofit it. Instead, the thirty-year-old facility should be retired as soon as is practically possible. Sincerely, Jeffrey Crunk 9012 Sommerland Way Austin, Texas 78749 (512) 809-9555

*Are formal oral comments
Submitted written comments* CCH ③

**TCEQ Public Meeting Form
June 14, 2012**

request
IP# 95144
H

**Lower Colorado River Authority
Air Quality Permit
Permit Number 51770 and PSDTX466M3**

PLEASE PRINT

Name: Ilan Levin

Mailing Address: 1303 San Antonio St.

Physical Address (if different): _____

City/State: Austin, TX Zip: 78701

****This information is subject to public disclosure under the Texas Public Information Act****

Email: ilevin@environmentalintegrity.org ✓

Phone Number: 512-637-9479 ✓

- Are you here today representing a municipality, legislator, agency, or group? Yes No

If yes, which one? Environmental Integrity Project

Please add me to the mailing list. ✓

I wish to provide formal **ORAL COMMENTS** at tonight's public meeting.

I wish to provide formal **WRITTEN COMMENTS** at tonight's public meeting.

(Written comments may be submitted at any time during the meeting)

Please give this form to the person at the information table. Thank you.

mm



June 14, 2012

VIA HAND DELIVERY

RECEIVED

JUN 14 2012

AT PUBLIC MEETING

Ms. LaDonna Castanuela
Office of the Chief Clerk, MC-105
TCEQ
P.O. Box 13087
Austin, TX 78711-3087

Re: Comments, Request for Contested Case Hearing on Draft Permit No. 51770 & PSD-TX-486M3, authorizing emissions from the Lower Colorado River Authority's Fayette Power Project/Sam Seymour Plant in Fayette County, Texas

Dear Ms. Castanuela:

On behalf of the Sierra Club and Texas Campaign for the Environment, we are submitting these comments and request for a contested case hearing in response to the mailed Public Notice of the Application and Preliminary Decision on the above referenced air permit for the Fayette Power Project ("power plant").

We have several major concerns regarding the Application and Draft Permit. We have raised some of these issues in previous letters regarding the Fayette power plant's deficient air permits. These letters are attached and incorporated by reference. In general, our concerns fall under the following specific issues:

- The Application and Draft Permit fail to demonstrate how the proposed emission limits meet the *best available control technology* ("BACT") standard.
- The Application and Draft Permit fail to demonstrate that the emissions will not cause or contribute to violations of health-based ambient air quality standards.
- The Application and Draft Permit do not set emission limits that are as least as stringent as the emission limits in effect prior to the Flexible Permit.
- LCRA misrepresented emissions and inflated capacity (annualized heat input) in order to get high Flex Permit limits. Those past misrepresentations should be corrected in this Permit proceeding.
- LCRA Fayette plant has undergone major modifications to its boilers, which would have triggered NSR/PSD review had LCRA not relied on its Flex Permit and PAL to avoid federal permitting requirements. These modifications resulted in increased life of the boilers, fewer maintenance outages, and more annual hours in operation. Thus, these

mc

major modifications are classic NSR activities that require BACT analyses and impacts analyses.

- The Application and Draft Permit should be strengthened to reduce air toxics such as lead and mercury, in light of new federal rules requiring *maximum achievable control technology* (“MACT”) to reduce dangerous toxics from coal-fired power plant boilers.

These issues and other issues relevant to the Executive Director or Commission’s actions regarding Permit No. 51770/PSD-TX-486M3 are also discussed more fully below and in the attachments. Please carefully review all these comments and attachments as you prepare your responses to comments, as we believe the evidence is overwhelming that: (a) the LCRA has misled TCEQ and misrepresented its emissions and operations, which raises not only several compliance issues, but also demonstrates that a more careful review be performed before issuing a new PSD permit, (b) the Fayette power plant should conduct a full BACT analysis, and demonstrate compliance with all national ambient air quality standards before a new PSD permit can issue.

I. Request for Contested Case Hearing

On behalf of the Sierra Club and Texas Campaign for the Environment, we request a contested case hearing.

The **Sierra Club** is one of the oldest environmental membership organizations in the country. Sierra Club is a nonprofit corporation headquartered in California, with offices, programs and members in Texas. Sierra Club’s Austin, Texas offices are at 1202 San Antonio Street, Austin, Texas 78701, (512) 477-1729 (phone), (512) 477-8526 (fax). Among the goals of the Sierra Club are preserving and enhancing the natural environment and protecting public health. The Sierra Club has the specific goal of improving outdoor air quality. The Sierra Club and its members have a significant interest in ensuring that the LCRA Fayette plant complies with the Clean Air Act and reduces air emissions that endanger public health and property. Sierra Club has an interest in ensuring that the LCRA’s Fayette power plant air pollution permit, at issue here, complies with the federal and Texas Clean Air Act and is protective of public health and the environment. Sierra Club members own property, reside, and/or recreate nearby and downwind of the power plant. One such Sierra Club member is Ms. Carol Daniels. Ms. Daniels resides at 3701 FM 609, La Grange, Texas, 78945. This is approximately less than 10 miles from the Fayette power plant. Ms. Daniels, a retired nurse, has concerns about air quality at her home and in her community, and specifically is concerned that air pollution from the power plant harms her health and property and interferes with her normal use and enjoyment of her home. Ms. Daniels would like the Fayette power plant to comply with all air pollution laws and have an air permit that protects public health and the environment. Ms. Daniels has standing to request a hearing in her own right.

Texas Campaign for the Environment (TCE) is a nonprofit membership organization dedicated to informing and mobilizing Texans to protect their health, their communities and the

environment. TCE has offices located at 3303 Lee Parkway #402, Dallas, TX 75219; 611 S. Congress #200-B, Austin, TX 78704; and 3100 Richmond #290, Houston, TX 77098. TCE has participated in numerous legislative, regulatory, legal, and other lawful actions over the years to reduce air pollution. TCE members and staff live, work, own property and recreate in the vicinity and directly downwind of the Fayette power plant. One such TCE member is Maggie Rivers. Mrs. Rivers and her husband have owned property, resided, and raised their family at 2506 E. State Hwy. 237, Round Top, Texas, since 1982. This property is roughly six miles north of the Fayette power plant. Mrs. Rivers can see the smokestacks from her property. Mrs. Rivers has observed smoke coming from the power plant's smokestacks and she has seen sooty ash on her property and vehicles, consistent with the prevailing winds in Fayette County, which blow the power plant's plume directly toward Mrs. Rivers' property for much of the time. Mrs. Rivers, who is a lifelong non-smoker, developed severe asthma and a lung condition in recent years. Mrs. Rivers believes that air pollution from the Fayette power plant causes or contributes to her asthma. When Mrs. Rivers sought medical advice from a specialist in Houston, and informed the doctor that she lives near a coal-fired power plant, he suggested that she move. Mrs. Rivers has standing to request a hearing in her own right.

For the reasons stated above, and in order to ensure that the Fayette power plant's air permit complies with air quality laws and rules, and is protective of public health and the environment, Sierra Club and TCE request a contested case hearing on the Application and Draft Permit.

Please direct all communications or questions regarding this request to Ilan Levin, Senior Attorney, Environmental Integrity Project, at (512) 637-9479, or ilevin@environmentalintegrity.org.

II. Comments

A. The Fayette Power Plant Must Demonstrate Compliance with Federal Clean Air Act § 165

The federal Clean Air Act and Texas State Implementation Plan require major sources of air pollution to undergo a rigorous permit review, known as New Source Review, before undertaking major modifications that could cause significant emissions increases. Because the Fayette plant is located in an area designated as attainment/unclassifiable in terms of meeting the national health-based ambient air quality standards (NAAQS), the specific federal New Source Review permit requirements are the "prevention of significant deterioration" (PSD) provisions of the federal Clean Air Act Section 165. The law requires the Fayette power plant to demonstrate, in essence, two things:

- That the power plant's air emissions and pollution controls meet the definition of "best available control technology" (BACT), and

- That the emissions from the plant will not cause or contribute to a violation of any federal ambient air standard, including the health-based “national ambient air quality standards” (NAAQS).

The Fayette is a major source of air pollution currently operating without a valid PSD permit. Thus, the power plant should be brought into compliance with Clean Air Act Section 165 immediately, by undergoing a complete BACT review and demonstrating compliance with all NAAQS under existing rules. In other words, the Application and Draft Permit should be strengthened to ensure that the plant meets today’s BACT and that emissions do not violate any NAAQS, such as the short-term SO₂ and NO₂ health-based standards. The Fayette plant has *never* made these demonstrations, and only when LCRA does so can members of the public truly trust that the power plant’s emissions are protective of health and property.

If you disagree that the plant should be required to show compliance with present-day BACT and NAAQS, please explain your basis. In addition, please consider a less onerous alternative, such as requiring the Fayette plant to demonstrate compliance with BACT and NAAQS in effect *at the time of the major boiler upgrades and modifications* that occurred after the Flex Permit and PAL issued in 2002. In other words, the Fayette power plant should at least be brought up to the NSR/PSD standards that it should have applied, and would have had to apply but for the 2002 issuance of the Flex Permit and PAL. EPA’s recommended approach for bringing Flex Permits into compliance included requiring permit applicants to provide detailed explanations and emissions data for all major modifications during the life of the Flex Permit. LCRA’s Application fails to provide any such information regarding the major modifications to the coal-fired boilers between 2002 and 2012. LCRA has relied on its Flex Permit and PAL to make major boiler modifications while avoiding PSD review. The result is that boiler Units No. 1, 2, and 3 are virtually completely rebuilt boilers from the units originally constructed in the late 1970’s and early 1980’s, and yet, LCRA has avoided compliance with Clean Air Act Section 165.

An even less onerous alternative would be to require LCRA to demonstrate compliance with BACT and NAAQS based on the standards in place in 2002, when LCRA first received its Flex Permit. LCRA’s 2002 Flex Permit Application misled the TCEQ and the public by misrepresenting emissions and maximum annual heat input for each of the three boilers. The 2002 Application fails to demonstrate both BACT and compliance with NAAQS. For example, LCRA has never explained how the particulate matter emission rates used for setting limits in either its 2002 Flex Permit or in the current Draft Permit meet BACT.

B. The Plant Has Undergone Major Modifications Without Meeting Best Available Control Technology or Conducting Required Impacts Analyses

By its own admission, LCRA has undertaken several major modifications without undergoing NSR/PSD review, because LCRA has relied on the plantwide caps in its Flex Permit. LCRA has called its Flex Permit a “safe harbor from NSR enforcement.” During the life of the

Flex Permit, LCRA believed that, as long as emissions do not exceed the caps in the Flex Permit and PAL, then the Fayette plant was exempt from compliance with the federal Clean Air Act's PSD requirements.

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Asset Issues

FPP permit amendment – FPP has initiated a project to evaluate the costs and benefits of obtaining a flexible air permit from the TNRCC. This unique permitting strategy would allow FPP to perform pre-authorized maintenance projects and efficiency upgrades, under the premise that FPP would not exceed a pre-negotiated emissions cap for the entire facility. The permit would commit FPP to install scrubbers by the end of the 10-year permit term, but allow FPP to perform the needed work in the boilers without being subject to New Source Review (NSR) regulation. The URS Corporation presented a cost estimate for installing scrubbers on FPP Units 1 and 2 last week. The cost is estimated to be \$90-95 million. These costs assume the excess capacity of the Units 3 limestone preparation and de-watering equipment is used and the existing Units 1 and 2 stacks can accommodate a higher moisture concentration. In addition, on April 22, 2002, the TNRCC staff provided LCRA with a NO_x BACT determination (in terms of an emission limit) that will likely necessitate making emission reductions beyond those that we will be capable of with the technology that is being used in the current NO_x reduction project. However, the BACT limit and associated annual emissions cap would not be so stringent as to force SCR technology. A review of the technology capable of meeting the new emission cap and the associated control costs are being evaluated.

LCRA's Fayette power plant Air Operating Manual states:

FPP is currently exempt from the provisions of State and Federal NSR provided a modification does not cause the emissions from the facility to exceed the emissions limit in the flexible permit and does not result in the emissions of an air pollutant not previously emitted. The FPP flexible

And, in fact, during the past decade, LCRA has virtually rebuilt the entire boilers, replacing all boiler tubes and major boiler components to avoid future outages and extend the life of the power plant. As the additional attachments demonstrate, LCRA has clearly undertaken major upgrades and modifications to the boilers, including, for example, a complete Unit 2 Upper Arch replacement (all 260 furnace tubes and sidewall tubes along the length of the upper arch). LCRA's internal documents show that LCRA admits that these projects would trigger NSR but for the Flexible Permit's inflated caps, stating, "adequate cushion was included in the [Flex Permit and PAL] cap calculations to guard against potential exceedences of emission limits that may be associated with this type of project."

LCRA misled TCEQ (and EPA) in 2002, when it obtained the "adequate cushion" in the caps – both the Flexible Permit's MAERT caps as well as the PAL caps, which are essentially

the same because they are based on the same assumptions and calculations. First, as LCRA's internal emails and correspondence, attached to this comment letter, indicate, for several criteria pollutants, including NOx, PM, CO, and VOC, the 2002 establishes "final" caps that were not demonstrated to be BACT levels (and are not BACT). LCRA obtained PM emission limits based on levels it knew were significantly higher than it achieved in practice. For example, LCRA knew the Flex Permit's hourly and annual PM limits, based on high NSPS limits, were significantly higher than anything LCRA had ever reported in recent years:

LCRA has reported actual emission rates to TNRCC each year in its annual Emissions Inventory for FPP. There could be an issue with claiming an actual rate for the PAL that exceeds these previously reported levels. For example, we may wish to permit PM emissions based on the NSPS limit of 0.03 lb/mmBtu, and in previous EIQs, Unit 3 emissions have been reported based on stack test data which shows 0.01 lb/mmBtu. After scrubbers are installed on Units 1 and 2, PM emissions will likely come down, eventually

PM. There are no CEMS for PM. There is no recent compliance test data. Thus, current actual emissions are hard to define. Most desirable approach for LCRA is to set final (BACT-based) equal to NSPS limit of 0.03 lb/mmBtu for all three units. This is a reduction in actual emissions for Units 1 and 2, but would be an increase for Unit 3, which is currently doing better than 0.03. Initial cap that will be in place prior to scrubbing Units 1 and 2 must be higher. Can we use a factor that allows some cushion and apply this factor to 12 month actual peak heat input and call this an actual emission rate? What about conflict with past EIQs? Will a compliance test be required when Flex permit is issued? Should LCRA consider testing now to determine what current emission rates are rather than rely on old test data?

Second, LCRA knowingly inflated the annual heat input for all three boilers, by "annualizing" the highest ever reported *daily* heat input, and purposely chose not to divulge this critical fact to the TCEQ permit engineers in 2002.

2. Use of max daily heat input to calculate final "BACT" caps. This has been presented to Erik and Randy. We asked if they were okay with the way the calculation was done (without specifically pointing out that max daily heat input exceeds design input), and they said yes. This is a state-only issue and should not impact EPA PAL requirements (even at the higher tpy

Additional LCRA internal documents from 2002 show that LCRA intentionally used these inflated annualized heat input rates to establish hourly and annual NOx caps "such that the magnitude of the PAL is never set at a level that would trigger PSD review."

Had LCRA been more honest, and informed TCEQ that the Flex Permit caps it was seeking (and got) in 2002 reflect hourly heat input rates at levels higher than LCRA had ever represented before – 30 percent higher for Unit 3 – then TCEQ would have been required to conduct a full impacts analysis and rigorous BACT analysis for all criteria pollutants. Instead, TCEQ focused primarily on the SO₂ reductions, but failed to require, for example, the top control technology (SCR) for NOx control.

Thus, not only did LCRA mislead TCEQ in its 2002 Permit Application, but also, preexisting permit limits, *including representations regarding operations and design of the boilers and pollution controls*, remain fully enforceable. Thus, for example, the Unit 3 boiler's maximum hourly heat input rate of 4,735 MMBTU/hour, was never amended, and thus should be included in the Draft Permit.

For these reasons, and also for the public health benefits that reduced emissions would bring, TCEQ should require the rigorous BACT and ambient impacts analyses required by the federal Clean Air Act for issuance of a new PSD permit to a major source that currently lacks a valid permit. If TCEQ is not willing to make LCRA meet today's BACT, then it should at least require 2002 BACT limits. The Draft Permit does not meet current-day BACT, and does not even meet 2002 BACT levels.

C. The Draft Permit Does Not Satisfy BACT

The emission limits contained in the Special Conditions and/or MAERT do not meet the definition of "best available control technology," which is defined as:

an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under Act which would be emitted from any proposed major stationary source or major modification which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.¹

TCEQ should establish BACT limits for boilers in pounds of any given pollutant per million British thermal units (lb/MMBTU). The pound per hour and ton per year limits contained in the MAERT might be sufficient to demonstrate compliance with NAAQS (a demonstration yet to be made), but they cannot be said to satisfy BACT. Pound per hour and TPY limits should be set at levels designed to avoid exceedances of the NAAQS. But lb/MMBTU limits are routinely used by TCEQ to reflect the performance of a pollution control device. A lb/MMBTU limit will require that the controls be operated at all times, including periods when the plant is at less than full load. However, without lb/MMBTU limits, the boilers could comply with lb/hr or TPY limit without operating the control devices. Thus, without lb/MMBTU limits, the Fayette power plant could circumvent the requirement to meet BACT on a continuous basis. In addition, the federal law requires BACT to be no less stringent than the limits established under Clean Air Section 111 (new source performance standards) and 112 (national emission standards for hazardous air pollutants) – standards that are expressed in lbs/MMBTU.

¹ 30 TEX. ADMIN. CODE §§ 116.111(a)(2)(C) & 116.160(c)(1)(A) (incorporating 40 C.F.R. § 52.21(b)(12) by reference)

In the PSD permit that existed prior to TCEQ's issuance of the Flex Permit in 2002, the Fayette power plant's three main boilers were limited to maximum hourly heat inputs. Units 1 and 2 were limited to a maximum hourly heat input of 6,000 MMBTU/hour, based on representations in numerous PSD applications. Unit 3 was limited to a maximum hourly heat input of 4,735 MMBTU/hour, which was expressly included in the Unit 3 original PSD permit, and represented as the maximum hourly capacity in all subsequent permit applications. The Draft Permit is deficient because it fails to include these limits.

In addition, Unit 3 has always had a federal PSD condition limiting the sulfur content of fuel to no more than 2.75 percent sulfur (dry weight basis). This federal limit should be included in the Permit, and TCEQ should consider additional fuel limitations (e.g., ash content) consistent with the definition of BACT.

Emission limits are only protective of health and the environment when they are based on short averaging periods (to avoid dangerous pollution spikes that can be "averaged out" over 30 days or a year), and reliable compliance methods. The Draft Permit should be changed to reflect BACT limits for the three main boilers, including limits expressed in lb/MMBTU, short-term averaging periods, and continuous or frequent compliance tests, as shown in the following tables.

Unit 1				
Pollutant	lb/MMBTU (Averaging period)	lb/hr	tons/yr	Compliance Method
CO	0.187 (1-hr)	1,122.0	4,128.6	CEMS
H ₂ SO ₄	0.006 (3-hr)	36.0	132.5	Method 8
NO _x	0.10 (1-hr)	600.0	2,207.8	CEMS
PM _{Total}	0.05 (3-hr)	300.0	1,103.9	Method 5, 201/202*
PM ₁₀ (total)	0.035 (3-hr)	210.0	772.7	Method 5, 201/202*
PM ₁₀ (filter)	0.025 (3-hr)	150.0	552.0	CEMS
SO ₂	95% Removal	315.0	1,159.1	CEMS
VOC	0.00375 (3-hr)	22.5	82.8	Method 25A

Unit 2				
Pollutant	lb/MMBTU (Averaging Period)	lb/hr	tons/yr	Compliance Method
CO	0.187 (1-hr)	1,122.0	4,187.6	CEMS
H ₂ SO ₄	0.006 (3-hr)	36.0	132.5	Method 8
NO _x	0.10 (1-hr)	600.0	2,239.3	CEMS
PM _{Total}	0.05 (3-hr)	300.0	1,119.7	Method 5, 201/202*
PM ₁₀ (total)	0.035 (3-hr)	210.0	783.8	Method 5, 201/202*
PM ₁₀ (filter)	0.025 (3-hr)	150.0	559.8	CEMS
SO ₂	95% Removal	315.0	1,175.7	CEMS
VOC	0.00375 (3-hr)	22.5	84.0	Method 25A

Unit 3				
Pollutant	lb/MMBTU	lb/hr	tons/yr	Compliance Method
CO	0.187 (1-hr)	885.4	3,531.1	CEMS
H ₂ SO ₄	0.006 (3-hr)	28.4	113.3	Method 8
NO _x	0.10 (1-hr)	473.5	1,888.3	CEMS
PM _{Total}	0.03 (3-hr)	142.1	566.5	Method 5, 201/202*
PM ₁₀ (total)	0.02 (3-hr)	94.7	377.7	Method 5, 201/202*
PM ₁₀ (filter)	0.015 (3-hr)	71.0	283.2	CEMS
SO ₂	90% Removal	497.2	1,982.7	CEMS
VOC	0.00375 (3-hr)	17.8	70.8	Method 25A

* Method 5, 201/202, modified as follows:

Year 1: Two stack tests w/in first year. Stack test to include at least five runs, each of at least two hours duration. At least two runs during cold startup. Stack test to measure PM_{Total}, PM₁₀ and PM_{2.5}. Operating conditions during stack test used to set CAM parameters.

Year 2 and beyond: Annual stack test; same as year 1. Condensable PM from stack test is added to filterables measured by PM CEMS to determine hourly concentration.

Mass determined by multiplying mmbtu * concentration.

D. The De-Flex Application and Draft Permit Are Vague and Confusing Regarding Emissions from Startup, Shutdown, Maintenance, and Malfunction

LCRA's Application for an Amendment to Permit No. 51770 & PSD-TX-486M3 (Fayette Power Plant's "De-Flex" Application) was processed separately from two related permitting actions: (1) LCRA's application for planned maintenance, startup, and shutdown ("MSS") emissions,² and (2) LCRA's "stand-alone PAL" permit.³

The Fayette power plant must meet BACT limits at all times, including any periods of reasonably foreseeable startup, shutdown, and maintenance. The Draft Permit's Special Condition 7 appears to exempt the plant from complying with federal opacity limits during "startup, shutdown, upset, or maintenance." This provision violates federal law and should be removed. If you disagree, please explain the legal and technical rationale for including this exemption in the permit. Special Condition 21 is vague and confusing surplusage, and should be removed. To the extent you disagree, please explain the purpose and meaning of Special Condition 21.

On January 4, 2011, LCRA submitted a permit application disclosing that PM emissions during startup, shutdown, and maintenance ("MSS") activities can reach "maximum" levels of 2,110.67 pounds per hour each at Units 1 and 2, and 2,752.74 pounds per hour at Units 3, and that these conditions can occur for up to 600 hours per year. These emissions must be considered as part of this Application and Draft Permit.

In addition, certain pound per hour limits in the Draft Permit appear unusually high for normal operations. Please explain whether any hourly limits in the Draft Permit's MAERT have been established at levels that take into account emissions during MSS. For example, the Draft Permit contains CO limits of up to 1,716 lbs/hr for Unit 3.⁴ It is unclear why the Unit 2 CO limit is so much higher than the hourly limit for the identical Unit 1; please explain. Hourly NOx limits for each boiler are also much higher than would be expected if based strictly on BACT and normal operations.

² LCRA's Application was submitted on January 4, 2011.

³ LCRA's Application was submitted on January 27, 2011; the Permit (PAL2) was issued by Executive Director on April 14, 2011. LCRA has missed the deadline set forth in TCEQ's rules for renewing its PAL Permit, and, therefore, we assume LCRA does not intend to renew its PAL permit. Please inform commenters on the status of LCRA's PAL Permit, including whether it will expire on its own terms in October 2012.

⁴ 1,296 lbs/hr for U1, and 920 lbs/hr for U3.

EPA has addressed MSS emissions from coal-fired power plants in the recent Mercury and Air Toxics Rule, by setting MSS requirements for coal plants based on the top performing 12 percent. This EPA rule should be used as the starting point for establishing BACT-level MSS emission limits and controls.

E. Certain Proposed Emission Limits Result in Significantly Higher Allowable Emissions Than Those Limits Contained in Prior SIP-approved (“Legacy”) Permits and the Flex Permit

Annual and hourly proposed carbon monoxide, VOC, lead, NO_x, and PM limits are higher than previously authorized limits. In addition, some hourly or annual limits sum to higher than previously authorized Flex Permit caps. Also, certain pollutants are authorized, or proposed to be authorized, at levels higher than what LCRA has reported on past Emission Inventories. If the Draft Permit will authorize emissions at levels higher than previously emitted or authorized, this is yet one more reason to conduct a full impacts analysis and BACT review.

F. Interim and Final “Compliance Caps” Have no Basis in Law, and Perpetuate the Illegal and Problematic Flex Permit & PAL Caps

According to the TCEQ staff’s Permit Amendment Source Analysis & Technical Review, the Draft Permit contains compliance caps “to ensure the permit action does not result in an increase in allowable emissions.” There is no legal or technical basis for including these caps in the Draft Permit. Interim caps are completely irrelevant and should be deleted, because the Unit 3 scrubber upgrade and scrubbers for Units 1 and 2 have been complete and operational for over a year. In addition, the TCEQ’s obligation is to ensure that this permit action could not result in increases in *actual* emissions (not Flex Permit allowables, which, as explained, are ridiculously inflated). Unit-specific, BACT-level emission limits should be set at levels to ensure the power plant could not emit more than past actuals.

G. The Draft Permit Should Contain a Heat Input Limit for Unit 3, or LCRA Must Apply for an Amendment and Demonstrate Compliance at the Higher Heat Input Levels.

LCRA should explain how its originally permitted 4,735 mmBtu/hour (maximum rated capacity) Unit 3 boiler has increased capacity by 30 percent. LCRA made conflicting representations in its 2002 Flexible Permit applications: on the one hand LCRA requested and received from the State emission caps based on a maximum heat input rate for Unit 3 that is roughly 30 percent greater than the pre-existing federally-enforceable (i.e., SIP-approved permit’s) limit of 4,735 mmBtu/hour; but on the other hand, LCRA represented that the boiler operations and design (including the maximum capacity) was the same as when the unit was first authorized.

TCEQ and LCRA should explain why it is appropriate to base annual and hourly allowables on heat input rates far in excess of the maximum capacity represented in all pre-existing SIP-approved, PSD, or federally-enforceable permits. If LCRA seeks to increase maximum heat input capacity beyond previous maximum representations made in SIP-approved

PSD permits, then the Application should demonstrate that the plant meets BACT and does not violate ambient air quality standards.

H. The Application Contains no Ambient Impacts Analyses

TCEQ should require LCRA to submit modeling to demonstrate that its proposed emissions will not cause or contribute to air pollution.

I. Stack tests show LCRA Fayette Plant can meet lower emission levels

The Application incorrectly states that “[f]or SO₂ and PM/PM₁₀/PM_{2.5}, reduced emission limits are being proposed based on stack test data and/or ESP/scrubber data that was unavailable at the time of the original Flexible Permit application submittal.” (Application at 5-1). This statement is untrue, because stack test data was available at the time of the original Flex Permit application, showing that the power plant can emit at levels well below those incorporated in its Flex Permit, and that “front-half” (or filterable) PM is approximately half of “total” (filterable plus condensable) PM.⁵

J. LCRA’s Compliance History Necessitates a More Careful Review Before the Draft Permit Should be Issued

We have described above, and in previous letters (attached), LCRA’s misleading 2002 Application, which inflated actual capacity and emission rates to avoid PSD review during the life of the Flexible Permit. LCRA used inflated PM emission rates and heat input rates to obtain exceedingly high PM caps. LCRA’s internal 2002 documents demonstrate that LCRA knew that these calculations should also be used for compliance purposes and to determine actual emissions absent a stack test or continuous monitors. However, as soon as it obtained the Flex Permit in 2002, LCRA immediately relied on lower stack test data that it had called “unreliable” in the 2002 Flex Permit Application, both for compliance and for Emission Inventory purposes. Thus, LCRA reported less PM emissions than it should have, and this is not only a reporting violation but also resulted in substantial underpayment of fees. The attached compact disc contains summary data and calculations showing examples of LCRA’s PM emissions and fee underpayment.

III. Conclusion

For the foregoing reasons, we believe the Application and Draft Permit do not live up to the laws and regulations designed to protect the public health and environment in communities around, and downwind of, the Fayette power plant. We have provided these comments and attachments for your consideration, and we look forward to your response to comments. In the

⁵ Stack test reports from 1979 to September 2002 present actual PM “front-half” emission levels of 0.01 lb/mmBtu (see, e.g., Unit 1, 1979 stack test); 0.02 (Unit 1 “front-half,” September 2002 stack test); 0.04 lb/mmBtu (Unit 1 “total” PM, September 2002 stack test); 0.02 (Unit 2, 1981 stack test); 0.01 lb/mmBtu (Unit 3, Aug. 1988 stack test).

event that you disagree with our comments and do not make the requested changes to the Draft Permit, we respectfully request a contested case hearing. While you are considering our comments, if you have any questions, please contact me at the phone number or email address below.

Sincerely,



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w/ Attachments, including:

- PM Emissions and Fee Underpayment Analysis (compact disc)
- EPA May 20, 2011 letter
- EPA Dec. 6, 2010 letter
- Environmental Integrity Project letters to TCEQ (1/13/2011, 1/12/2011, 5/20/2011) and attachments
- Statements by EPA and State of Texas regarding Flex Permits and compliance with legacy permits
- Excerpts from LCRA permits and Applications
- Excerpts from LCRA internal communications and documents regarding Flex Permit Application and compliance with NSR

**Addendum to comments submitted by Environmental Integrity Project on behalf of Sierra Club and
Texas Campaign for the Environment**

The Draft Permit proposes an emission limit for fine particles that is based on multiplying 0.04 lb/mmbtu x the “maximum heat input” of Units 1 and 2, and 0.02 lbs/mmbtu x the maximum heat input for unit 3. The mass limits are 274 pounds per hour for Units 1, 276 pounds per hour for Unit 2, and 124 pounds per hour for unit 3 (rounded).

There is no basis for these limits, and no explanation provided in either the application or the draft permit. They do not reflect emission limits that could be achieved using best available technology, and neither LCRA nor the state have tried to make that argument.

Nor do they reflect current emissions. LCRA is apparently reporting emissions based on stack tests conducted in 2010 and 2011. The proposed permit limits are two and a half times higher than the highest hourly emissions reported by LCRA in 2011 for Units 1 and 2, and about 50% higher than the highest hourly emissions reported for Unit 3. LCRA has stated in an affidavit filed with the federal district court that stack tests are the best measure of actual emissions. If this permit is supposed to reflect “actual emissions,” the proposed limits should be based on the most recent stack tests.

If LCRA can achieve its proposed emissions rate – for example, 0.04 lbs per mmbtu of heat input for Unit 1 – that emissions rate ought to be reflected in its permit. That matters because TCEQ has proposed hourly mass limits that assume LCRA is operating at its maximum heat input every hour of the year. That is physically impossible, and is simply a fiction used to inflate the permit limit for LCRA well beyond what it is capable of achieving. For example, the average hourly heat input for LCRA Unit 1 in 2010 was 5,468 pounds per hour, with many hours recording much lower heat input. With an emission limit of 0.04 lb/mmbtu, Unit 1 could not release more than 219 pounds of particulate matter to the air during an “average” hour of operation, or less than 1000 tons per year assuming round the clock operation. Instead, TCEQ has proposed allowing LCRA to release 274 pounds an hour, regardless of heat input, or more than 1200 tons per year. Why?

LCRA has never provided the state or the public with accurate or consistent reports of the amount of particulate matter it is actually releasing to the air. For example, LCRA released 2573 tons of particulate matter with a diameter less than ten microns in 2010, according to records of hourly emissions from the plant obtained by the Environmental Integrity Project. But LCRA reported only 1229 tons to the state’s emissions inventory of the same pollutant, or less than half the amount it recorded. The same pattern can be seen in each of the last five years (See attached Compact Disk). The state’s rules are clear – all emissions from all units and all activity throughout the plant, whether they result from normal operation or upsets, must be included in the emission inventory. Why hasn’t LCRA done that, and why does the plant produce so many different estimates of actual emissions? TCEQ should reconcile this conflicting emissions data before issuing a final de-flex permit to LCRA.

The proposed de-flex permit doesn't include any emission estimates for maintenance, startup, and shutdown. In a separate permit application, LCRA has asked for permission to release over 2,000 pounds an hour from each of Units 1 and 2 for up to 600 hours a year during startup, shutdown, and maintenance activities, and more than 2,700 pounds an hour from Unit 3. TCEQ has authorized other plants in Texas to release this much.

- It's clear that LCRA isn't reporting these emissions today. For example, LCRA reported releasing just 19 pounds of particulate matter from Unit 3 between 3 and 4 pm during a startup on February 8, 2011, when the Unit also reported very high opacity. Based on its permit application, the unit was much more likely to have released 2,750 pounds, or even more. (EXHIBIT B).
- By not including the emission limits that LCRA is seeking for MSS events in the proposed de-flex permit, TCEQ is misleading the public and hiding the full extent of the emission increases the facility is seeking.
- TCEQ cannot authorize the higher MSS emission limits that LCRA wants without first determining that the plant is using the best available technologies to prevent these emission spikes, which occur because the plant is burning coal during startup and shutdown at times when the plant's electrostatic precipitator is not working. EPA's final mercury standard makes clear that best practices require the use of clean fuels – which do not include coal – during startup or shutdown to minimize particulate matter emissions, and these need to be reflected in LCRA's de-flex permit.

The draft deflex permit assumes there is no difference in the size of particles released from the plant, i.e., that the total amount of particulate matter emitted from the boiler stacks and the amount of fine particles (smaller than 2.5 microns) are one and the same. There is no basis for that distinction, as both TCEQ and LCRA should know. In fact, LCRA has long distinguished between particle size in its annual emission inventory report to TCEQ, in which it provides separate emission estimates for PM-10 and PM 2.5. Federal rules have not allowed the use of "total" particulate matter as a surrogate for PM 2.5 for a long time, and no longer allow PM-10 to stand in for PM 2.5. The permit should be amended to set a separate limit for PM 2.5, which should be significantly lower than the limit for total particulates proposed in the draft de-flex permit. That limit can be determined through stack testing, or by using long available methods, such as AP-42 emission factors, to arrive at the appropriate standard.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS TX 75202-2733

MAY 20 2011

Office of the Chief Clerk (MC-105)
Texas Commission on
Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

NSR
76973

OPA
MAY 25 2011
BY *DL*

2011 MAY 25 AM 10:06
CHIEF CLERKS OFFICE
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

RE: Lower Colorado River Authority (LCRA) Sam Seymour Station Fayette Power Plant, Fayette County, Texas - Prevention of Significant Deterioration (PSD) Permit No. PSDTX486M3 and Flexible Permit 51770 – Review of January 31, 2011, Permit Amendment Application

To Whom It May Concern:

We have reviewed the permit application to transition the LCRA Fayette Power Plant from a Subchapter G Flexible Permit No. 51770 to a Subchapter B permit. The permit application is dated January 31, 2011, and was received in our office on February 15, 2011. It was evaluated to ensure consistency with the Federal Clean Air Act (CAA) requirements and also to ensure a transparent lookback record. EPA has consistently recommended an approach to transition from a Subchapter G permit to a Subchapter B permit as laid out in an *Agreed Process for Transitioning Subchapter G Flexible Permits to State Implementation Plan (SIP) Approved Permits*. See http://www.epa.gov/region6/6xa/pdf/10-21-10_epa_letter_to_fha_with_all_transition_attachments.pdf.

The application submitted does not follow the recommended four step process referred to in the previous paragraph. It is important that all historical permit transactions are evaluated. We note that the first step of the process was not conducted by LCRA and instead they chose to submit a Subchapter B permit application without amending the Title V Permit through a minor permit revision to incorporate a term/condition assuring compliance with all federal applicable requirements during the transition process.

In addition, the application does not adequately justify whether the individually assigned limitations that were requested are appropriate. Specifically, Tables 7-1, 7-2, and Sections 8 and 9 of the application are inadequate in that they must contain information demonstrating whether the emission limits requested by LCRA are the appropriate limits based upon an analysis of historical permit authorizations which would include determining whether past authorizations should have undergone New Source Review (NSR) review. The application must also include a review and summary of all federal requirements under the CAA such as New Source Performance Standards (NSPS), Maximum Achievable Control Technology (MACT) Standards and SIP emission limits as they apply to each individual unit covered under the flexible permit.

In addition, the analysis must summarize all permit by rules (PBRs) that apply to, or authorize emissions from, emission units under the flexible permit cap. Title V Permit No. O21 issued September 21, 2009, incorporates by reference 11 PBRs. For each emission unit under the flexible permit cap that also has emissions authorized by a PBR, a review should be conducted to determine the total emission limit for the unit, considering all PBRs relevant to the unit. Specifically, did activities authorized by any the PBRs affect emission units under the flexible permit cap? If not, a statement should be made for the record that no emission units were affected.

We are also in receipt of the final Plantwide Applicability Limit (PAL) Separation and Permit Alteration dated April 14, 2011, which affects Permit Nos. 51770, PSDTX486M3, and PAL2. It is intricately linked to this amendment application. A comment letter is currently being prepared regarding that particular permit action and will be sent under separate cover.

We look forward to working with the TCEQ to resolve the issues identified in our comments and to ensure that the permit, when it is proposed, is consistent with the requirements of the Texas PSD State Implementation Plan (SIP). This letter is not a final position by the U.S. Environmental Protection Agency (EPA) concerning the disposition of the application and the subsequent draft permit. This concludes our review of the permit application as received. If you have any questions, please contact Stephanie Kordzi of my staff at (214) 665-7520.

Sincerely yours,



Jeff Robinson
Chief
Air Permits Section

cc: Mr. Steve Hagle
Texas Commission on Environmental Quality (MC-163)
Mr. Erik Hendrickson
Texas Commission on Environmental Quality (MC-163)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

December 6, 2010

Thomas G. Mason
General Manager and Chief Executive Officer
LCRA
P.O. Box 220
Austin, Texas 78767

Dear Mr. Mason:

My staff and I appreciated the opportunity to speak with LCRA and Austin Energy representatives on October 25, 2010, regarding LCRA's flexible and PAL air permit for the Fayette Power Plant (FPP). Thank you also for your letter to me dated November 18, 2010. We agree that the dialogue at the meeting was productive and believe that it was a positive step forward. We also appreciate the information presented by LCRA as it appears to show that emissions reductions are taking place.

In the Environmental Protection Agency's (EPA's) September 20, 2010 Opportunity to Confer letter, we outlined three acceptable options moving forward: EPA's Audit Program; direct negotiations with EPA on a streamlined enforcement path; and a flexible permit transition process consistent with the general elements of the four-step process that we jointly discussed with the Texas Commission on Environmental Quality (TCEQ) and stakeholders on September 16, 2010, or the Flint Hills Resources four-step process dated October 21, 2010. Each of these paths involves an enforceable commitment as well as an appropriate "look back" in order to arrive at federally enforceable unit-specific emission limits. As you are aware, completion of the Audit Program or a streamlined enforcement process also offers flexible permit holders a potentially significant release of liability. And as my staff discussed with Patti Hershey via telephone the week of October 25, given LCRA's potential New Source Review (NSR) exposure under the national enforcement initiative for NSR and coal-fired utilities, we encourage LCRA to reconsider moving forward with either the audit or a negotiated enforcement settlement.

In your November 18 letter, LCRA stated its intention to use a State Implementation Plan (SIP)-approved permit amendment process to convert FPP's flexible permit to a federally-approved permit (under 30 TAC Chapter 116, Subchapter B). The first step in your conversion process appears to be the submission of a permit amendment to TCEQ, pursuant to the recently adopted revisions to the TCEQ's public notice rules. While we appreciate your commitment to transition out of a flexible permit

through an amendment process with public notice, we have some concerns regarding elements of your proposed process.

First, we re-emphasize the importance of using a federally enforceable mechanism to memorialize your commitment and schedule for transitioning your flexible permit to a SIP-approved permit. We reiterate that there are several available mechanisms, such as a minor Clean Air Act (CAA) Title V permit modification (step one of the four-step transition process); a statement in the company's annual CAA Title V certification of compliance; or an Administrative Order on consent. We are open to discussing other enforceable mechanisms as well. Companies that do not make an enforceable commitment to obtain SIP-approved permits run the risk that, during the 6-12 month delay while the new Subchapter B permit application is being developed, EPA will decide (or be petitioned) to use its CAA Title V authorities to object to or reopen their permits on the basis that a facility is operating under a non-SIP-compliant flexible permit.

Second, you state in your November 18, 2010 letter that LCRA's permit amendment process will be relatively straightforward, and may not require the rigor of analysis described in Step 2 of the four-step transition process. We are willing to discuss streamlining steps that are appropriate to your circumstances. For instance, EPA understands that establishing unit-specific limits for decommissioned units is not necessary, and that recently constructed equipment already with unit-specific limits may not have a long or involved permitting or operational history, and thus the limits can be identified more quickly. However, it is EPA's position that an essential component of the permit application is a thorough examination of the facility's permitting and operational history from the last SIP-approved permit to the new proposed permit revision. This is critical in order to ensure that future permits contain all SIP and federally applicable requirements, and that pre-flexible permit, SIP-approved permit conditions are either brought forward or their omission is justified. We are open to discussing an appropriate Step 2 analysis with you.

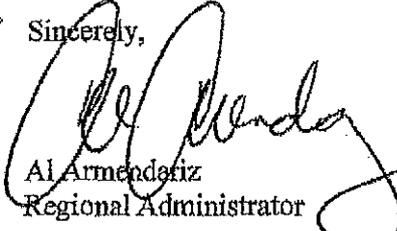
Third, we note that FPP's flexible permit is distinctive in that it incorporates a plantwide applicability limit (PAL) component. While the Opportunity to Confer letter did not specifically discuss the PAL, this is an issue of concern. You correctly note that EPA lent support in 2002 to the idea of piloting a PAL; however, the Agency has since issued federal PAL rules, and those rules have not yet been adopted by the State and included in the SIP. The PAL permit, like the flexible permit, is not a SIP-approved permit, and that situation needs to be addressed. Of course, you may wish to maintain the PAL as a State-only requirement in addition to SIP-approved unit-specific emissions limits required by federal law and, as we discussed on October 25, you may wish to consider including in your CAA Title V permit some alternative operating scenarios, which can provide LCRA with additional operational flexibility.

Finally, we would like to clarify that Region 6, through its September 20, 2010 letter, has, in fact, provided LCRA with notice of specific violations – they are set out in the attachment to that letter. The Agency believes that LCRA can return to compliance by following any of the three paths described in this letter. The opportunity to confer

with EPA regarding those violations will remain open until December 22, 2010. Please do not hesitate to contact Patricia Welton if you would like to schedule another meeting.

Again, thank you for meeting with Region 6 and your willingness to obtain a SIP-approved authorization for the FPP. I am confident we can work together to resolve the flexible permit concerns as they relate to the Fayette Power Plant.

Sincerely,



Al Armendariz
Regional Administrator

cc: Joe Bentley, LCRA
Henry Eby, LCRA
Patti Hershey, LCRA
Pam Giblin, Baker Botts
Derek McDonald, Baker Botts
Matt Russell, City of Austin/Austin Energy



1303 San Antonio Street, Suite 200
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January 13, 2011

La Donna Castañuela
Office of the Chief Clerk, MC-105
Texas Commission on Environmental Quality
12100 Park 35 Circle
Austin, TX 78753

via facsimile

Re: January 5, 2011 Application of the Lower Colorado River Authority for an Amendment to Flexible Permit Number 51770 and PSD-TX-486M3, Fayette Power Project (Sam Seymour power plant), La Grange, Texas

Dear Ms. Castañuela:

The Environmental Integrity Project (“EIP”) and Texas Campaign for the Environment (“TCE”) **request to be placed on the permanent mailing list** for the above-referenced permit.

In addition, **we request a contested case hearing** for LCRA’s application seeking to authorize planned maintenance, startup, and shutdown emissions at the Fayette Power Project. Our preliminary concerns regarding this application are detailed below.

Requestors

The Environmental Integrity Project (EIP) (<http://www.environmentalintegrity.org/>) is a nonprofit organization dedicated to the enforcement of anti-pollution laws, including the Clean Air Act. EIP has offices at 1303 San Antonio Street, Suite 200, Austin, Texas, 78701, 512-637-9479, ilevin@environmentalintegrity.org. Members of EIP’s staff live, work, and recreate downwind of the Fayette Power Project and are affected by air emissions from this coal-fired power plant.

Texas Campaign for the Environment (TCE) (<http://www.texasenvironment.org/>) is a nonprofit membership organization dedicated to informing and mobilizing Texans to protect their health, their communities and the environment. TCE has offices located at 3303 Lee Parkway #402, Dallas, TX 75219; 611 S. Congress #200-B, Austin, TX 78704; and 3100 Richmond #290, Houston, TX 77098. TCE members and staff live, work, and recreate in the vicinity and downwind of FPP.

Please address all correspondence regarding this letter to Ilan Levin, Senior Attorney, Environmental Integrity Project, 1303 San Antonio Street, Suite 200, Austin, Texas, 78701.

Initial Concerns

LCRA's application requests increases in hourly allowable emission rates for particulate matter and lead. Particulate matter is a mixture of small particles, including organic materials, metals, and ash, which can cause health and environmental problems. According to the U.S. EPA, once inhaled, PM can affect the lungs and pulmonary and respiratory systems, causing serious health effects such as "disease, cancer, and premature mortality." 52 Fed. Reg. 24,634, 24,663 (July 1, 1987). Numerous studies have linked PM exposure to increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; decreased lung function; aggravated asthma; development of chronic bronchitis; irregular heartbeat; heart attacks; and premature death in people with heart or lung disease. Additionally, PM can be carried long distances to settle over land or water, which may result in acidic lakes and streams, nutrient imbalances in aquatic systems, and damage to forests and farmlands.

According to the U.S. EPA,¹ lead is persistent in the environment and accumulates in soils and sediments through deposition from air sources. Ecosystems near point sources of lead demonstrate a wide range of adverse effects including losses in biodiversity, changes in community composition, decreased growth and reproductive rates in plants and animals, and neurological effects in vertebrates. Lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems and the cardiovascular system. Lead exposure also affects the oxygen carrying capacity of the blood.

The application does not contain any demonstration that the FPP will meet best available control technology for control of PM and lead emissions. The application states, "LCRA is proposing to minimize the duration of planned boiler startup and shutdown as described in section IX.C.1." Section IX.C.1. is not a BACT analysis. Among the basic preliminary questions that need to be answered as part of a BACT analysis are the following:

- Please explain why the Unit 3 scrubber cannot be brought online before startup.
- Please explain why the ESPs are unable to be brought online until after coal and fuel-oil are fired in the boilers.
- Please explain why natural gas is not BACT for a startup fuel. Natural gas lines are abundant in the La Grange area.
- Please explain the 30% PM control efficiency for Units 1 and 2 used in the calculation on startup for Units 1 and 2. AP-42 Table 1.1-5 states that 30% control of condensable PM emissions is a reasonable assumption for a PC boiler with FGD. Does a wet scrubber remove any filterable particulate matter during startup?

The application also fails to demonstrate that the requested increase in hourly emissions will not cause or contribute to an exceedance of any applicable ambient air standard, including NAAQS for PM and lead.

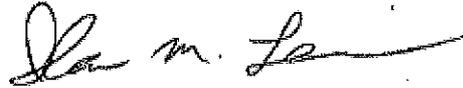
¹ <http://epa.gov/air/lead/health.html>

In addition, the application seeks to increase authorized emissions of hazardous air pollutants ("HAP"), and is subject to the federal Clean Air Act Section 112(g) requirement for maximum achievable control technology ("MACT").

Lastly, we request public notice, and the opportunities to file public comments and have a contested case hearing on LCRA's application.

Thank you for your attention to this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Ilan M. Levin". The signature is fluid and cursive, with a long horizontal stroke at the end.

Ilan Levin
Environmental Integrity Project
1303 San Antonio Street, Suite 200
Austin, TX 78701
(512) 637-9479
ilevin@environmentalintegrity.org



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January 12, 2011

Mark R. Vickery, Executive Director
Office of the Executive Director MC-109
Texas Commission on Environmental Quality
12100 Park 35 Circle
Austin, Texas 78753

Re: Underpayment of Emissions fees for the Lower Colorado River Authority's Fayette Power Project

Dear Executive Director Vickery:

We are writing to inform you that the Lower Colorado River Authority ("LCRA") has underreported and underpaid fees for particulate matter ("PM") emissions from its Fayette Power Project power plant since at least 2003. LCRA's underpayment of emissions fees is a violation of TCEQ rules as well as the General Conditions of its Title V federal operating permit.¹ During the period from 2003-2010, LCRA has failed to report and pay for approximately 9,200 tons of PM emissions from its main boilers. The amount of unpaid fees for these emissions is approximately \$288,670.²

The Commission is required by federal law to obtain fees from industrial emitters sufficient to cover all reasonable costs required to develop and administer its Title V permitting program, including permit review, enforcement of permit requirements, emissions and ambient air monitoring, preparation of regulations and guidance, air quality modeling, and maintenance of emissions inventories.³ When a source fails to properly pay emissions fees, the TCEQ should undertake an enforcement action to recover unpaid fees and impose additional penalties where appropriate.⁴

Particulate matter generated by LCRA's main boilers is released into the air in filterable and condensable forms. *Filterable* PM consists of particles emitted by a source that exit the smokestack as a solid or liquid. *Condensable* PM refers to material that is vapor phase at stack conditions, but which reacts in ambient air to form solid or liquid PM after being discharged

¹ 30 TEX. ADMIN. CODE § 101.27; 30 TEX. ADMIN. CODE § 122.143(10).

² (Attachment 1). This spreadsheet is based on information in documents maintained and submitted to the TCEQ by LCRA. It calculates the difference between total PM emissions as reflected in LCRA's continuous compliance documents with reported total suspended particulate emissions numbers that LCRA used to calculate the fee basis for PM emissions from its main boilers. LCRA's continuous compliance document is (Attachment 2) to this letter and the LCRA fee and Emissions Inventory documents submitted to TCEQ are included as (Attachment 3).

³ 42 U.S.C. § 7661a(b)(3)(B).

⁴ For example, if an emitter's failure to pay emissions fees is knowing or intentional 30 TEX. ADMIN. CODE § 101.27(g) requires the Commission to impose criminal sanctions pursuant to TEXAS WATER CODE § 7.178. See also, TEXAS WATER CODE § 5.706 (Penalties and Interest on Delinquent Fees).

from the stack. The two forms of PM together are referred to as *total* PM. LCRA is required to pay fees based on the amount of total PM emitted from the Fayette Power Project.⁵

Between 2003 and 2010, LCRA relied on the same stack test data for its main boilers to calculate its emissions fees and to demonstrate compliance with the Fayette plant's PM permit limits.⁶ Both the payment of fees and the demonstrations of compliance are required to be made for actual emissions of the same pollutant, *total* PM.⁷ Despite the fact that LCRA relied on the *same* tests to derive emissions factors for purposes of calculating actual emissions of the *same* pollutant from its main boilers, the emission factors LCRA used for its emissions fees were *different* (and significantly lower) than the emission factors used to demonstrate compliance with its permit limits.

To demonstrate compliance with its permit limits for Units 1 and 3, LCRA calculated actual total PM emissions by multiplying the measured heat input for each boiler by an emission factor for total PM emissions based on the rate of emissions of total PM measured from each boiler during stack tests.⁸ The process was slightly different for Unit 2, because the stack test LCRA relied on to establish the total PM emission factor for that Unit only measured filterable PM emissions (and not total PM). Accordingly, based on stack tests on Units 1 and 3 which demonstrated that total PM emissions from those Units was approximately 50% filterable and 50% condensable, LCRA established an emission factor for total PM emissions from Unit 2 of twice the filterable PM emission rate measured during the 1985 stack test for that Unit.⁹

To calculate its actual total PM emissions for fee payment from 2003 to 2010, LCRA relied on stack test emission factors to determine actual emissions of *filterable* PM.¹⁰ To derive these emission factors, LCRA relied on the same stack tests it used for its compliance demonstrations. However, LCRA inexplicably disregarded stack test results for condensable PM and used much lower emission factors to calculate condensable PM emissions.¹¹ Thus, LCRA is reporting much lower actual total PM emissions for Emissions Inventory and Fee purposes than for compliance purposes.¹²

⁵ TCEQ Permit No. 51770 establishes total PM limits for the Fayette Power Project. Emissions fees must be paid for each ton of "regulated pollutants" (up to a maximum of 4,000 tons per pollutant) emitted from a facility. 30 TEX. ADMIN. CODE § 101.27(f)(1). Because total PM is subject to requirements under commission rules, regulations, permits, and orders of the commission, it is a "regulated pollutant" subject to TCEQ's emissions fees requirements. 30 TEX. ADMIN. CODE § 101.27(f)(3).

⁶ The Report Summaries for these stack tests are included as: (Attachment 4) Report Summary for 1985 test of Unit 2, (Attachment 5) Report Summary for 1988 stack test of Unit 3, and (Attachment 6) Report Summary for 2002 stack test of Unit 1.

⁷ See note 5 above.

⁸ (Attachment 7) at 7. This Attachment is a sworn affidavit of Joe Bentley, LCRA's Environmental Advisor for Wholesale Power Services, discussing how PM emissions from LCRA's main boilers are measured.

⁹ *Id.* at 10.

¹⁰ (Attachment 8) at 2. This attachment is a copy of emissions calculations submitted by LCRA as part of its 2006 EI package. The use of these emission factors for filterable PM for other years is documented in (Attachment 3). (Attachment 9), an email from LCRA to TCEQ concerning this submission confirms that PM, as referenced in (Attachment 8) means *filterable* PM.

¹¹ (Attachment 9).

¹² See (Attachment 1).

Environmental Integrity Project submitted a Public Information Act request to the Commission for all documents related to LCRA's payment of emissions fees and Emissions Inventory reporting from 2002 to the present. None of the documents released by the Commission in response to this request provide any explanation for this discrepancy. Therefore, we presume that LCRA has not provided any explanation for its use of different emission factors to demonstrate compliance with permit limits than it uses to calculate its fee payments. In the absence of information indicating that LCRA's stack test results were inaccurate, TCEQ's Emissions Inventory Guidelines indicate that stack tests emission factors should be used instead of generic emissions factors like those used by LCRA to calculate its fees for the condensable fraction of PM emissions from the Fayette boilers.¹³ LCRA was aware of the stack test results for condensable PM emissions and improperly disregarded that information in favor of less reliable emission factors that resulted in a lower fee basis.

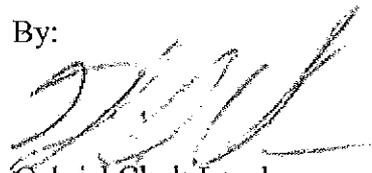
LCRA may not explain this discrepancy by claiming that stack test results for condensable PM emissions are unreliable. If actual emissions of a regulated pollutant cannot be reliably measured, emissions fees must be based on allowable emissions.¹⁴ As TCEQ's Emissions Inventory Guidelines indicates, stack test emission factors are preferable to the generic emissions factors used by LCRA to calculate its emissions fees for the condensable fraction of its PM emissions.¹⁵ If LCRA became aware that the emissions factors it used to demonstrate compliance with its permit limits were inaccurate, and that alternative emission factors should be used, it should have so informed the TCEQ.

In light of LCRA's repeated failure to pay for all PM emissions from the Fayette power plant, we request that the Commission initiate an enforcement action to recover fees due to the agency. Additionally, we ask that the Commission review its Emissions Inventory and Emissions Fees procedures to ensure that a full and accurate accounting of total PM emissions consistent with Texas and federal law is made by all entities subject to these requirements.

Respectfully Submitted,

ENVIRONMENTAL INTEGRITY PROJECT

By:



Gabriel Clark-Leach
1303 San Antonio Street, Suite 200
Austin, Texas 78701
Phone: 512-637-9477
Fax: 512-584-8019
gclark-leach@environmentalintegrity.org

¹³ RG-360, 2010 Emissions Inventory Guidelines at 57 and 59.

¹⁴ 30 TEX. ADMIN. CODE § 101.27(f).

¹⁵ RG-360, 2010 Emissions Inventory Guidelines at 57 and 59.

Attachments

cc: John Blevins, Director of Compliance Assurance and Enforcement Division
Environmental Protection Agency
Fountain Place 12th Floor, Suite 1200
1445 Ross Avenue
Dallas, Texas 75202-2733

Richard A. Hyde, Deputy Director
Office of Compliance and Enforcement, MC-172
Texas Commission on Environmental Quality
12100 Park 35 Circle
Austin, Texas 78753

Mary Facundo
Emissions Assessment Section, MC-164
Texas Commission on Environmental Quality
12100 Park 35 Circle
Austin, Texas 78753

Attachments

Attachment 1: Spreadsheet indicating amount of underreported PM emissions and underpaid emissions fees for Fayette power plant main boilers, 2003-2010.

Attachment 2: LCRA PM compliance record for Fayette main boilers.

Attachment 3: CD containing LCRA's Emission Inventory and Emissions Fees documentation, 2001-2010.

Attachment 4: Stack test summary, Fayette Unit 2, 1985.

Attachment 5: Stack test summary, Fayette Unit 3, 1988.

Attachment 6: Stack test summary, Fayette Unit 1, 2002.

Attachment 7: Sworn Affidavit of Joe Bentley.

Attachment 8: 2006 Emissions Inventory emissions calculations.

Attachment 9: Email from Joe Wegenhoft to Matoaka Johnson, November 26, 2007.

Attachment 1

Spreadsheet indicating amount of underreported PM emissions and underpaid emissions fees for Fayette power plant main boilers, 2003-2010

Year	Unit 1			Unit 2			Unit 3		
	EI TSP Reported PM10	Compliance Records Total	Difference	EI TSP Reported	Compliance Records Total PM10	Difference	EI TSP Reported	Compliance Records Total PM10	Difference
2003	640.284	955	314.716	923.452	1580.1	656.648	199.755	345	145.245
2004	559.48	856.7	297.22	815.03	1415	599.97	220.96	370.2	149.24
2005	517.4098	891.8	374.39	845	1547.6	702.6	176.5334	301.8	125.266
2006	453.286	796.3	343.014	666.481	1305.9	639.419	191.805	339.7	147.895
2007	523.555	976	452.445	871.184	1691.08	819.896	184.741	348.97	164.229
2008	518.031	918.5	400.469	799.766	1518.3	718.534	202.957	363.8	160.843
2009	537.362	934	396.638	833.374	1528.6	695.226	173.821	337.4	163.579
2010	555.303	757.7	202.397	789.245	1200	410.755	277.172	395.9	118.728
Total:			2781.289			5243.048			1175.025

Year	Unreported PM	Rate Per Ton	Amount Underpaid
2003	1116.609	28.63	31968.51
2004	1046.43	29.18	30534.82
2005	1202.256	29.77	35791.16
2006	1130.328	30.9	34927.14
2007	1436.57	32.39	46530.5
2008	1279.846	32.73	41889.36
2009	1255.443	33.74	42358.65
2010	731.88	33.71	24671.67
Total	9199.362 tons		288671.81

Attachment 2

LCRA PM compliance record for Fayette main boilers

FPP PM10 Emissions

Month	Heat Input (mmBtu)			PM10 (tons)			PM10 (lb/mmBtu)			Stack 12-month PM10 (tons)			Engines (tons)	Temp. Engines (tons)	Minor PM10 Sources (tons)	Welding Rods & Sandblasting (tons)	Total (tons)	PM10 Permit Limit (tons)
	Unit 1	Unit 2	Unit 3	Unit 1	Unit 2	Unit 3	Unit 1	Unit 2	Unit 3	Unit 1	Unit 2	Unit 3						
Oct-02	546,539	4,009,922	2,932,353	11.48	140.35	29.32	0.042	0.070	0.02	855.3	1,601.8	362.0	2,819.1	0.07	95.5	2.49	2,915.4	5,090.52
Nov-02	496,840	4,118,551	3,626,726	10.43	144.15	36.27	0.042	0.070	0.02	914.2	1,587.3	362.1	2,863.7	0.07	95.5	2.33	2,960.1	5,090.52
Dec-02	3,746,810	3,565,279	3,462,124	78.68	124.78	34.62	0.042	0.070	0.02	976.9	1,578.5	353.3	2,908.7	0.07	95.5	0.89	3,005.1	5,090.52
Jan-03	4,387,644	4,160,037	3,735,585	91.51	145.60	37.36	0.042	0.070	0.02	955.0	1,580.1	345.0	2,880.1	0.06	95.5	0.50	2,976.6	5,090.52
Feb-03	4,073,639	3,362,319	3,335,295	85.55	117.68	33.35	0.042	0.070	0.02	944.2	1,568.2	337.6	2,839.1	0.06	95.5	0.31	2,976.4	5,090.52
Mar-03	3,835,406	3,259,521	3,441,034	80.54	114.08	34.41	0.042	0.070	0.02	933.3	1,560.2	333.4	2,825.9	0.06	95.5	0.32	2,923.2	5,090.52
Apr-03	4,006,914	3,762,875	1,987,576	84.15	131.70	19.88	0.042	0.070	0.02	928.2	1,536.6	338.9	2,803.7	0.06	95.5	0.37	2,877.5	5,090.52
May-03	4,188,877	3,984,435	2,966,896	87.97	139.46	23.67	0.042	0.070	0.02	925.7	1,338.3	346.9	2,610.9	0.08	95.5	0.34	2,701.0	5,090.52
Jun-03	3,998,967	3,625,294	2,849,638	83.98	126.89	28.50	0.042	0.070	0.02	935.2	1,350.2	349.6	2,653.0	0.05	95.5	0.40	2,730.6	5,090.52
Jul-03	3,462,373	4,231,396	2,941,629	72.71	148.10	29.42	0.042	0.070	0.02	930.3	1,367.7	353.6	2,653.9	0.05	95.5	0.39	2,751.6	5,090.52
Aug-03	4,151,968	4,077,233	2,893,571	87.19	142.70	28.94	0.042	0.070	0.02	932.6	1,367.7	353.6	2,653.9	0.05	95.5	0.52	2,734.3	5,090.52
Sep-03	3,861,998	3,607,826	2,650,164	81.10	126.27	26.50	0.042	0.070	0.02	831.9	1,390.2	363.5	2,855.6	0.06	95.5	2.01	2,683.4	5,090.52
Oct-03	3,354,086	3,597,624	2,929,024	70.44	125.92	29.39	0.042	0.070	0.02	856.7	1,415.0	370.2	2,841.9	0.06	95.5	2.02	2,737.4	5,090.52
Nov-03	3,481,264	3,865,180	2,749,640	73.11	135.28	27.50	0.042	0.070	0.02	845.9	1,424.0	369.9	2,859.8	0.06	95.5	2.77	2,806.9	5,090.52
Dec-03	2,704,426	3,612,726	2,626,036	56.79	126.45	26.26	0.042	0.070	0.02	824.0	1,688.4	315.2	2,777.5	0.06	95.5	3.05	2,873.5	5,090.52
Jan-04	3,843,312	3,248,128	3,002,424	80.71	113.68	30.02	0.042	0.070	0.02	821.9	1,615.9	318.5	2,756.2	0.06	95.5	3.03	2,852.1	5,090.52
Feb-04	3,553,888	3,704,788	2,908,104	74.63	129.67	29.08	0.042	0.070	0.02	825.3	1,603.0	316.8	2,745.3	0.07	95.5	2.97	2,846.9	5,090.52
Mar-04	3,748,838	3,574,494	3,197,202	78.73	121.51	31.97	0.042	0.070	0.02	824.7	1,648.5	373.4	2,687.5	0.06	95.5	2.02	2,780.2	5,090.52
Apr-04	3,850,704	2,751,930	2,782,932	80.86	9.66	27.83	0.042	0.070	0.02	845.9	1,424.0	369.9	2,859.8	0.06	95.5	2.77	2,806.9	5,090.52
May-04	4,061,591	3,807,329	3,310,575	85.29	133.26	33.11	0.042	0.070	0.02	837.9	1,532.0	341.1	2,711.0	0.07	95.5	2.02	2,737.4	5,090.52
Jun-04	4,006,951	3,850,464	2,710,526	84.15	134.77	27.11	0.042	0.070	0.02	824.0	1,688.4	315.2	2,777.5	0.06	95.5	3.05	2,873.5	5,090.52
Jul-04	3,821,702	4,572,366	3,205,153	80.26	160.20	32.05	0.042	0.070	0.02	821.9	1,615.9	318.5	2,756.2	0.06	95.5	3.03	2,852.1	5,090.52
Aug-04	4,122,017	4,577,247	3,295,286	86.56	160.20	32.95	0.042	0.070	0.02	825.3	1,603.0	316.8	2,745.3	0.07	95.5	3.12	2,841.2	5,090.52
Sep-04	3,750,815	3,070,430	3,037,580	78.77	107.47	30.38	0.042	0.070	0.02	824.7	1,648.5	373.4	2,687.5	0.06	95.5	3.30	2,880.0	5,090.52
Oct-04	3,062,179	4,416,384	3,252,964	72.31	154.57	32.53	0.042	0.070	0.02	880.6	1,620.6	310.0	2,811.3	0.06	95.5	1.85	2,896.9	5,090.52
Nov-04	3,088,667	4,227,023	3,016,581	72.86	147.95	30.17	0.042	0.070	0.02	891.8	1,579.6	307.0	2,804.0	0.06	95.5	1.68	2,896.9	5,090.52
Dec-04	3,882,755	4,321,681	3,302,090	81.54	151.26	33.02	0.042	0.070	0.02	872.9	1,599.4	310.5	2,725.4	0.06	95.5	1.64	2,836.8	5,090.52
Jan-05	4,031,719	4,204,911	3,318,991	84.67	147.17	33.19	0.042	0.070	0.02	872.9	1,599.4	310.5	2,725.4	0.06	95.5	1.65	2,779.0	5,090.52
Feb-05	2,850,703	3,005,431	2,581,486	59.86	105.19	25.61	0.042	0.070	0.02	821.9	1,615.9	318.5	2,756.2	0.06	95.5	2.97	2,846.9	5,090.52
Mar-05	3,369,573	3,443,037	3,142,291	70.76	120.51	31.4	0.042	0.070	0.02	825.3	1,603.0	316.8	2,745.3	0.07	95.5	3.12	2,841.2	5,090.52
Apr-05	3,189,366	3,316,501	1,927,724	66.98	116.08	19.93	0.042	0.070	0.02	824.7	1,648.5	373.4	2,687.5	0.06	95.5	2.02	2,780.2	5,090.52
May-05	3,655,022	2,691,619	2,845,177	76.76	94.21	28.45	0.042	0.070	0.02	824.0	1,688.4	315.2	2,777.5	0.06	95.5	3.05	2,873.5	5,090.52
Jun-05	4,312,284	4,321,912	3,504,300	90.56	151.27	35.04	0.042	0.070	0.02	821.9	1,615.9	318.5	2,756.2	0.06	95.5	3.03	2,852.1	5,090.52
Jul-05	3,882,593	4,393,943	3,181,225	81.53	153.79	31.81	0.042	0.070	0.02	825.3	1,603.0	316.8	2,745.3	0.07	95.5	2.97	2,846.9	5,090.52
Aug-05	4,232,027	4,387,947	3,156,034	88.37	153.58	31.56	0.042	0.070	0.02	824.7	1,648.5	373.4	2,687.5	0.06	95.5	3.30	2,880.0	5,090.52
Sep-05	3,715,522	4,212,797	2,991,333	78.03	147.45	29.51	0.042	0.070	0.02	880.6	1,620.6	310.0	2,811.3	0.06	95.5	1.85	2,896.9	5,090.52
Oct-05	3,724,718	3,775,689	2,619,643	78.22	132.18	26.20	0.042	0.070	0.02	917.4	1,579.6	307.0	2,804.0	0.06	95.5	1.68	2,896.9	5,090.52
Nov-05	2,840,727	3,053,624	2,716,590	59.66	106.88	27.17	0.042	0.070	0.02	891.8	1,579.6	307.0	2,804.0	0.06	95.5	1.64	2,836.8	5,090.52
Dec-05	2,660,614	3,409,015	2,778,247	55.87	119.32	27.78	0.042	0.070	0.02	872.9	1,599.4	310.5	2,725.4	0.06	95.5	1.65	2,779.0	5,090.52
Jan-06	3,131,437	3,248,974	2,780,123	65.76	113.71	27.80	0.042	0.070	0.02									

FPF PM10 Emissions

Month	Heat Input (mmBtu)			PM10 (tons)			PM2.5 (lb/mmBtu)			Stack-12-month PM10 (tons)	Engines (tons)	Temp. Engines (tons)	Minor PM10 Sources (tons)	Welding Rods & Sandblasting (tons)	Total (tons)	PM10 Permit Limit (tons)	
	Unit 1	Unit 2	Unit 3	Unit 1	Unit 2	Unit 3	Unit 1	Unit 2	Unit 3								
Feb-06	3,105,142	2,998,327	2,449,479	65.21	104.94	24.49	0.042	0.070	0.02	878.2	1,513.9	295.3	2,687.4	0.06	0.04	2,783.0	5,090.52
Mar-06	3,554,195	1,139,346	3,010,766	74.64	39.88	30.11	0.042	0.070	0.02	882.1	1,485.3	322.3	2,637.6	0.05	0.15	2,738.3	5,090.52
Apr-06	3,702,013	1,512,594	3,081,534	77.74	52.94	30.82	0.042	0.070	0.02	892.8	1,370.1	351.1	2,614.1	0.05	0.14	2,709.8	5,090.52
May-06	3,648,412	3,542,949	3,112,195	76.62	124.00	31.12	0.042	0.070	0.02	892.7	1,399.9	353.8	2,646.5	0.06	0.14	2,742.2	5,090.52
Jun-06	3,701,715	3,763,638	2,965,074	77.74	131.73	29.65	0.042	0.070	0.02	879.9	1,380.4	348.4	2,608.7	0.12	0.14	2,704.5	5,090.52
Jul-06	4,006,183	4,199,236	3,083,116	84.13	146.97	30.83	0.042	0.070	0.02	882.5	1,373.6	347.4	2,603.5	0.14	0.14	2,699.3	5,090.52
Aug-06	4,258,388	4,056,788	2,969,200	89.43	141.99	29.69	0.042	0.070	0.02	883.0	1,362.0	345.6	2,590.6	0.14	0.14	2,686.4	5,090.52
Sep-06	3,457,752	3,289,966	2,444,752	72.61	115.15	24.45	0.042	0.070	0.02	877.6	1,329.7	340.1	2,547.4	0.17	0.14	2,643.2	5,090.52
Oct-06	2,125,976	3,004,252	2,725,815	44.65	105.15	27.26	0.042	0.070	0.02	844.0	1,302.7	341.2	2,487.9	0.24	0.42	2,584.0	5,090.52
Nov-06	4,988,852	3,118,136	2,640,397	1.05	109.13	25.40	0.042	0.070	0.02	785.4	1,304.9	340.4	2,430.8	0.24	0.43	2,526.9	5,090.52
Dec-06	3,176,675	3,437,262	2,702,915	66.71	120.30	27.08	0.042	0.070	0.02	796.3	1,305.9	339.7	2,441.8	0.33	0.37	2,538.1	5,090.52
Jan-07	3,627,213	3,663,000	2,773,708	76.17	128.21	27.74	0.042	0.070	0.02	806.7	1,320.4	339.6	2,466.7	0.43	0.43	2,563.0	5,090.52
Feb-07	3,374,829	3,669,396	2,485,195	70.87	128.43	26.85	0.042	0.070	0.02	812.3	1,343.9	341.9	2,498.2	0.44	0.38	2,594.5	5,090.52
Mar-07	4,175,372	4,463,310	3,249,924	87.68	156.22	32.50	0.042	0.070	0.02	823.4	1,468.2	344.3	2,629.9	0.52	0.40	2,726.3	5,090.52
Apr-07	4,071,298	4,407,210	4,69,501	85.30	154.25	4.70	0.042	0.070	0.02	833.1	1,561.5	318.2	2,712.9	0.62	0.58	2,809.4	5,090.52
May-07	4,237,709	4,062,508	2,053,846	88.89	142.19	20.54	0.042	0.070	0.02	845.5	1,579.7	367.5	2,732.9	0.75	0.60	2,829.5	5,090.52
Jun-07	4,004,281	4,155,315	3,083,787	84.09	145.44	30.84	0.042	0.070	0.02	851.9	1,593.4	308.8	2,754.1	0.70	0.63	2,850.8	5,090.52
Jul-07	4,382,315	4,352,077	3,330,080	92.03	152.32	33.30	0.042	0.070	0.02	859.8	1,598.8	311.3	2,769.8	0.75	0.64	2,866.5	5,090.52
Aug-07	4,480,714	4,406,340	3,504,698	94.09	156.32	33.05	0.042	0.070	0.02	864.4	1,613.1	316.6	2,794.2	0.78	0.53	2,890.9	5,090.52
Sep-07	4,169,443	4,261,082	3,577,771	87.56	149.14	35.78	0.042	0.070	0.02	879.4	1,647.1	328.0	2,854.5	0.75	0.54	2,951.1	5,090.52
Oct-07	3,368,124	3,592,728	3,605,393	71.15	125.75	36.05	0.042	0.070	0.02	905.9	1,667.7	336.8	2,910.4	0.69	0.55	3,006.7	5,090.52
Nov-07	2,384,828	3,019,690	3,468,729	54.28	105.69	34.69	0.042	0.070	0.02	959.1	1,664.2	345.1	2,968.4	0.80	0.15	3,064.9	5,090.52
Dec-07	3,980,336	4,203,570	3,093,053	83.59	147.12	30.93	0.042	0.070	0.02	976.0	1,691.1	349.0	3,016.0	0.75	0.15	3,112.4	5,090.52
Jan-08	4,338,042	4,460,358	3,599,296	91.10	156.11	35.99	0.042	0.070	0.02	990.9	1,719.0	357.2	3,067.1	0.69	0.89	3,163.5	5,090.52
Feb-08	3,938,203	4,072,695	3,416,978	82.70	142.54	34.17	0.042	0.070	0.02	1,002.8	1,733.1	364.5	3,100.4	0.70	0.15	3,196.7	5,090.52
Mar-08	4,430,783	4,192,865	3,133,980	93.03	0.48	31.33	0.042	0.070	0.02	1,008.1	1,577.4	363.4	2,948.8	0.62	0.15	3,045.1	5,090.52
Apr-08	4,201,985	4,632,226	3,412,852	88.24	167.13	34.13	0.042	0.070	0.02	1,010.7	1,490.5	393.1	2,894.2	0.61	0.00	2,990.4	5,090.52
May-08	4,269,766	4,376,966	3,194,001	89.67	153.19	31.94	0.042	0.070	0.02	1,009.9	1,510.4	406.7	2,927.0	0.50	0.00	3,023.0	5,090.52
Jun-08	4,300,725	4,257,069	3,075,636	90.32	149.00	30.76	0.042	0.070	0.02	1,013.8	1,514.8	405.3	2,933.9	0.45	0.60	3,029.8	5,090.52
Jul-08	4,339,481	4,359,679	2,133,319	91.13	152.59	31.53	0.042	0.070	0.02	1,010.8	1,511.1	401.5	2,923.5	0.50	0.62	3,019.5	5,090.52
Aug-08	3,865,734	3,817,563	2,364,944	81.18	133.61	23.65	0.042	0.070	0.02	1,004.5	1,495.6	389.4	2,889.4	0.51	0.03	2,985.5	5,090.52
Sep-08	1,321,088	4,070,736	2,128,904	27.74	142.48	21.30	0.042	0.070	0.02	961.0	1,512.3	374.7	2,848.0	0.51	0.07	2,944.1	5,090.52
Oct-08	511,123	3,903,177	2,922,631	10.73	136.61	28.24	0.042	0.070	0.02	917.5	1,543.2	369.2	2,829.9	0.46	0.45	2,925.3	5,090.52
Nov-08	4,028,535	3,490,414	2,548,465	84.69	122.15	25.48	0.042	0.070	0.02	918.5	1,518.3	363.8	2,800.5	0.45	0.52	2,897.0	5,090.52
Dec-08	3,791,999	3,901,875	3,310,919	79.63	136.57	33.11	0.042	0.070	0.02	907.0	1,498.7	360.9	2,766.6	0.39	0.52	2,863.0	5,090.52
Jan-09	4,247,877	3,221,090	2,913,361	68.21	112.74	29.13	0.042	0.070	0.02	892.5	1,468.9	355.8	2,717.3	0.41	0.54	2,813.7	5,090.52
Feb-09	3,215,783	3,698,914	2,145,653	67.53	127.36	21.46	0.042	0.070	0.02	867.0	1,595.8	346.0	2,808.8	0.47	0.57	2,905.3	5,090.52
Mar-09	3,118,512	3,367,839	3,078,258	65.49	118.40	30.78	0.042	0.070	0.02	844.5	1,646.8	342.3	2,833.5	0.47	0.59	2,930.2	5,090.52
Apr-09	3,719,334	2,270,910	2,242,352	78.11	79.48	32.42	0.042	0.070	0.02	834.3	1,564.2	340.5	2,739.1	0.47	0.64	2,835.7	5,090.52

FFPP PM10 Emissions

Month	Heat Input (mmBtu)			PM10 (tons)			PM10 (lb/mmBtu)			Stack 12-month PM10 (tons)			Engines (tons)	Temp. Engines (tons)	Minor PM10 Sources (tons)	Welding Rods & Sandblasting (tons)	Total (tons)	PM10 Permit Limit (tons)
	Unit 1	Unit 2	Unit 3	Unit 1	Unit 2	Unit 3	Unit 1	Unit 2	Unit 3	Unit 1	Unit 2	Unit 3						
Jun-09	3,916,932	4,171,422	2,991,064	32.26	146.00	29.91	0.042	0.070	0.02	826.9	1,557.0	338.6	2,722.5	0.42	95.5	0.52	2,819.1	5,090.52
Jul-09	4,161,517	4,187,187	3,420,779	87.39	146.55	34.21	0.042	0.070	0.02	824.0	1,554.6	342.0	2,720.6	0.42	95.5	0.79	2,817.2	5,090.52
Aug-09	3,985,565	4,047,674	3,143,178	83.70	141.67	31.43	0.042	0.070	0.02	816.6	1,543.6	342.1	2,702.3	0.34	95.5	0.85	2,798.9	5,090.52
Sep-09	3,581,240	3,706,334	2,868,008	75.21	129.72	28.68	0.042	0.070	0.02	810.6	1,539.7	347.2	2,697.5	0.40	95.5	0.85	2,794.1	5,090.52
Oct-09	3,957,899	3,870,462	2,368,823	83.12	135.47	2.37	0.042	0.070	0.02	866.0	1,532.7	328.2	2,726.9	0.47	95.5	0.88	2,834.3	5,090.52
Nov-09	3,580,292	3,078,730	2,777,564	75.19	107.76	27.78	0.042	0.070	0.02	930.4	1,503.9	326.8	2,761.1	0.48	95.5	0.76	2,838.1	5,090.52
Dec-09	4,200,790	4,196,903	3,616,518	88.22	146.89	36.17	0.042	0.070	0.02	934.0	1,528.6	337.4	2,800.1	0.51	95.5	0.78	2,897.1	5,090.52
Jan-10	3,774,510	3,912,106	3,370,245	79.26	136.92	33.70	0.042	0.070	0.02	933.7	1,529.0	336.0	2,800.7	0.53	95.5	0.82	2,897.8	5,090.52
Feb-10	3,782,164	3,790,895	3,109,955	79.42	132.68	31.10	0.042	0.070	0.02	944.9	1,548.9	340.0	2,833.8	0.53	95.5	1.15	2,930.9	5,090.52
Mar-10	3,681,084	3,020,103	3,315,389	75.62	105.70	33.15	0.042	0.070	0.02	953.0	1,527.2	351.7	2,831.9	0.55	95.5	1.97	2,929.0	5,090.52
Apr-10	3,901,014		3,308,250	81.92	0.00	33.00	0.042	0.070	0.02	969.4	1,498.8	353.9	2,732.2	0.48	95.5	1.15	2,829.3	5,090.52
May-10	3,975,248	2,676,630	3,538,108	83.48	93.68	33.38	0.042	0.070	0.02	974.8	1,423.0	354.9	2,752.7	0.48	95.5	1.99	2,849.9	5,090.52
Jun-10	4,132,570	4,402,397	3,461,717	86.78	154.08	34.62	0.042	0.070	0.02	979.3	1,431.1	359.6	2,770.0	0.53	95.5	2.10	2,867.3	5,090.52
Jul-10	4,319,770	4,555,397	3,450,531	90.72	159.44	34.51	0.042	0.070	0.02	982.6	1,444.0	359.9	2,786.5	0.54	95.5	1.82	2,883.8	5,090.52
Aug-10	4,308,947	4,600,758	3,533,024	90.49	161.03	35.53	0.042	0.070	0.02	989.4	1,463.4	364.0	2,816.8	0.57	95.5	1.90	2,914.1	5,090.52
Sep-10	3,869,525	4,133,837	3,064,074	81.26	144.68	30.64	0.042	0.070	0.02	995.5	1,478.3	365.9	2,839.8	0.50	95.5	1.74	2,937.1	5,090.52
Oct-10	916,010	3,566,452	3,501,109	8.70	35.66	35.01	0.019	0.020	0.02	921.1	1,378.5	398.6	2,698.2	0.42	95.5	0.68	2,794.8	5,090.52
Nov-10	0	3,804,131	3,136,020	0.00	38.04	31.36	0.019	0.020	0.02	845.9	1,308.8	402.2	2,556.9	0.35	95.5	1.75	2,653.4	5,090.52
Dec-10	0	3,892,210	2,950,433	0.00	38.02	29.90	0.019	0.020	0.02	757.7	1,200.0	395.9	2,353.5	0.33	95.5	1.72	2,450.0	5,090.52

Attachment 4

Stack test summary, Fayette Unit 2, 1985

MULLINS ENVIRONMENTAL TESTING CO., INC.

P.O. Box 598
Addison, Tx 75001
(214) 931-7127

METCO

PERMANENT

Particulates

SOURCE EMISSIONS SURVEY
OF
LOWER COLORADO RIVER AUTHORITY
FAYETTE POWER PROJECT
UNIT NUMBER 2 STACK
LA GRANGE, TEXAS

*(Test Bin: AUGUST 1985
Kaiser, and Lane 4/1/85)*

FILE NUMBER 85-102

MULLINS ENVIRONMENTAL TESTING CO., INC.

L008834



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SOURCE EMISSIONS SURVEY
LOWER COLORADO RIVER AUTHORITY
FAYETTE POWER PROJECT
UNIT NUMBER 2 STACK
LA GRANGE, TEXAS
FILE NUMBER 85-102

INTRODUCTION

Mullins Environmental Testing Co., Inc., Dallas, Texas, conducted a source emissions survey of the Lower Colorado River Authority, Fayette Power Project, located near La Grange, Texas, on August 20 and 21, 1985. The purpose of these tests was to determine the concentration of particulate matter being emitted to the atmosphere via the stack from Unit Number 2.

The sampling followed the procedures set forth in the Appendix to the Code of Federal Regulations, Title 40, Chapter I, Part 60.



SUMMARY OF RESULTS

The principal conclusion is as follows:

~~The emissions of particulate matter from the stack were equal to~~
~~0.035 pounds per million Btu of heat input (15.1 nanograms per Joule),~~
based on averaging the three tests using the "front-half" collections
of the EPA-type sampling train and using an F factor of 9780 dscf/
million Btu. The allowable emission rate is ^{403 nanograms per Joule} 0.10 pounds per million
Btu of heat input, as determined from the Code of Federal Regulations,
Title 40, Chapter I, Part 60, Subpart D. ~~The actual emissions were~~
~~35.0 percent of the allowable emission rate.~~



SUMMARY OF RESULTS

Fayette Power Project
Unit Number 2 Stack

Run Number	1	2	3
Stack Flow Rate - ACFM	2,107,311	2,105,305	2,122,760
Stack Flow Rate - DSCFM*	1,261,775	1,269,978	1,259,361
% Water Vapor - % Vol.	11.13	10.19	10.56
% CO ₂ - % Vol.	12.6	12.7	12.6
% O ₂ - % Vol.	6.3	6.8	6.9
% Excess Air @ Sampling Point	42	47	48
Particulates Probe, Cyclone & Filter Catch grains/dscf*	0.0275	0.0102	0.0138
grains/cf @ Stack Conditions	0.0164	0.0062	0.0081
lbs/hr	296.9	111.4	148.4
Emission Rate calculated using an F factor of 9780 dscf/million Btu - lbs/million Btu	0.055	0.021	0.029
Emission Rate calculated using an F _c factor of 1800 scf CO ₂ /million Btu - lbs/million Btu	0.056	0.021	0.028
Process Input as calculated from coal analysis - million Btu/hr	-----	-----	-----
Emission Rate calculated using process input - lbs/million Btu	-----	-----	-----
Emission Limit 40 CFR 60 - lbs/million Btu	0.10	0.10	0.10
Boiler Production - megawatts	-----	-----	-----

* 29.92 "Hg, 68°F (760 mm Hg, 20°C)

Attachment 5

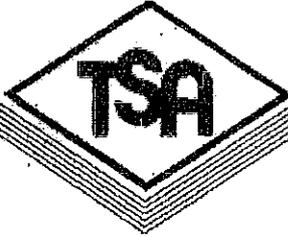
Stack test summary, Fayette Unit 3, 1988

COMPLIANCE
TEST REPORT
for
LCRA
FAYETTE POWER PROJECT
UNIT 3

August 18/21, 1988

88-088

PERMANENT



Total Source Analysis, Inc.

Air Pollution Testing Consultants

139 W. Herrick, P.O. Box 257
Wellington, Ohio 44090
(216) 647-4444

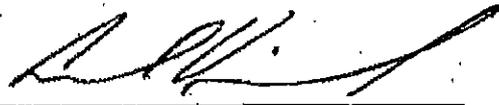
I, Bruce Woods, Jr., hereby certify that the compliance tests conducted at Fayette Power Project on Unit 3 for Lower Colorado River Authority are in accordance with procedures established by the USEPA and the TACB. This report accurately and faithfully presents the data obtained from the tests and the results determined from analysis of this data.



Bruce Woods, Jr.

Crew Chief

I, Carl Vineyard, P.E., hereby attest that all work on this project was completed under my supervision and this report accurately presents the emissions from this unit.



Carl Vineyard, P.E.

Chief Test Engineer

Offices: Wellington, OH • Spring, TX • Independence, MO

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INTRODUCTION

100233

INTRODUCTION

This report presents the results of the compliance tests performed on Fayette Power Project, Unit 3 Lower Colorado River Authority.

The purpose of the tests was to determine the pollutant emissions of the unit for compliance. The results of the tests can be found in Section II of this report.

Tests were performed to determine the emission rates of the following pollutants: Particulates, SO₂, H₂SO₄, NO_x, CO, VOC's, Mercury and Beryllium. Opacity measurements were also taken.

The emissions testing was performed by Total Source Analysis, Inc., whose main office is located at 139 W. Herrick, Wellington, Ohio 44090.

The tests were performed on August 18/21, 1988. The testing was performed in accordance with EPA reference methods as published in the August 1, 1987 Federal Register, "Standards of Performance for New Stationary Sources" and the Texas Air Control Board's Sampling Procedures Manual.

The testing equipment, sampling procedures and analytical procedures are described in Section III of this report. The raw field data, lab analysis reports and equations used in determining final results are presented in the Appendix.

EMISSION LIMITATIONS
APPLICABLE TO FPP UNIT 3

Pollutant	Federal Limitations ^a	State Limitations ^b
Particulates	0.03 lb/mm Btu input	0.3 lb/mm Btu input
Opacity	10% ^g 27% ^c	20% ^d
Sulfur Dioxide	1.2 lb/mm Btu input and 90% control efficiency ^e	3.0 lb/mm Btu input
Oxides of Nitrogen ^f	0.6 lb/mm Btu input for lignite 0.5 lb/mm Btu input for subbituminous	None

- a New Source Performance Standards for electric utility steam generating units with heat inputs greater than 250 million British thermal units per hour (mmBtu/hr) (40 CFR 60).
- b Texas Air Control Board Regulation I - Control of Air Pollution from Visible Emissions and Particulate Matter.
- c For not more than one six-minute period in any hour.
- d For not more than one five-minute period in any hour.
- e This value represents the sulfur dioxide NSPS promulgated 11 June 1979, based upon firing lignite with an uncontrolled emission rate of less than 12.0 and greater than 6.0 lb sulfur dioxide per million Btu of heat input.
- f When two or more fuels are combusted simultaneously, the applicable standard is determined by proration using the percentage of total heat input derived from the combustion of each type of fuel and the appropriate standard. For LCRA, NO_x limit is approximately 0.53 lb/10⁶ Btu for 40% lignite, 60% sub-bituminous.
- g 10% opacity limit for Federal PSD permit.
- h PSD permit also has 3-hour rolling average SO₂ emission limit.

SUMMARY OF TEST RESULTS

100233

SUMMARY OF TEST RESULTS

The following table presents the final results of the compliance tests performed on August 18/21, 1988 on Fayette Power Project, Unit 3 for Lower Colorado River Authority.

Pollutant	Date	Emissions		EPS	TACB	Permit	ISO
		lb/hr	lb/MBtu	NSPS lb/MBtu	Standard lb/MBtu	Max/Allowable Emissions lb/hr	
Part. EPA 5B	8/18	25.3	.01	.03	N/A	N/A	98.8<I<100.7
Part. EPA 5	8/18	29.4	.01	N/A	N/A	142	98.8<I<100.7
Part. TACB	8/18	77.6	.02	N/A	.30	N/A	98.8<I<100.7
SO2	8/19	1998	.50	1.2	3.0	4735	N/A
H2SO4	8/19	73.5	N/A	N/A	N/A	218	96.9<I<101.2
NOx	8/20	1762	.42	.54	N/A	2820	N/A
CO	8/19-20	410	N/A	N/A	N/A	600	N/A
VOC	8/18	18.8	N/A	N/A	N/A	38.4	N/A
Hg	8/20	0	N/A	N/A	N/A	.029	99.0<I<99.4
Be	8/21	0	N/A	N/A	N/A	.00125	99.7<I<100.6

The complete results can be found on the computer printouts following.

Attachment 6

Stack test summary, Fayette Unit 1, 2002



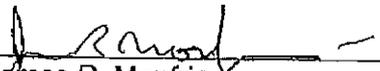
P.O. Box 598
Addison, TX 75001
(972) 931-7127

SOURCE EMISSIONS SURVEY
OF
THE LOWER COLORADO RIVER AUTHORITY
FAYETTE POWER PROJECT
UNIT NUMBER 1 STACK
LA GRANGE, TEXAS

SEPTEMBER 2002

FILE NUMBER 02-240FPP1A

" I certify that I have personally checked and am familiar with the information submitted herein, and based on my inquiries of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, and complete. "


James R. Monfries
Senior Quality Assurance Manager

PERMANENT



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02-240FPP1A



SOURCE EMISSIONS SURVEY
THE LOWER COLORADO RIVER AUTHORITY
FAYETTE POWER PROJECT
UNIT NUMBER 1 STACK
LA GRANGE, TEXAS
FILE NUMBER 02-240FPP1A

INTRODUCTION

METCO Environmental, P.O. Box 598, Addison, Texas, conducted a source emissions survey of the Lower Colorado River Authority, Fayette Power Project, Unit Number 1 Stack, located in La Grange, Texas, on September 4 and 5, 2002. The purpose of these tests was to determine the concentrations of particulate matter being emitted to the atmosphere via the Unit Number 1 Stack. Three tests were performed while the unit was operating at an average load rate of 586 MW.

The sampling was performed by the following METCO personnel: Mike Hoskovec -- Project Supervisor, Bob Kirkland, and Joe Hannon.

The sampling followed the procedures set forth in the Code of Federal Regulations, Title 40, Chapter I, Part 60, Appendix A, Methods 1, 2, 3B, 4, and 5; and in the "Sampling Procedures Manual, Texas Air Control Board, Revised July 1985".



SUMMARY OF RESULTS

Fayette Unit Number 1 Stack

Run Number	"Front-Half" Particulate Matter Emissions			"Total" Particulate Matter Emissions		
	(gr/dscf*)	(lbs/hr)	(lbs/million Btu)	(gr/dscf*)	(lbs/hr)	(lbs/million Btu)
1	0.0126	149.55	0.026	0.0242	286.60	0.049
2	0.0092	109.87	0.019	0.0183	219.74	0.038
3	<u>0.0082</u>	<u>101.03</u>	<u>0.017</u>	<u>0.0193</u>	<u>236.74</u>	<u>0.040</u>
Average	0.0100	120.15	0.021	0.0206	247.69	0.042

* 29.92 "Hg, 68°F (760 mm Hg, 20°C)



SUMMARY OF RESULTS
Fayette Unit Number 1 Stack

Run Number	1	2	3
Date	09/05/02	09/05/02	09/05/02
Time	1134-1304	1408-1532	1616-1740
Stack Flow Rate - ACFM	2,358,086	2,425,175	2,401,644
Stack Flow Rate - DSCFM*	1,382,944	1,399,875	1,432,680
% Water Vapor - % Vol.	13.79	14.93	12.13
% CO ₂ - % Vol.	13.4	12.8	13.2
% O ₂ - % Vol.	6.6	6.8	6.6
% Excess Air @ Sampling Point	45.2	46.9	45.0
Stack Temperature - °F	308	308	308
Stack Pressure - "Hg	29.50	29.42	29.44
Percent Isokinetic	105.2	99.7	98.3
Particulate Matter Emissions Probe & Filter Catch grains/dscf*	0.0126	0.0092	0.0082
grains/cf @ Stack Conditions	0.0074	0.0053	0.0049
lbs/hr	149.55	109.87	101.03
lbs/million Btu	0.026	0.019	0.017
Total Catch grains/dscf*	0.0242	0.0183	0.0193
grains/cf @ Stack Conditions	0.0141	0.0105	0.0115
lbs/hr	286.60	219.74	236.74
lbs/million Btu	0.049	0.038	0.040

* 29.92 "Hg, 68°F (760 mm Hg, 20°C)

02-240FPP1A

-3-

L008545

Attachment 7

Sworn Affidavit of Joe Bentley

3. I have a Bachelor of Science degree in Mechanical Engineering from the University of Texas at Austin. I have worked in the environmental field since 1979, concentrating primarily in air quality matters.

4. In my position as Environmental Advisor, I am responsible for assisting LCRA's power generating stations in maintaining compliance with applicable federal and state environmental air quality laws and regulations. My responsibilities include ensuring that LCRA has the air quality permits that it must hold to construct and operate LCRA's electric generating units and assisting LCRA in complying with the terms and conditions of those permits, including associated emissions testing, recordkeeping and reporting obligations of the Texas Commission on Environmental Quality ("TCEQ") and the U.S. Environmental Protection Agency ("U.S. EPA"). I have also been responsible for managing the initial certification of over 15 continuous emission monitoring systems ("CEMS") and for directing air emissions stack testing as required under applicable air quality permits. Other responsibilities include coordinating CEMS quality assurance testing for all LCRA coal- and gas-fired boilers and combustion turbines and coordinating LCRA's sulfur dioxide ("SO₂") and nitrogen dioxides ("NO_x") allowance trading and annual reconciliation as part of the federal Acid Rain Program and Clean Air Interstate Rule.

5. One of LCRA's power generating stations is the Sam K. Seymour Generating Station located approximately seven miles east of La Grange, Texas, that is the subject of this litigation. Three coal-fired steam electric generating units known as Fayette Power Project ("FPP") Units 1, 2 and 3 are located at the Sam K. Seymour Generating Station. I regularly visit FPP Units 1, 2 and 3, and I am familiar with the design, operation, air emissions, and applicable air quality requirements of those units based on my environmental permitting and compliance work for LCRA.

6. I have reviewed Plaintiff's Motion for Partial Summary Judgment. This Affidavit responds to certain summary judgment evidence and factual assertions of Plaintiff in that Motion.

7. In its Motion, Plaintiff asserts that emissions of particulate matter ("PM") and particulate matter of less than 10-microns in diameter ("PM₁₀") from FPP Units 1, 2 and 3 exceeded the annual PM emission limit of 5,155.16 tons per year ("tpy") and the annual PM₁₀ emission limit of 5,090.52 tpy that are enforceable under the Title V permit for FPP for 20 12-month periods between March 2006 and January 2010. Motion at VI.B.

8. Plaintiff's allegation that LCRA exceeded the annual PM emission limit and the annual PM₁₀ emission limit applicable to FPP is false. As described in this Affidavit, the annual emissions of PM and PM₁₀ from FPP were lower than the annual PM and PM₁₀ emission limits for FPP that are enforceable under the Title V permit for FPP for the period from March 1, 2006 until January 31, 2010.

9. A Title V permit facilitates compliance by consolidating all of a source's applicable air quality requirements into a single permit document. FPP is a source whose operation is subject to the terms and conditions of Title V Permit No. O21. From March 2006 until September 20, 2009, the operation of FPP was subject to the version of Title V Permit No. O21 that was issued by TCEQ on April 2, 2004 (the "2004 Operating Permit"). A true and correct copy of the 2004 Operating Permit is attached as Exhibit B to LCRA's Response to Plaintiff's Motion for Partial Summary Judgment. EPA had the opportunity to review the 2004 Operating Permit and did not object to its issuance. From September 21, 2009 until January 31, 2010, the operation of FPP was subject to the terms and conditions of the version of Title V Permit No. O21 that was issued by TCEQ on September 21, 2009 (the "2009 Operating Permit").

A true and correct copy of the 2009 Operating Permit is attached as Exhibit A to LCRA's Response to Plaintiff's Motion for Partial Summary Judgment. EPA had the opportunity to review the 2009 Operating Permit and did not object to its issuance.

10. Title V Permit No. O21 sets forth all air quality requirements applicable to FPP. One of the air quality requirements applicable to FPP is the new source review construction authorization found in Construction Permit No. 51770/PSD-TX-486M3. *See* Exhibit A at 88. EPA reviewed and commented on Construction Permit No. 51770/PSD-TX-486M3 and specifically endorsed Construction Permit No. 51770/PSD-TX-486M3 at a press conference in Austin in July 2002. A true and correct copy of the version of Construction Permit No. 51770/PSD-TX-486M3 incorporated by reference in the 2004 Operating Permit is attached as Exhibit C to LCRA's Response to Plaintiff's Motion for Partial Summary Judgment. A true and correct copy of the version of Construction Permit No. 51770/PSD-TX-486M3 incorporated by reference in the 2009 Operating Permit is attached as Exhibit D to LCRA's Response to Plaintiff's Motion for Partial Summary Judgment. The 2004 Operating Permit and the 2009 Operating Permit did not incorporate by reference as an air quality requirement applicable to FPP Permit No. 9233 or any prior version of Permit No. PSD-TX-486M3. Because the versions of Construction Permit No. 51770/PSD-TX-486M3 that were incorporated by reference into the 2004 Operating Permit and the 2009 Operating Permit did not contain a unit-specific hourly emission limit for FPP Unit 3 of 142.1 pounds of PM per hour, there is no unit-specific hourly emission limit for FPP Unit 3 of 142.1 pounds of PM per hour that is incorporated by reference in the 2004 Operating Permit or the 2009 Operating Permit. *See* Exhibit A; Exhibit B. The unit-specific hourly emission limit for FPP Unit 3 of 142.1 pounds of filterable PM that Plaintiff

seeks to enforce was found in a former air quality permit that was determined obsolete by the TCEQ and is not referenced in the 2004 Operating Permit or the 2009 Operating Permit. *Id.*

11. Special Condition No. 1 of Construction Permit No. 51770/PSD-TX-486M3 provides that "This permit covers those sources of emissions listed in the attached table entitled "Emission Sources-Maximum Allowable Emission Rates," and those sources are limited to the emission limits and other conditions specified in the attached table." Exhibit C; Exhibit D. The table, known as the MAERT, attached to the Construction Permit establishes initial, interim, and final emission caps for all sources of air emissions at FPP, including, but not limited to Units 1, 2 and 3. Exhibit C MAERT; Exhibit D MAERT. TCEQ required LCRA's emission caps to become increasingly more stringent over the life of the permit, resulting in substantial decreases in contaminants emitted from FPP. From March 2006 until January 2010, the applicable emission limits are the interim emission cap, as specified in footnote 4 of the MAERT. Exhibit C; Exhibit D. The MAERT establishes sitewide interim annual emission rate or limit for PM of 5,155.16 tpy, and sitewide interim annual emission rate or limit for PM₁₀ of 5,090.52 tpy. Exhibit C MAERT; Exhibit D MAERT.

12. As used in Construction Permit No. 51770/PSD-TX-486M3, the term PM refers to particulate matter, suspended in the atmosphere, including PM₁₀ and the term PM₁₀ refers to particulate matter equal to or less than 10 microns in diameter. Exhibit C; Exhibit D. If the emission of all particulate matter from a source is less than 10 microns, then there would be no difference in the emission of PM and PM₁₀ from a source because PM₁₀ is a subset of PM emissions. Particulate matter in flue gas from a coal-fired steam electric generating unit is found in two forms: filterable and condensable. Filterable refers to particulate matter that is emitted by a source and captured on the filter of a stack test sampling train; condensable refers to particulate

matter that are vapors or gases at stack temperature conditions but form solids or liquids upon cooling when released to the atmosphere. The emission limits in Construction Permit No. 51770/PSD-TX-486M3 that are enforceable by the 2004 and 2009 Operating Permits include both filterable and condensable PM or PM₁₀. Emission limits that include both filterable and condensable PM or PM₁₀ are sometimes referred to as total PM or total PM₁₀ limits.

13. Special Condition No. 20 of Construction Permit No. 51770/PSD-TX-486M3 requires LCRA to establish and maintain recordkeeping programs to demonstrate compliance with all authorized emission caps. Exhibit C; Exhibit D. Special Condition No. 20 further specifies that compliance with annual typ emissions shall be based on a 12-month rolling average, and that emission calculations for verifying compliance with emission caps shall be calculated at least once every month. Finally, Special Condition No. 20(E) states that "The permit holder shall keep records of process parameters necessary to demonstrate compliance with the emission caps for sources not equipped with a CEMS. Emission calculations and emission factors may be changed to reflect newer emission factors or emission factors that are based upon more recent stack sampling." *Id.*

14. LCRA established and maintained a recordkeeping program as required by Special Condition No. 20 of Construction Permit No. 51770/PSD-TX-486M3. LCRA performed emission calculations once every month from March 2006 until January 2010, to demonstrate compliance with the annual total PM and total PM₁₀ emission limits. Part of my job responsibilities for LCRA included the review and oversight of LCRA's recordkeeping program. True and correct copies of the contemporaneous compliance records established and maintained by LCRA are attached as Exhibit E. The records attached as Exhibit E are excerpts of records reflecting information compiled by LCRA and kept in the regular course of business of LCRA.

The records were made at or near the time of the act, event or condition recorded, or reasonably soon thereafter, and they were made by persons with knowledge of the information reflected in the records. The method of preparation of the records is trustworthy. The records attached as Exhibit E are the originals or duplicates of the originals of the records.

15. The actual annual emissions of total PM and total PM₁₀ from FPP on a 12-month rolling basis from March 2006 until January 2010 are accurately reflected in the compliance records attached as Exhibit E to LCRA's Response to Plaintiff's Motion for Partial Summary Judgment. As shown in Exhibit E, the actual annual emissions of total PM and total PM₁₀ from FPP are lower than the emission limits for FPP that are enforceable by the Title V permit for the period from March 2006 until January 2010. LCRA determined that all particulate matter emitted by Units 1, 2 and 3 is less than 10 microns in diameter. Therefore, the emission of total PM from Units 1, 2 and 3 is the same as the emission of total PM₁₀ from Units 1, 2 and 3.

16. The actual annual emissions of total PM and total PM₁₀ were determined by performing emission calculations as required under Special Condition No. 20 of Construction Permit No. 51770/PSD-TX-486M3. To perform the emission calculations for total PM and total PM₁₀ for Units 1, 2 and 3, LCRA multiplied the heat input calculated for each of the units for a calendar month by an emission factor for total PM and total PM₁₀ based on stack testing of the Units.

17. The heat input for each unit was calculated and reported by the CEMS installed on each of Units 1, 2 and 3 that are used to measure the emissions of NO_x, SO₂, carbon dioxide ("CO₂") and volumetric flow. The CEMS calculates heat input to the Units based on measurements of CO₂ and volumetric flow using U.S. EPA specified protocols. These CEMS

calculations for heat input were used by LCRA in performing the emission calculations under Special Condition 20.

18. An emission factor is a value that relates the quantity of an air contaminant released to the atmosphere with an activity associated with the release of that contaminant. An emission factor is usually expressed as the weight of an air contaminant divided by a unit weight, volume, or duration of the activity emitting the contaminant (*e.g.*, pounds of PM emitted per heat input of coal burned). An emission factor facilitates the reliable estimation of emissions from various sources of air contaminants.

19. LCRA determined the emission factor for total PM and total PM₁₀ to use in its emission calculations by performing stack tests on the emissions from Unit 1, 2 and 3. A stack test is a procedure for sampling flue gas in the stack by using appropriate access ports and traverse points to obtain representative measurements of contaminant concentrations from a facility, unit, or pollution control equipment. It is used for compliance and to determine a pollutant emission rate, concentration, or parameter while the unit is operating at conditions that result in the measurement of the highest emission values or at other operating conditions approved by TCEQ. A test is typically comprised of three sampling runs for a specified sampling time that are then summed and divided by three to result in an emission rate that reflects the average of the three runs. The testing is performed by an independent source testing company using sampling and analytical procedures approved by TCEQ or the U.S. EPA for the specific contaminant. A stack test is also known as an emission test, compliance test, source test, or performance test.

20. Stack testing of Units 1, 2 or 3 was required under FPP's new source review Construction Permit and Title V Operating Permits. LCRA has contracted with

independent source testing companies to perform stack tests for particulate matter emissions from Units 1, 2 and 3 on several occasions, including testing conducted in August 1985, August 1988, September 2002, September 2010, and January 2011, as accurately summarized in the table below.

Date of Stack Test and Source Testing Company	Unit	Stack Test Results (average of 3 sampling runs)	Contaminant	Exhibit
August 1985 (METCO)	2	0.035 lb/mmBtu	Filterable PM	F-1
August 1988 (Total Source Analysis)	3	0.02 lb/mmBtu	Total PM	F-2
September 2002 (METCO)	1	0.042 lb/mmBtu	Total PM	F-3
September 2010 (Air Sampling Associates)	1	0.019 lb/mmBtu	Total PM	F-4
September 2010 (Air Sampling Associates)	2	0.020 lb/mmBtu	Total PM	F-4
January 2011 (Air Sampling Associates)	3	0.017 lb/mmBtu	Total PM	F-5

True, correct and complete copies of the reports of this stack testing are included as Exhibit F to LCRA's Response to Plaintiff's Motion for Partial Summary Judgment, Exhibits F-1, F-2, F-3, F-4 and F-5 respectively. The data presented in those reports is accurate and reliable based on my education, training and experience and is generally and routinely relied on by environmental professionals in rendering opinions on air emissions.

21. LCRA used the results of stack testing of Units 1, 2 and 3 to determine the appropriate emission factor for total PM and total PM₁₀ from Units 1, 2 and 3. Because all PM

emitted from Units 1, 2 and 3 is reasonably assumed to be less than 10 microns in diameter, the emission factor for total PM and total PM₁₀ from Units 1, 2 and 3 is the same. For the period from March 2006 until January 2010, LCRA used the following stack test results to determine an annual emission factor for total PM/PM₁₀ from Units 1, 2 and 3:

Unit	Contaminant	Stack Test Results (average of 3 1-hour sampling runs)	Date of Most Recent Stack Test Prior to 2006 - 2010	Annual Emission Factor (Total PM/PM ₁₀)
1	PM/PM ₁₀	0.042 lb/mmBtu (Total PM)	September 2002	0.042 lb/mmBtu
2	PM/PM ₁₀	0.035 lb/mmBtu (Filterable PM)	August 1985	0.070 lb/mmBtu
3	PM/PM ₁₀	0.02 lb/mmBtu (Total PM)	August 1988	0.02 lb/mmBtu

The annual emission factors identified above were based on the then most recent stack testing of Units 1, 2 and 3 that occurred prior to the March 2006 to January 2010 period, in accordance with Special Condition 20 of Construction Permit No. 51770/PSD-TX-486M3. Because the stack testing requirements for Unit 2 in August 1985 only required measurement of the filterable PM from that Unit, and not the total PM emissions (which includes filterable and condensable PM emissions), LCRA had to determine from the available testing an appropriate emission factor for total PM/PM₁₀. The results of stack testing of Units 1 and 3 in 1988 and 2002 demonstrated that total PM emissions were approximately two times as much as the filterable PM emissions from those Units. Based on those results and the design and operational similarities between Unit 1 and Unit 2, I determined that the annual emission factor for total PM/PM₁₀ from Unit 2 should be two times the stack test results for filterable PM from Unit 2.

22. Attached to this Affidavit as Exhibit G-1 is a Table that I prepared that identifies the actual total PM/PM₁₀ emissions from Units 1, 2 and 3 that are reflected on the

compliance records attached as Exhibit E to LCRA's Response to Plaintiff's Motion for Partial Summary Judgment for the periods identified by Plaintiff.

23. In 2010 and 2011, LCRA contracted with an independent source testing company for the performance of additional stack testing on Units 1, 2 and 3 to evaluate whether the annual emission factors for PM/PM₁₀ that were used to calculate annual emissions of PM/PM₁₀ from Units 1, 2 and 3 continued to be appropriate. The additional stack testing was voluntary but conducted in accordance with the requirements of the 2009 Operating Permit and Construction Permit No. 51770/PSD-TX-486M3. The results of the additional stack testing and the corresponding annual emissions factors are accurately summarized below:

Unit	Contaminant	Stack Test Results (average of 3 1-hour sampling runs)	Date of Stack Test	Annual Emission Factor (Total PM/PM ₁₀)
1	PM/PM ₁₀	0.019 lb/mmBtu (Total PM)	September 2010	0.019 lb/mmBtu
2	PM/PM ₁₀	0.020 lb/mmBtu (Total PM)	September 2010	0.020 lb/mmBtu
3	PM/PM ₁₀	0.017 lb/mmBtu (Total PM ₁₀)	January 2011	0.017 lb/mmBtu

This additional stack testing indicates that the annual emission factors used by LCRA to determine the actual annual emissions of total PM and total PM₁₀ from Units 1, 2 and 3 were conservative and tended to overestimate the annual emissions of total PM and total PM₁₀ from FPP during the March 2006 to January 2010 period.

24. In its Motion, Plaintiff used emission factors for total PM/PM₁₀ that overstated the annual total PM/PM₁₀ emissions from Units 1, 2 and 3. Plaintiff used the

following annual emission factors to allege an exceedence of the total PM and total PM₁₀ emission limits in Construction Permit No. 51770/PSD-TX-486M3:

Unit	Contaminant	Plaintiff's Annual Emission Factor (Total PM/PM ₁₀)
1	PM/PM ₁₀	0.1 lb/mmBtu
2	PM/PM ₁₀	0.1 lb/mmBtu
3	PM/PM ₁₀	0.03 lb/mmBtu

These emission factors are not based on the most recent stack testing of Units 1, 2 and 3 that occurred prior to the March 2006 to January 2010 period and are not appropriate for determining actual annual emissions of PM and PM₁₀ from Units 1, 2 and 3 during that period. In its Motion, Plaintiff does not identify or consider the results of any stack testing of Units 1, 2 or 3. This failure has caused Plaintiff to use annual emission factors that overstate the actual emissions of total PM and total PM₁₀ from Units 1, 2, and 3. Had the Plaintiff adjusted the annual emission factor that it erroneously used for Unit 1 to a value based on the September 2002 stack testing of Unit 1, that adjustment alone would show that the annual total PM/PM₁₀ emissions from FPP complied with the total PM/PM₁₀ emission limits in Construction Permit No. 51770/PSD-TX-486M3.

25. In its Motion Plaintiff argues that because LCRA had used these annual emission factors in a July 2002 permit application in order to identify total PM/PM₁₀ emissions in 1999 for TCEQ's consideration in setting future emission caps for FPP, LCRA must continue to use these annual emission factors when determining actual annual emissions of PM/PM₁₀ under its permit. Motion at 18. Plaintiff's argument is flawed.

26. The emission factors that Plaintiff has employed are derived from the July 2002 permit application for Construction Permit No. 51770/PSD-TX-486M3. As stated in that 2002 permit application these values "provide the best estimate of current actual front-half and plus back-half PM/PM₁₀ emissions from the FPP boilers" subject to the additional discussion qualifications set forth in the application. These values represent actual emissions in 1999 derived from limited stack test results available at that time. They represent the upper end of the range of actual emissions on an hourly basis, and, thus, account for the uncertainty and variability presented in the stack test results. In establishing an emission cap based on limited stack test results, it was appropriate to consider the variability of these data. At any point in time, TCEQ may call upon LCRA to perform stack testing to demonstrate compliance. As set forth in Construction Permit No. 51770/PSD-TX-486M3, at the request of the TCEQ Executive Director the permit holder "shall perform stack sampling... to establish actual pattern and quantities of air contaminants being emitted... from sources authorized by this permit." Based on results available in July 2002, it was reasonable to assume that any future hourly stack tests could yield results that are at or near the upper range of previous stack tests. Accordingly, if compliance is to be determined based on a "snap shot" in time, it is reasonable to allow for variability of the test results in establishing the emissions cap.

27. To determine compliance with the annual limits, the average results of the most recent representative stack tests were used. Over a lengthy period of time, for example 12-months, it is assumed that the actual emissions will more closely be represented by the average stack test results rather than the high or low hourly end of the variability. In establishing compliance over a significant span of time such as a year, as opposed to any one hour, the average results from the most recent representative stack tests are employed.

28. Plaintiff's argument ignores this rationale as well as the results of all of the stack testing, including that performed on Units 1, 2 and 3 in 2002, 2010 and 2011 that were not available in July 2002. As described in Paragraphs 13-22 of this Affidavit, LCRA established and maintained a recordkeeping program that demonstrates compliance with the total PM and total PM₁₀ emission limits set forth in Construction Permit No. 51770/PSD-TX-486M3.

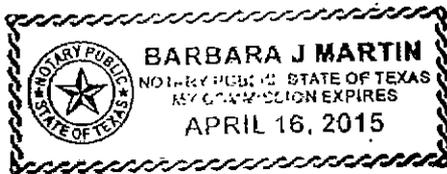
29. Neither TCEQ nor the U.S. EPA has alleged that LCRA has exceeded the total PM or total PM₁₀ emission limits that are enforceable under the 2004 Operating Permit or the 2009 Operating Permit. LCRA has an obligation to identify instances of non-compliance with Title V Permit No. O21 on a semi-annual basis in its Title V deviation reporting. LCRA has not identified any non-compliance with or deviation from the total PM or total PM₁₀ emission limits that are enforceable under the 2004 Operating Permit or the 2009 Operating Permit.

30. Based on my work for LCRA, my training and experience in air quality compliance, and the records and data described in my Affidavit, it is my opinion that LCRA's annual actual emissions of total PM and total PM₁₀ did not exceed the total PM and total PM₁₀ emission limits that are enforceable under the 2004 Operating Permit or the 2009 Operating Permit as alleged by Plaintiff, and that LCRA has at all times from the period March 2006 until January 2010, maintained compliance with the applicable annual total PM emission limit of 5,155.16 tpy and the applicable annual total PM₁₀ emission limit of 5,090.52 tpy.

FURTHER AFFIANT sayeth not.

Affiant Joe Bentley

on this 8th day of September, 2011, to which witness my hand and seal of office. SUBSCRIBED AND SWORN to before me by Joe Bentley



Barbara J. Martin
Notary Public in and for the State of Texas

My Commission Expires: April 16, 2015

Attachment 8

2006 Emissions Inventory emissions calculations

EMISSION CALCULATIONS

Boilers

SO₂

Every calendar quarter, all units at FPP are required to electronically report to the EPA's Clean Air Markets Division the hourly, quarterly and year-to-date emissions of SO₂ reported by the continuous emission monitoring system (CEMS). For SO₂, this system includes a pollutant concentration monitor and a stack volumetric flow monitor. The acid rain rules include provisions for substituting for hourly emissions that are missing due to CEMS malfunction or failure of any quality assurance check so that each hour a pounds per hour value is reported. The hourly SO₂ emissions are calculated as follows:

SO₂ (lbs/hr) = Hourly Average SO₂ Concentration (ppm) x Hourly Average Volumetric Flow Rate (scf/hr) x 1.66x10⁻⁷ ((lb/scf)/ppm). For example, if the hourly SO₂ concentration is 287.1 ppm and the volumetric flow rate is 59,994,727 scf/hr:

$$\begin{aligned} \text{SO}_2 \text{ (lbs/hr)} &= 287.1 \text{ ppm} \times 59,994,727 \text{ scf/hr} \times 1.66 \times 10^{-7} \text{ ((lb/scf)/ppm)} \\ &= \underline{2,859.3 \text{ lbs/hr or } 1.43 \text{ tons/hr}} \end{aligned}$$

NO_x

For NO_x, hourly emission values (lbs/mmBtu) recorded by CEM equipment are multiplied by the hourly heat input values. (See 40 CFR Part 75, Appendix F, Equation F-6 for NO_x lbs/mmBtu calculation.) The hourly values are summed and divided by 2,000 to obtain annual tons reported. For example, if the hourly NO_x emission rate was reported to be 0.336 lbs/mmBtu and the hourly heat input was measured to 3,500 mmBtu, the calculation would proceed as follows:

$$\begin{aligned} \text{NO}_x \text{ (lbs/hr)} &= 0.336 \text{ lbs/mmBtu} \times 3,500 \text{ mmBtu} \\ &= \underline{1,176 \text{ lbs/hr, or } 0.588 \text{ tons/hr}} \end{aligned}$$

Each hourly amount reported is summed to obtain the annual emission tonnage for both SO₂ and NO_x.

CO & NM VOC

Emissions of carbon monoxide (CO) and non-methane volatile organic compounds (NM VOC) are calculated using the July 1998 emission factors listed in AP-42, Tables 1.1-4 for coal and 1.3-1 for fuel oil. The emission factors used are as follows: Coal (CO = 0.5

lbs/ton; VOC = 0.06 lbs/ton) and Fuel oil (CO = 5 lbs/1000 gal; VOC = 0.76 lbs/1000 gal)

Annual Emissions = Emissions from Coal + Emissions from Fuel Oil

If 2,000,000 tons of coal is burned annually and 600,000 gallons of fuel oil is burned in the same year, annual CO emissions would be:

CO (tons) = ((AP-42 Coal Emission Factor (lbs/ton) x Coal Burned (tons)) + (AP-42 Fuel Oil Emission Factor (lbs/ton) x Fuel Oil Burned (gal))) / 2000

$$\begin{aligned} \text{CO (tons)} &= ((0.5 \text{ lbs/ton} \times 2,000,000 \text{ tons/yr}) + (5 \text{ lb/1000 gal} \times 600,000 \text{ gal/yr})) / 2000 \\ &= \underline{501.5 \text{ tons/yr}} \end{aligned}$$

PM

Particulate matter (PM) emissions factors for coal are obtained through stack testing at the plant. The emissions factors used are: Coal (0.021 lb/mmBtu for Unit 1; 0.035 lb/mmBtu for Unit 2; and 0.01 lb/mmBtu for Unit 3). For fuel oil, emission factors are obtained from AP-42 Table 1.3-1. The emission factor used is 2 lb/1000 gal for Units 1, 2, & 3. The annual emissions are calculated by multiplying the given emission factor by the total amount of coal and fuel oil burned in each unit in a calendar year. Divide by 2000 to convert pounds to tonnage. For example, for Unit 1, if 2,000,000 mmBtu of coal is burned annually and 600,000 gallons of fuel oil is burned in the same year, annual PM emissions would be

$$\begin{aligned} \text{PM (tons/yr)} &= ((0.021 \text{ lbs/mmBtu} \times 2,000,000 \text{ mmBtu/yr}) + (2 \text{ lbs/1000 gal} \times 600,000 \text{ gal/yr})) / 2000 \\ &= \underline{21.6 \text{ tons/yr}} \end{aligned}$$

Cl and HCl

For chloride and HCl emissions for Units 1&2 first calculate the chloride emissions by multiplying the total dry tonnage of coal burned per calendar year by the dry concentration of chlorine in fuel and the HCl removal efficiency across electrostatic precipitator. Divide by 1 million to convert to ppm. For example, if given the following numbers:

Coal Burned in FPP-1 = 1,706,129 dry tons
Concentration of Chlorine in Fuel = 185.2 ppm (dry)
HCl Removal Efficiency Across Electrostatic Precipitator = 20%

(Reference: EPRI Fraction to Air Factor for HCl gas = 20%)

The calculation would proceed as follows:

$$\begin{aligned} E(\text{Cl}) &= \text{Dry Coal (tons)} * \text{Conc. (ppm)} * (1 - \text{Control Eff./100}) / 1,000,000 \\ &= 1,706,129 \text{ tons} * 185.2 \text{ ppm} * 0.8 / 1,000,000 \\ &= \underline{252.8 \text{ tons Cl/year}} \end{aligned}$$

Then to calculate HCl multiply the Cl emissions by the acid conversion factor of 1.028. The conversion factor is the molecular weight of HCl divided by the molecular weight of Cl.

So HCl emissions would be:

$$\begin{aligned} E(\text{HCl}) &= E(\text{Cl}) * \text{Acid Conversion Factor} \\ &= 252.8 \text{ tons/yr} * 1.028 \\ &= \underline{259.86 \text{ tons/yr}} \end{aligned}$$

For Unit 3, the calculation is more involved because the unit has a wet scrubber. For units burning subbituminous coal with an ESP and wet scrubber controls, a removal efficiency of 97% is used. In addition, 23% of the flue gas bypasses the scrubber, so only 77% is actually scrubbed.

If annual tons of coal burned in 3-1B is 1,469,177 dry tons and the HCl removal efficiency across ESP and Wet Scrubber = 97%

Then emissions of chloride would be:

$$\begin{aligned} E(\text{Cl}) &= (\text{Dry Coal (tons)} * \text{Conc. (ppm)} * (1.0 - \text{Control Eff./100}) * (\% \text{ Scrubbed})) \\ &= 1,469,177 \text{ tons} * 185.2 \text{ ppm} * 0.03 * 0.77 / 1,000,000 \\ &= \underline{6.3 \text{ tons Cl/year}} \end{aligned}$$

Emissions of HCl:

$$\begin{aligned} (\text{HCl}) &= E(\text{Cl}) * \text{Acid Conversion Factor} \\ &= 6.3 \text{ tons/yr} * 1.028 \\ &= \underline{6.5 \text{ tons/yr}} \end{aligned}$$

To calculate the emissions that bypass the scrubber the same equation is used, the

percentage that bypasses the scrubber is used instead of the percentage that is scrubbed. Also, the removal efficiency is the same as that used for Units 1 & 2 because emissions that bypass the scrubber only have a removal efficiency across electrostatic precipitator.

Emissions of Chloride Bypassing Scrubber:

$$\begin{aligned} E(\text{Cl}) &= \text{Dry Coal (tons)} * \text{Conc. (ppm)} * (1.0 - \text{ESP Eff./100}) * (\% \text{ Unscrubbed}) \\ &= 1,469,177 \text{ tons} * 185.2 \text{ ppm} * 0.2 * 0.23 / 1,000,000 \\ &= \underline{12.5 \text{ tons/yr}} \end{aligned}$$

Emissions of HCl:

$$\begin{aligned} \text{Tons (HCl)} &= E(\text{HCl}) * 1.028 \\ &= 12.5 \text{ tons/yr} * 1.028 \\ &= \underline{12.9 \text{ tons/year}} \end{aligned}$$

For total emissions the tons scrubbed is added to the tons bypassed.

$$\begin{aligned} \text{Total HCL Emitted} &= \text{Tons Scrubbed and Tons Bypassed} \\ \text{Total HCl (tons/yr)} &= 6.5 \text{ tons} + 12.9 \text{ tons} \\ &= \underline{19.4 \text{ tons/year emitted}} \end{aligned}$$

H2SO4

First SO2 production must be estimated

For Units 1 and 2, SO2 production is estimated from CEM data using the following equation:

$$E2 = E3 * [1 - ((C1 * R^2 + C2 * R) / 100)]$$

Where:

E2 = SO2 production, tons/yr

E3 = CEM SO2 production, tons/yr

C1 = 0.0264 (non-axial flow bias correction)

R = Stack/Duct swirl angle, degrees = 3.92 for Unit 1, 8.7 for Unit 2

C2 = 0.183 (non-axial flow bias correction)

For Unit 3, SO₂ production is estimated from Fuel Burn Data using the following equation:

$$E2 = K1 * K2 * C1 * S1$$

Where:

E2 = SO₂ mass rate, tons/yr

C1 = Fuel burn, tons/yr

S1 = Fuel sulfur weighted average, %

K1 = Molecular weight and units conversion constant = $64.04 / (100 * 32.06) = 0.02$

K2 = Sulfur conversion to SO₂ which is 0.875 for subbituminous coal and 1.0 for oil, gas, and alternative fuels

These numbers are then used to estimate the quantity of H₂SO₄ released from the combustion of coal, oil, or gas using the following equations:

For Units 1 and 2:

$$E1 = K * F1 * APH * ESP * E2$$

Where:

E1 = Total H₂SO₄ released from combustion lbs/year

K = Molecular weight and units conversion constant = 3,063 H₂SO₄-lb / SO₂ - ton

APH = 0.9

ESP = 0.5

E2 = Sulfur dioxide (SO₂) emissions from equation 1 or 2.

F1 = Fuel Impact Factor = 0.000556

For Unit 3:

$$E1'_{comb} = K * F1 * APH * ESP * F2s * E2 * (1 - SBf) + K * F1 * APH * ESP * E2 * SBf$$

Where:

E1'_{comb} = total H₂SO₄ released from combustion, lbs/yr

SBf = fraction of scrubber bypass, as a decimal = 0.2301

F2s = Technology Impact Factor for scrubber = 0.5

APH = 0.9

ESP = 0.5

K = Molecular weight and units conversion constant = 3,063 H₂SO₄-lb / SO₂ - ton

F1 = Fuel Impact Factor = 0.000556

E2 = Sulfur dioxide (SO₂) emissions from equation 1 or 2.

So if CEM SO₂ production data for Unit 1 was 15,930.6 tons/yr then H₂SO₄ released is:

$$E_2 = 15930.6 * [1 - ((0.0264 * 3.92^2) + (.183 * 3.92)) / 100] = 15751.69 \text{ tons/yr}$$

$$E_1 = 3063 * 0.000556 * 0.9 * 0.5 * 15751.69 = \underline{12071.51 \text{ lb/yr or } 6.04 \text{ tons/yr}}$$

Diesel Industrial Engines

Emissions of SO₂, NO_x, CO, PM, and VOCs are calculated using the October 1996 emission factors listed in AP-42, Table 3.3-1. The emission factors used are as follows: SO₂ = 2.05 E-03 lb/hp-hr; NO_x = 0.031 lb/hp-hr; CO = 6.68 E-03 lb/hp-hr; PM = 2.20 E-03 lb/hp-hr; and TOC (exhaust) = 2.47 E-03 lb/hp-hr.

To calculate emissions for each pollutant, the given emission factor is multiplied by the hours of operation, and the rated horsepower of each engine. The diesel engines at the Fayette Power Project power plant are only operated one half hour a week for testing. This product is then multiplied by the appropriate emission factor and divided by 2000 to determine annual tons emitted.

For example, EG-1&2 has a rated horsepower of 1425 hp, so the calculation for NO_x would be:

$$0.5 \text{ hr} \times 52 \text{ weeks} = 26 \text{ hr/yr}$$

$$\text{NO}_x_{\text{EG-1\&2}} = 26 \text{ hr/yr} \times 1425 \text{ hp} \times 0.031 \text{ lb/hp-hr} \times 1 \text{ ton} / 2000 \text{ lb}$$

$$= \underline{0.5743 \text{ ton/yr}}$$

Storage Tanks

Fixed roof tanks are calculated using Equation 1-1 (September 1997) in Chapter 7 of AP-42, Volume I, Fifth Edition. The standing and working losses are calculated using Equation 1-2 and 1-23, respectively.

For example, for diesel tank AOF140A, the standing storage losses are estimated from the following equation:

$$L_s = 365 V_v W_v K_B K_S$$

where:

$$V_v = \text{vapor space volume, ft}^3 = 77,390.39 \text{ (from equation 1-3)}$$

W_V = vapor density, lb/ft³ = 0.000254 (from equation 1-9)

K_B = vapor space expansion factor, dimensionless = 0.071 (from equation 1-16)

K_S = vented vapor saturation factor, dimensionless = 0.989 (from equation 1-22)

Thus,

$$L_S = \underline{115.23 \text{ lbs or } 0.058 \text{ tons/yr}}$$

The working loss are estimated from:

$$L_W = 0.0010 M_V P_{VA} Q K_N K_P$$

where:

M_V = vapor molecular weight, lb/lb-mole = 130 (Table 7.1-2)

P_{VA} = vapor pressure at daily average liquid surface temperature, psia = 0.0112

Q = annual net throughput (tank capacity [bbl] times annual turnover rate), bbl/yr

K_N = turnover factor, dimensionless = 1.0 (Figure 7.1-18)

K_P = working loss product factor, dimensionless = 0.75 for crude oils (1-25)

Thus, if the annual throughput for tank AOF140A was 171,600gal you first convert gal to bbl (there are 1/42 bbl per gallon)

$$171,600 \text{ gal} \times 1 \text{ bbl}/42 \text{ gal} = 4085.71 \text{ bbl}$$

Working loss would then be calculated as:

$$\begin{aligned} L_W &= 0.0010 \times 130 \text{ lb/lb-mole} \times .0112 \text{ psia} \times 4085.71 \text{ bbl} \times 1.0 \times 0.75 \times 1 \text{ ton}/2000 \text{ tons} \\ &= 0.00223 \text{ tons} \end{aligned}$$

Therefore the total loss would be:

$$\begin{aligned} L_T &= L_S + L_W \\ &= 0.058 \text{ tons/yr} + 0.00223 \text{ tons/yr} = \underline{0.062 \text{ tons/yr}} \end{aligned}$$

Unpaved Roads

Paved road emissions (PM and PM-10) are estimated using Equation 1 and Tables 13.2.2-2 of the September 1998 AP-42 emission factors. The size-specific emission factors calculated from equation 1 are as follows:

$$E = k(s/12)^a (W/3)^b / (M/0.2)^c$$

where:

E = particulate emission factor for PM or PM-10, lb/VMT

k(lb/VMT) = base emission factor for various particle sizes (PM and PM-10),
k = 2.6 for PM-10 and 10 for PM

s = surface material silt content (%) = 5.1 (default value)

a = 0.8 for all particle sizes

b = 0.4 for PM-10 and 0.5 for PM

c = 0.3 for PM-10 and 0.4 for PM

W = mean vehicle weight (tons) = 2.2 (default value)

M = surface material moisture content (%) = 0.2 (default value)

Therefore for PM-10, the emission factor would be calculated as follows:

$$\begin{aligned} E &= (2.6) (5.1/12)^{0.8} (2.2/3)^{0.4} / (0.2/0.2)^{0.3} \\ &= 1.16 \text{ lbs/VMT} \end{aligned}$$

For PM, the emission factor is calculated as follows:

$$\begin{aligned} E &= (10) (5.1/12)^{0.8} (2.2/3)^{0.5} / (0.2/0.2)^{0.4} \\ &= 4.32 \text{ lbs/VMT} \end{aligned}$$

So if the total miles traveled between storage, coal, flyash 2, flyash 3, and sludge is 9,000 miles for the year then:

$$\begin{aligned} \text{PM-10} &= 9,000 \text{ miles/yr} \times 1.16 \text{ lbs/VMT} \times 11\text{lb}/2000 \text{ tons} \\ &= \underline{5.22 \text{ tons/yr}} \end{aligned}$$

$$\begin{aligned} \text{PM} &= 9,000 \text{ miles/yr} \times 4.32 \text{ lbs/VMT} \times 11\text{lb}/2000 \text{ tons} \\ &= \underline{19.44 \text{ tons/yr}} \end{aligned}$$

Paved Roads

Paved road emissions (PM and PM-10) are estimated using Equation 1 and Tables 13.2-1.1 and 13.2.1-2 of the October 1997 AP-42 emission factors. The emission factors calculated from equation 1 are as follows:

$$E = k (sL/2)^{0.65} (W/3)^{1.5}$$

where:

E = particulate emission factor for PM or PM-10, lb/VMT

k = base emission factor for various particle sizes (PM and PM-10), lb/VMT = 0.082 for PM and 0.016 for PM-10

sL = road surface silt loading, g/m² = 0.4 (from Table 13.2.1-2)

W = average weight of vehicles traveling road, tons = 1 ton

Therefore, the emission factor for PM is as follows:

$$\begin{aligned} E &= 0.082 (0.4/2)^{0.65} (1/3)^{1.5} \\ &= 0.0055 \text{ lb/VMT} \end{aligned}$$

The PM-10 emission factor is as follows:

$$\begin{aligned} E &= 0.016 (0.4/2)^{0.65} (1/3)^{1.5} \\ &= 0.0011 \text{ lb/VMT} \end{aligned}$$

If 350,000 miles are driven in a year, then emissions for PM and PM-10 are estimated as follows:

$$\begin{aligned} \text{PM (tons/yr)} &= 350,000 \text{ miles/yr} \times 0.0055 \text{ lbs/VMT} \times 1 \text{ ton}/2000 \text{ lbs} \\ &= \underline{0.9625 \text{ tons/yr}} \end{aligned}$$

$$\begin{aligned} \text{PM-10 (tons/yr)} &= 350,000 \text{ miles/yr} \times 0.0011 \text{ lbs/VMT} \times 1 \text{ ton}/2000 \text{ lbs} \\ &= \underline{0.1925 \text{ tons/yr}} \end{aligned}$$

General Surface Coating

ITEM	DENSITY (lb/gal)	VOLATILE PERCENT (%)
SOLVENT	6.5	100
MXD PT	7.7	30.52
THINNER	6.5	100

FPP uses a variety of paints, paint thinner, and solvents as part of the routine maintenance activities at the plant. Emissions resulting from the use of these products are calculated by multiplying the annual quantity used (in gallons) by the total volatiles (as weight percent) of each product and by the product density. The densities and volatile percentages are obtained from product MSDS sheets. A representative value for the percentage of volatiles in the paint is 30.52% and a representative density is 7.7 pounds per gallon. If the total volume of paint used was 57.6 gallons, then annual emissions are calculated as follows:

$$\begin{aligned} \text{VOC (tons/yr)} &= 57.6 \text{ gal/yr} \times 30.52/100 \times 7.7 \text{ lbs/gal} \times 1 \text{ ton}/2000 \text{ lbs} \\ &= 0.068 \text{ tons/yr} \end{aligned}$$

Fugitives For Fuel

EPN	COMPONENT	AP-42 TABLE 9.1-2 (lb/hr-source)	NUMBER OF COMPONENTS *
FOHANDLE	VALVES	0.0055	212
	FLANGES	0.000243	306
	PUMP SEALS	0.02866	10
	PRESSURE RELIEF DEVICES	0.0165	1
	OPEN-ENDED LINES	0.00309	57
	>2" SCREW-PIPE CONNECT.	0.0165	31

The number of each type of source (i.e., valve, flange, and pump seal) used in fuel oil service are counted throughout the plant. The emission factors are found in a TCEQ guidance document on equipment leak fugitives. To find the annual emissions the emission factor is multiplied by the element count, then multiplied by the number of hours operated for the year. For example, if 212 valves at the facility were in operation

for 8760 hour/yr, then the emission calculation is as follows:

$$\begin{aligned} \text{VOC (tons/yr)} &= 212 \times 0.0055 \text{ lbs/hr/element} \times 8760 \text{ hrs/yr} \times 1 \text{ ton/2000 lbs} \\ &= \underline{5.11 \text{ tons/yr}} \end{aligned}$$

The total emissions from each type of element and fuel type are summed to reach an annual tonnage for fohandle.

Sandblasting

Quantity of sand used throughout the year (in lbs) is multiplied by an emission factor of 1.6 % of sand (Emission factor obtained from Source Environmental, from J. Jolly of TACB in September 1991) and divided by 2000 for tons per year. If 332,820 lbs of sand were used, the calculation would proceed as follows:

$$\begin{aligned} \text{PM (tons/yr)} &= 332,820 \text{ lbs} \times 1.6/100 \times 1 \text{ ton/2000 lbs} \\ &= \underline{2.66 \text{ tons/yr}} \end{aligned}$$

Oil Skimmers

Wastewater throughput (gal/yr) is multiplied by an emission factor for oil (Skimmer = 5lb/1000gal and APISBP = 0.02 lb/1000 gal) from AP-42 and divided by 2000 for annual tonnage. If Skimmer 1 had a throughput of 1,340 gal in 2001, the emissions would be estimated as follows:

$$\begin{aligned} \text{VOC (tons/yr)} &= 1,340 \text{ gal/yr} \times 5 \text{ lb/1000 gal} \times 1 \text{ ton/2000 lbs} \\ &= \underline{0.0034 \text{ tons/yr}} \end{aligned}$$

Coal Handling Emissions

Coal Handling — FINS: 3-1F, 3-2F, 3-4F thru 3-11F, 3-13F thru 3-17F

		Control	Number of	PM Emission Factor	PM to PM10
FIN	EPN	Efficiency	Transfers	lb/ton	Factor
3-1F	3-1F	99	2	0.04	1.00
3-2F	3-2F	90	1	0.04	0.51

3-4F	3-4F	90	1	0.04	0.51
3-5F	3-5F	99	2	0.04	1.00
3-6F	3-6F	99	4	0.04	1.00
3-7F	3-7F	99	2	0.04	1.00
3-8F	3-8F	99	1	0.04	1.00
3-9F	3-9F	99	1	0.04	1.00
3-10F	3-9F	99	2	0.04	1.00
3-11F	3-8F	99	2	0.04	1.00
3-13F	3-13F	99	1	0.04	1.00
3-14F	3-13F	99	1	0.04	1.00
3-15F	3-15F	100	1	0.04	1.00
3-16F	3-16F	99	1	0.04	1.00
3-17F	3-17F	98	1	0.04	0.51

Reference for Emission Factors: Technical Guidance for Control of Industrial Process Fugitive Particulate Emissions, EPA-450/3-77-010, U.S. EPA, Office of Air and Waste Management, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina, 27711.

For all FIN numbers in table above:

$$\text{Annual Emission Rate} = \text{Uncontrolled Emission Factor (lb/ton)} * \text{Throughput (tons/yr)} * (100 - \text{Control efficiency}/100) * 1 \text{ Ton}/2000 \text{ lb}$$

$$\text{Maximum Yearly Emissions} = \text{Uncontrolled Emission Factor (lb/ton)} * \text{Maximum Throughput (tons/yr)} * (100 - \text{Control efficiency}/100) * 1 \text{ Ton}/2000 \text{ lb}$$

$$\text{Uncontrolled Emission Factor (lb/ton)} = \text{PM Emission Factor} * \text{Number of Transfers}$$

Example:

If 3-5F had a throughput of 1,507,899 tons/year out of a maximum of 6,600,000 tons/year and had 2 transfers, yearly emissions would be calculated as follows:

$$\text{Uncontrolled Emission Factor (lb/ton)} = .04 \text{ lb/ton} * 2 \text{ transfers} = \underline{0.08 \text{ lb/ton}}$$

$$\text{Annual Emission Rate} = .08 \text{ lb/ton} * 1,507,899 \text{ tons/yr} * (100 - 99/100) * 1 \text{ ton}/2000 \text{ lb}$$

$$= \underline{.0604 \text{ tons/year}}$$

$$\text{Maximum Yearly Emissions} = .08 \text{ lb/ton} * 6,600,000 \text{ ton/yr} (100 - 99/100) * 1 \text{ ton}/2000 \text{ lb}$$

$$= \underline{2.64 \text{ tons/year}}$$

For FINS 3-3F and 3-12F, Pile 1 & 2, and Ashpile:

	Control	Area of Pile	PM Emission Factor
EPN	Efficiency	acres	lb/acre/day
3-3F	50	2.58	10.40
3-12F	50	9.30	10.40
Pile 1 & 2	50	40	10.40
Ashpile	50	25	3.50

The emission factors were obtained from USEPA Technical Guidance for Control of Industrial Processes Fugitive Particulate Emissions, pg. 2-33

$$\text{Annual Emission Rate for PM} = [\text{PM Emission Factor (lb/acre/day)} * \text{Area of Pile (acres)} * (100 - \text{Control Efficiency}/100)] * 365 \text{ days/year} * 1 \text{ Ton}/2000 \text{ lbs}$$

To calculate PM10:

$$\text{PM10} = \text{PM (tons)} * 0.51$$

Example:

$$\text{Annual PM Emission rate for 3-3F} = 10.4 \text{ lb/acre/day} * 2.58 \text{ acres} * (100-50/100) * 365 \text{ days/year} * 1 \text{ ton}/2000 \text{ lbs}$$

$$= \underline{2.45 \text{ tons/year}}$$

$$\text{Annual PM10 Emission} = 2.45 \text{ tons/year} * 0.51$$

$$= \underline{1.25 \text{ tons/year}}$$

Coal - 1 thru 8

EPN COAL - 1 thru 8 relate to the emissions from the transfer of coal from the railcars through transfer points and a luffing boom to the coal storage pile and then to the reclaim system for Units 1 & 2. Emission factors and control efficiencies are listed in the following table. PM10 is assumed to be 51 percent of the total particulate matter emitted. Note: If a coal transfer point includes a baghouse for control, all PM emissions are assumed to be PM10.

EPN	UNCONTROLLED EMISSION	CONTROL EFFICIENCY
-----	-----------------------	--------------------

	FACTOR (lb/ton)	(%)
COAL1	0.001	90.0
COAL2	0.04	99.0
COAL3	0.04	99.0
COAL4	0.04	75.0
COAL5	0.04	99.0
COAL6	0.08	99.0
COAL7/COAL8	0.08	99.0

Annual PM Emission Rate = Uncontrolled Emission Factor (lb/ton) * Throughput (ton/yr) * (100 - Control efficiency/100) * 1 Ton/2000 lb

$$\text{PM}_{10} = 0.51 * \text{PM (tons)}$$

So, if COAL 1 had a throughput of 6,826,259 tons/yr then:

$$\text{PM (tons/yr)} = (6,826,259 \text{ tons/yr} \times 0.001 \text{ lbs/tons} \times (100-90/100)) / 2000$$

$$= \underline{0.34 \text{ tons/yr}}$$

$$\text{PM}_{10} \text{ (tons/yr)} = 0.51 * 0.34 \text{ tons/yr}$$

$$= \underline{0.17 \text{ tons/yr}}$$

Flyash - 1 thru 4

A baghouse is used to control flyash emissions. The uncontrolled emission rate is 0.04 lb/ton and control efficiency is 99%. To calculate the emissions, the number of vents is multiplied with the uncontrolled emission rate, the amount of ash handled per calendar year, and control efficiency. Divide by 2000 for tonnage. Due to the baghouse, PM 10 is equal to PM.

Each has one vent, so if 200,639 tons of ash are handled in a calendar year, emission calculations for each flyash would be:

$$\text{Annual controlled PM} = \text{Number of Vents} * \text{Uncontrolled Emission Rate (lb/ton)} * \text{Annual Ash Handled} * (100-99/100)$$

$$\text{PM} = 1 * 0.04 \text{ lb/ton} * 200,639 \text{ tons} * (100-99/100) / 2000$$

$$= \underline{0.04 \text{ tons/yr}}$$

Limestone FIN 3-1L thru 3-6L

Emission factors and control efficiencies are listed in the following table. These factors were obtained from Development of Emission Factors For Fugitive Dust Sources.

FIN	UNCONTROLLED PM EMISSION RATE (lb/ton)	METHOD OF CONTROL	CONTROL EFFICIENCY (%)
3-1L	0.0038	wet sprays	90
3-2L	0.0038	wet sprays	90
3-3L	0.0038	enclosed	100
3-4L	0.0038	enclosed	100
3-5L	0.04	baghouse	99
3-6L	0.04	enclosed	100

For PM

$$\text{Annual Controlled PM} = \text{Uncontrolled PM Emission Rate (lb/ton)} * \text{Annual Handling} * (100 - \text{Control Efficiency}/100) * 11\text{b}/2000 \text{ tons}$$

If 18,919 tons of limestone were handled in a calendar year the annual emissions for 3-1L would be:

$$\begin{aligned} \text{PM} &= 0.0038 \text{ lb/ton} * 18,919 \text{ tons} * (100-90/100) /2000 \\ &= \underline{0.0036 \text{ tons/yr}} \end{aligned}$$

Attachment 9

Email from Joe Wegenhof to Matoaka Johnson, November 26, 2007

From: "Joe Wegenhoft" <Joe.Wegenhoft@lcra.org>
To: <mjohnson@tceq.state.tx.us>
Date: 10/26/2007 1:24:47 PM
Subject: Re: Fwd: TCEQ AIR ACCOUNT# FC0018G

Ms Johnson,

Here are the answers to your questions regarding the air emissions inventory for the Fayette Power Project. I will also fax this information to you.

Thanks,
Joe Wegenhoft

>>> "Matoaka Johnson" <MJohnson@tceq.state.tx.us> 10/25/2007 4:15 PM >>>
Mr. Gottier:

Thank you for submitting the air emissions inventory for TCEQ Air Account(s) # FC0018G.

Upon reviewing the account(s), it was determined that additional information is needed to accurately and completely review your EIQ submittal(s).

Provide NOx emissions factors (lb/ton, lb/mmBtu, etc.) for 3-1B, FPP-1, and FPP-2.

1) The continuous emission monitoring (CEM) systems for each of the three generating units record and report hourly NOx emission rates in lbs/mmBtu to EPA as part of the federal acid rain program. In addition, the CEM systems record and report hourly heat input (mmBtu) to EPA. The product of these two values are divided by 2000 each hour and then the hourly values are summed for the year to determine annual emission of NOx. Thus, there is not one single emission factor in lbs/mmBtu that is used to calculate annual emissions. However, the hourly average NOx emission factors (lbs/mmBtu) for each of the three units are as follows: FPP-1: 0.100; FPP-2: 0.110; 3-1B: 0.110.

Provide generation capacities (MW) for 3-1B, FPP-1, and FPP-2.

2) The hourly unit loads (MW) for the three units are also included in quarterly reports to EPA. The highest sustainable loads (MW) reported based on unit operating data for the last four quarters are: FPP-1: 650; FP-2: 640; and 3-1B: 482. The maximum unit loads will vary during the year based on ambient temperature and the thermal cooling capacity of Cedar Creek Reservoir.

Does stack test for TSP consist of method 5 and method 202, both front and back half catch?

3) The stack tests performed consisted of Reference Methods 1, 2, 3B, 4, and 5 to calculate TSP emissions and the emission factors included in the emission inventory represented the front half (filterable) catch only. The back half catch (condensibles) consists primarily of vapor phase emissions (H2SO4 and HCl) and these emissions are reported separately in the inventory.

Please submit the information via fax, at the number below or electronically if available, by November 01, 2007. If you have any questions, please call me.

Thank you for your assistance.

Matoaka Johnson
Natural Resource Specialist
Industrial Emissions Assessment Section
Texas Commission on Environmental Quality

512-239-3736 Voice
512-239-1515 Fax
www.tceq.state.tx.us (<http://www.tceq.state.tx.us/>)



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February 11, 2011

Mr. Steve Hagle, P.E., MC-163
Director, Air Permits Division
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

Re: Lower Colorado River Authority Fayette Power Plant's Application regarding Permit Amendment ("De-Flex") for Flexible Permit and Plantwide Applicability Limit (TCEQ Permit No. 51770/PSD-TX-486M3)

Dear Mr. Hagle:

We are writing to express our concern with the January 31, 2011 Lower Colorado River Authority (LCRA) Application requesting an amendment to convert their existing Flexible Permit to a SIP-compliant, Subchapter B, air permit ("De-Flex" Application").

The LCRA Fayette power plant is the only operating coal-fired power plant with its main boilers covered under a Flexible Permit. Evidence suggests that LCRA violated new source review requirements and has used its Flex Permit to circumvent NSR. The LCRA Fayette plant has increased its capacity and increased its emissions, and has used its Flexible Permit to avoid and postpone the installation of BACT on its three coal-fired units for roughly a decade. Amazingly, LCRA continues to seek "interim" emission limits, which simply proves the point that the plant has delayed promised cleanup that was required to be implemented long ago under any reasonable interpretation of new source review standards. LCRA's promises of future reductions, already delayed for more than a decade, do not meet BACT.

Based on our preliminary review of LCRA's De-Flex Application, we are concerned that the Application contains numerous errors and omissions. The Application is also confusing, and appears to confirm LCRA's Clean Air Act circumvention. Some of our initial concerns include the following:

1. The De-Flex Application is one of three separate, but inextricably connected, applications recently filed by LCRA. One application, filed on January 5, 2011, requests authorization for planned startup, shutdown, and maintenance emissions ("planned MSS")¹; a second application seeks a separate Plantwide Applicability Limit ("PAL") permit; and of course the third application seeks to convert the Flex Permit to a Subchapter B Permit.

¹ Please see our January 13, 2011, letter to LaDonna Castanuela, regarding the MSS Application, attached.

These three separate permitting actions should be combined into a single application, so that the plant's emissions and ambient impacts can be adequately and fully considered.

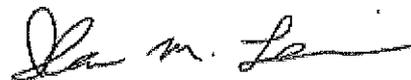
2. LCRA's January 31, 2011, De-Flex Application requests a so-called "no-increase amendment." This process essentially cuts out public participation. TCEQ should ensure that the affected public be given a meaningful opportunity to review, comment, and participate in LCRA's De-flex permit process. Given the complicated nature of this permit, the relatively huge amount of emissions being authorized, and the ongoing interests of the environmental stakeholders in LCRA's Fayette plant, TCEQ should, at the very least, allow a 90-day comment period once a Draft Permit and complete Application materials are made available for public comment. An extended comment period will serve the interests of all parties, and may allow errors and omissions to be adequately explained or addressed without the need for a contested case hearing.
3. Table 5-1 of LCRA's De-Flex Application seeks to "incorporate by reference" dozens of permits-by-rule ("PBRs") and standard permits. LCRA should include the emissions increases associated with each of these authorizations in its application, and include these emissions in ambient impacts analyses.
4. The Application contains no explanation of the chosen BACT limits, or why the chosen emission rates represent BACT. In addition, the Application contains no explanation as to why PM limits are downwardly adjusted, and why 0.04 and 0.02 lbs/mmBtu, represent BACT for PM for Units 1/2 and Unit 3, respectively. Also, the Application is vague and confusing as to whether the proposed PM limits are for Total PM, PM₁₀, or PM_{2.5}. The Application should justify all proposed limits, contain separate limits for all regulated pollutants, and specify the monitoring method used for compliance with those limits.
5. Certain proposed emission limits are significantly higher than the emission limits contained in LCRA's prior SIP-approved ("legacy") permit. For example, annual and hourly proposed carbon monoxide limits are far in excess of previously authorized SIP-approved permit limits; annual and hourly proposed lead limits are higher than previously authorized SIP-approved limits; hourly and annual proposed interim PM limits are higher than previously authorized SIP-approved emission limits.
6. Putting aside LCRA's bases for selecting BACT emission rates, the requested hourly and annual allowable limits are too high because they are based on inflated firing rates (as compared to represented maximum firing rates in prior permitting actions). For example, Unit 3 hourly and annual emission rates are calculated based on a heat input rate of 6,184 mmBtu/hour. LCRA should explain how its 4,735 mmBtu/hour (maximum rated capacity) Unit 3 boiler has 30 percent more heat input capacity than originally permitted. LCRA should also explain why it is appropriate to base annual and hourly allowables on heat input rates far in excess of the maximum capacity represented in all its legacy permits. Table 6 in the De-Flex Application, for Units 1, 2, and 3, represent fuel composition and boiler design markedly different from the Table 6 representations in the legacy permits. LCRA should explain these differences.

7. Lastly, TCEQ should require LCRA to submit modeling to demonstrate that its proposed emissions will not cause or contribute to air pollution. This demonstration is all the more important given that LCRA has also applied for two related permits (for planned MSS emissions, and for a PAL). Taken together, these three permit Applications seek authorization of new emissions not previously authorized and, therefore, warrant a high degree of scrutiny.

In closing, we urge TCEQ to carefully scrutinize the LCRA's Fayette Power Project De-Flex Application to ensure that any new Subchapter B permit is fully compliant with the SIP and that LCRA demonstrates that emissions will not cause exceedences of air quality standards.

We look forward to working with you, as well as with LCRA and EPA, on this important permitting action. Please include us on all public notices related to this permitting action and the related MSS and PAL Applications, so that we can fully participate in the permit processes.

Sincerely,



Ilan Levin
Senior Attorney
Environmental Integrity Project
1303 San Antonio St., Ste 200
Austin, Texas 78701
(512) 637-9479
ilevin@environmentalintegrity.org

CC (Via email):

Mr. Richard Hyde
Deputy Director, Office of Permitting and Registration
TCEQ

Mr. Larry Starfield
Deputy Regional Administrator
USEPA R6

Mr. John Blevins
Director, Compliance Assurance and Enforcement Division
USEPA R6

Ms. Suzanne Murray
Regional Counsel
USEPA R6

Mr. Carl E. Edlund, P.E.
Director, Multimedia Planning and Permitting Division
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May 20, 2011

Ms. LaDonna Castañuela
Office of the Chief Clerk, MC-105
TCEQ
P.O. Box 13087
Austin, TX 78711-3087

Re: Comments, Request for Public Meeting, and Request for Contested Case Hearing on Lower Colorado River Authority's Application for an Amendment to Permit No. 51770 & PSD-TX-486M3 (Fayette Power Plant's "De-Flexing" Application)

Dear Ms. Castañuela:

On behalf of the Sierra Club, we are submitting these comments, a request for a public meeting, and request for contested case hearing in response to the Notice of Receipt of Application and Intent to Obtain Air Permit, dated April 15, 2011, and published on April 22, 2011.

The Lower Colorado River Authority's (LCRA) has filed an Application to convert its existing illegal Flexible Air Permit for the Fayette (a.k.a. Sam Seymour) power plant to a federal Clean Air Act-compliant air permit. As discussed below, this Application contains errors and omissions and fails to comply with federal Clean Air Act standards. The Application fails to demonstrate how the proposed emission limits meet the *best available control technology* ("BACT") standard. The Application fails to demonstrate that the emissions will not cause or contribute to violations of health-based ambient air quality standards. The LCRA Fayette plant is currently operating in violation of the federal Clean Air Act because the plant is a major stationary source that is currently operating without the required federal Clean Air Act *prevention of significant deterioration* ("PSD") permit.

LCRA touts its long-delayed scrubber installations, which will thankfully reduce sulfur dioxide emissions, yet LCRA has steadfastly refused to reduce dangerous particulate matter ("PM") emissions to the maximum achievable levels.

Unless corrected as described below, the Application should not be granted.

I. Request for Contested Case Hearing

We request a contested case hearing. The requestor is the Sierra Club. The Sierra Club is one of the oldest and largest grassroots environmental organizations in the country. Sierra Club is a nonprofit corporation with offices, programs and members in Texas. Sierra Club's Austin, Texas offices are at 1202 San Antonio Street, Austin, Texas 78701, (512) 477-1729

(phone), (512) 477-8526 (fax). Among the goals of the Sierra Club are preserving and enhancing the natural environment and protecting public health. The Sierra Club has the specific goal of improving outdoor air quality. The Sierra Club and its members have a significant interest in ensuring that the LCRA Fayette plant complies with the Clean Air Act and reduces air emissions that endanger public health and property. Sierra Club has an interest in ensuring that the LCRA's Fayette power plant air pollution permit, at issue here, complies with the federal and Texas Clean Air Act and is protective of public health and the environment.

Sierra Club members own property, reside, and/or recreate nearby and downwind of the power plant. One such Sierra Club member is Ms. Carol Daniels. Ms. Daniels resides at 3701 FM 609, La Grange, Texas, 78945. This is approximately 10 miles, as the crow flies, from the power plant. Ms. Daniels is a retired nurse. Ms. Daniels is concerned about air quality and wants the Fayette power plant to comply with anti-pollution laws and have an air pollution permit that protects public health and the environment. Ms. Daniels has standing to request a hearing in her own right.

Please direct all communications or questions regarding this request to Ilan Levin, Senior Attorney, Environmental Integrity Project, at (512) 637-9479, or ilevin@environmentalintegrity.org

II. Request for a Public Meeting

We request a public meeting.

III. Comments

A. General Comments

TCEQ's Flexible Permit program has never been approved as part of the Texas State Implementation Plan, and thus it has never been a legal mechanism to change or void pre-existing construction permits.¹ This means that LCRA's Fayette power plant is currently operating in violation of the federal Clean Air Act and the Texas State Implementation Plan ("SIP"), because the power plant is required to have a federal Clean Air Act prevention of significant deterioration ("PSD") permit, but does not have one. To remedy this serious violation, TCEQ should require LCRA to demonstrate that the plant meets current best available control technology, and that maximum allowable emissions will not cause an exceedance of any national ambient air quality standard.

¹ See, Letter from David Neleigh, US EPA Region 6, to Steve Hagle, TCEQ Air Permits Division, regarding EPA's Comments on Texas' SIP Revisions for Flexible Permits, April 11, 2006 ("EPA's long-held position is that these [Title I, or SIP-approved permits] must remain in effect because they are the legal mechanism through which the underlying PSD or NSR requirements become applicable, and remain applicable, to individual sources." "Terms and conditions of construction permits are permanent and remain effective unless changed using title I procedures or a new construction permit is issued." (Attachment A)

Evidence suggests that LCRA violated new source review requirements and has used its Flex Permit to circumvent NSR. For example, recently-obtained documents from U.S. EPA, in response to a Freedom of Information Act request, contain references to a “boiler tube” issue² that was discussed during a meeting between representatives of LCRA, Austin Energy, and U.S. EPA on October 25, 2010.³ TCEQ should conduct a thorough examination of the Fayette plant’s permitting and operational history, from the last SIP-approved permit to the new proposed permit, in order to ensure that LCRA has not circumvented the federal or Texas Clean Air Acts or triggered New Source Review without meeting *best available control technology* (“BACT”).

In the alternative, if TCEQ is unwilling to require the rigorous BACT and ambient impacts analyses required by the federal Clean Air Act for issuance of a new PSD permit to a major source that currently lacks a valid permit, then TCEQ should require emission limits *no less stringent than* those contained in the following tables.

² Boiler tube replacement is a common power plant major modification that triggers the Clean Air Act’s “New Source Review,” which requires the power plant to meet modern emission standards and best available control technology. See, *United States v. Ohio Edison Co.*, 276 F.Supp.2d 829 (S.D. Ohio 2003) (holding that replacement of boiler tubes was not routine maintenance.) See also, Consent Decree (*U.S. v. Illinois Power Company*), which settles EPA’s NSR claim for modifications including boiler tube replacement at Baldwin station; available at: <http://www.epa.gov/compliance/resources/decrees/civil/caa/dmgfinal-cd.pdf>. See also, Consent Decree in *U.S. v. AEP*, settling NSR claim for major modifications including boiler tube replacement at several coal-fired power plants; available at: <http://www.epa.gov/compliance/resources/decrees/civil/caa/americanelectricpower-cd.pdf>.

³ Email from Al Armendariz, EPA Regional Administrator, to Larry Starfield, EPA Region 6, et al, Re: LCRA, October 25, 2010 (“Based on what we heard at the meeting about boiler tubes, call LCRA and give them a frank discussion about the agency’s ongoing national enforcement initiative for NSR and coal-fired EGUs,...”), Attachment B.

Unit 1				
Pollutant	lb/MMBTU (Averaging period)	lb/hr	tons/yr	Compliance Method
CO	0.187 (1-hr)	1,122.0	4,128.6	CEMS
H ₂ SO ₄	0.006 (3-hr)	36.0	132.5	Method 8
NO _x	0.10 (1-hr)	600.0	2,207.8	CEMS
PM _{Total}	0.05 (3-hr)	300.0	1,103.9	Method 5, 201/202*
PM ₁₀ (total)	0.035 (3-hr)	210.0	772.7	Method 5, 201/202*
PM ₁₀ (filter)	0.025 (3-hr)	150.0	552.0	CEMS
SO ₂	95% Removal	315.0	1,159.1	CEMS
VOC	0.00375 (3-hr)	22.5	82.8	Method 25A

Unit 2				
Pollutant	lb/MMBTU (Averaging Period)	lb/hr	tons/yr	Compliance Method
CO	0.187 (1-hr)	1,122.0	4,187.6	CEMS
H ₂ SO ₄	0.006 (3-hr)	36.0	132.5	Method 8
NO _x	0.10 (1-hr)	600.0	2,239.3	CEMS
PM _{Total}	0.05 (3-hr)	300.0	1,119.7	Method 5, 201/202*
PM ₁₀ (total)	0.035 (3-hr)	210.0	783.8	Method 5, 201/202*
PM ₁₀ (filter)	0.025 (3-hr)	150.0	559.8	CEMS
SO ₂	95% Removal	315.0	1,175.7	CEMS
VOC	0.00375 (3-hr)	22.5	84.0	Method 25A

Unit 3				
Pollutant	lb/MMBTU	lb/hr	tons/yr	Compliance Method
CO	0.187 (1-hr)	885.4	3,531.1	CEMS
H ₂ SO ₄	0.006 (3-hr)	28.4	113.3	Method 8
NO _x	0.10 (1-hr)	473.5	1,888.3	CEMS
PM _{Total}	0.03 (3-hr)	142.1	566.5	Method 5, 201/202*
PM ₁₀ (total)	0.02 (3-hr)	94.7	377.7	Method 5, 201/202*
PM ₁₀ (filter)	0.015 (3-hr)	71.0	283.2	CEMS
SO ₂	90% Removal	497.2	1,982.7	CEMS
VOC	0.00375 (3-hr)	17.8	70.8	Method 25A

* Method 5, 201/202, modified as follows:

Year 1: Two stack tests w/in first year. Stack test to include at least five runs, each of at least two hours duration. At least two runs during cold startup. Stack test to measure PM_{Total}, PM₁₀ and PM_{2.5}. Operating conditions during stack test used to set CAM parameters.

Year 2 and beyond: Annual stack test; same as year 1. Condensable PM from stack test is added to filterables measured by PM CEMS to determine hourly concentration.

Mass determined by multiplying mmbtu * concentration.

B. The De-Flex Application is one of three separate, but inextricably connected, permitting actions that should be considered together

LCRA's Application for an Amendment to Permit No. 51770 & PSD-TX-486M3 (Fayette Power Plant's "De-Flexing" Application) is being processed separately from two related permitting actions. These two related actions are: (1) LCRA's application for planned maintenance, startup, and shutdown ("MSS") emissions,⁴ and (2) LCRA's "stand-alone PAL" permit.⁵

Together, these three separate permitting actions will establish the maximum allowable emission limits of air contaminants, and these three permitting actions should be combined into a single application, so that the plant's emissions and ambient impacts can be adequately and fully considered.

⁴ LCRA's Application was submitted on January 4, 2011.

⁵ LCRA's Application was submitted on January 27, 2011; the Permit (PAL2) was issued by Executive Director on April 14, 2011; A motion to overturn the Executive Director's action is currently pending before the commission.

i. LCRA's MSS Application Cannot be Severed from the De-Flex Application

LCRA's MSS Application requests particulate matter startup emissions of *3,002 pounds per hour* each for Units 1 and 2, and *2,739 pounds per hour* for Unit 3, for *up to 600 hours per year*. If LCRA obtained these limits, the Fayette power plant could emit a maximum combined total of 2,622 tons of particulates during MSS events. The current Flex Permit authorizes up to 5,171 tons annually, which means that under the preceding scenario, LCRA could emit no more than 2,533 tons the rest of the year. The plant is now authorized to emit 1,441 pounds an hour, but if the MSS emissions that LCRA is requesting are accurate, then the plant would be limited to an average of no more than 602 pounds per hour during "normal" operations. LCRA's MSS Application cannot be considered in a vacuum, given that it requests emission limits that would consume more than half of the plant's annual allowable emissions during less than ten percent of operating hours. The scenario gets even more pronounced under the "final" Flex Permit cap, which limits PM emissions to 4,363 tons per year, and no more than 1,060 pounds per hour. If LCRA's MSS emissions approach the levels for which it is seeking a permit (600 hours x the maximum hourly emissions per unit), the plant could average no more than 426 pounds an hour for the remainder of the year, less than half the Flex Permit's final cap.

Therefore, if TCEQ takes the MSS Permit Application into consideration, as law and common sense dictate, then LCRA would receive significantly lower PM limits as part of this amendment. Put another way, TCEQ should establish substantially lower PM emission limits for "normal operations" than the limits LCRA seeks in this permit amendment.

ii. LCRA's recently issued PAL Permit Cannot be Severed from the De-Flex Application

There is absolutely no question that, in 2002, when TCEQ originally issued Permit No. 51770/PSD-TX-486M3 (the "Flex Permit" that contained the PAL), the two concepts were inseparably bound together. At that time, there was no federal PAL rule or a Texas PAL rule. The TCEQ clearly stated, when it issued this permit in 2002, that: "TCEQ implement[ed] the federal PAL concept through the flexible permit program pursuant to Texas air quality regulations."⁶ Even the venerable law firm currently representing LCRA, Baker Botts, admitted that TCEQ's "legally questionable" PAL rule "is a hybrid PAL approach, modeled on TCEQ's existing flexible permit program."⁷

As EPA noted in its December 6, 2010 letter to Thomas Mason, LCRA General Manager, "FPP's flex permit is distinctive in that it incorporates a plantwide applicability limit (PAL) component... The PAL permit, like the flexible permit, is not a SIP-approved permit, and that situation needs to be addressed." Attachment D. Issuing a stand-alone PAL permit – an action

⁶ Permit No 51770 and PSD-TX-486M, Technical Review Document prepared by the TCEQ's permit engineer, 2002.

⁷ Letter from Matthew Paulson, Baker Botts, LLP, to Ms. Joyce Spencer, TCEQ, regarding Comments of the Texas Industry Project on Proposed NSR Reform Rule, October 31, 2005. Attachment C.

that is currently the subject of a pending motion to overturn – simply perpetuates many of the same problems that exist under the Flex Permit. One example is that the PAL, just like the Flex Permit, is based on allowable emissions rather than actual emissions.

TCEQ can remedy these problems by overturning the Executive Director's April 14, 2010 issuance of Permit No. PAL2, and considering LCRA's requests for any site wide caps under the federal PAL rules. This analysis should be done as part of this permit amendment process (i.e., it cannot be severed and issued as a stand-alone PAL).

C. LCRA's De-Flex Application seeks to "incorporate by reference" dozens of permits-by-rule ("PBRs") and standard permits

LCRA should include the emissions increases associated with each of these authorizations in its application, and include these emissions in ambient impacts analyses.

D. The Application contains no explanation of the chosen BACT limits, or why the chosen emission rates represent BACT

PM limits are particularly troubling and confusing. The Application should justify all proposed limits, contain separate limits for all regulated pollutants, and specify the monitoring method used for compliance with those limits.

E. Certain proposed emission limits are significantly higher than the emission limits contained in LCRA's prior SIP-approved ("legacy") permit

Annual and hourly proposed carbon monoxide limits are far in excess of previously authorized SIP-approved permit limits. Annual and hourly proposed lead limits are higher than previously authorized SIP-approved limits. Hourly and annual proposed interim PM limits are higher than previously authorized SIP-approved emission limits.

F. LCRA Must Explain How Capacity for Unit 3 Was Able to Creep Up by 30 Percent

LCRA should explain how its 4,735 mmBtu/hour (maximum rated capacity) Unit 3 boiler was able to grow into a boiler with 30 percent more capacity than originally permitted. LCRA made conflicting representations in its 2002 Flexible Permit applications: on the one hand LCRA requested and received from the State emission caps based on a maximum heat input rate for Unit 3 that is roughly 30 percent greater than the pre-existing federally-enforceable (i.e., SIP-approved permit's) limit of 4,735 mmBtu/hour; but on the other hand, LCRA represented that the boiler operations and design (including the maximum capacity) was the same as when the unit was first authorized.

TCEQ and LCRA should explain why it is appropriate to base annual and hourly allowables on heat input rates far in excess of the maximum capacity represented in all pre-existing SIP-approved, PSD, or federally-enforceable permits. If LCRA seeks to increase maximum heat input capacity beyond previous maximum representations made in SIP-approved

PSD permits, then the Application should demonstrate that the plant meets BACT and does not violate ambient air quality standards.

G. The Application contains no ambient impacts analyses

TCEQ should require LCRA to submit modeling to demonstrate that its proposed emissions will not cause or contribute to air pollution.

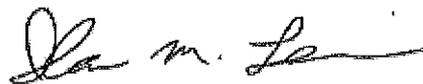
H. Stack tests show LCRA Fayette Plant can meet lower emission levels

The Application incorrectly states that “[f]or SO₂ and PM/PM₁₀/PM_{2.5}, reduced emission limits are being proposed based on stack test data and/or ESP/scrubber data that was unavailable at the time of the original Flexible Permit application submittal.” (Application at 5-1). This statement is simply untrue, because stack test data was available at the time of the original Flex Permit application, showing that the power plant can emit at levels well below those incorporated in its Flex Permit, and that “front-half” (or filterable) PM is approximately half of “total” (filterable plus condensable) PM.⁸

Given LCRA’s inconsistent statements, and considering the available stack test data, TCEQ should impose PM emission limits that meet BACT.

Thank you for your attention to this matter.

Sincerely,



Ilan Levin
Senior Attorney
Environmental Integrity Project
1303 San Antonio St., Ste 200
Austin, Texas 78701
(512) 637-9479
ilevin@environmentalintegrity.org

⁸ Stack test reports from 1979 to September 2002 present actual PM “front-half” emission levels of 0.01 lb/mmBtu (see, e.g., Unit 1, 1979 stack test); 0.02 (Unit 1 “front-half,” September 2002 stack test); 0.04 lb/mmBtu (Unit 1 “total” PM, September 2002 stack test); 0.02 (Unit 2, 1981 stack test); 0.01 lb/mmBtu (Unit 3, Aug. 1988 stack test).

ATTACHMENT A

APR 11 2006

Mr. Steve Hagle
Special Assistant
Air Permits Division (MC-163)
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

RE: U.S. Environmental Protection Agency (EPA) Comments on Texas' State
Implementation Plan (SIP) Revisions for Flexible Permits

Dear Mr. Hagle:

This letter is a follow-up to our meeting in Austin on October 12, 2005, and subsequent discussions concerning revisions to the Texas SIP related to Flexible Permits, Subchapter G of Chapter 116 of Title 30 of the Texas Administrative Code (30 TAC). We have reviewed the rules and identified the items of concern that are described in the Enclosure. We request that you address these concerns and respond to us concerning how these rules meet Federal requirements or identify changes you will make to address our concerns. We will review and take action on these rules prior to taking final action on your New Source Review (NSR) Reform regulations.

If you have any questions, please call Mr. Stanley M. Spruiell of my staff at (214) 665-7212.

Sincerely yours,

Originally Signed
by David Neleigh

David Neleigh
Chief
Air Permits Section

Enclosure

Spruiell/ss:6PD-R:x7212/4/6/06\Comments.Fp.wpd(Spruiell #2 Disk)

Comments on Texas SIP revisions, Subchapter G, Chapter 116, Flexible Permits

1. General Comment

We understand that the Flexible Permit rules apply to major and minor sources and that the rules are designed to provide an exemption from minor NSR requirements if sources do not exceed an allowable emissions cap. In general, the allowable emissions cap assumes Best Available Control Technology (BACT) emission rate plus up to 9% for all units under the permit. Partial Flexible Permits are allowed. We reviewed the Flexible Permit rule as it applies to major sources for consistency with Federal major NSR regulations and 40 CFR 51.160 and 51.161. Texas adopted the Flexible Permit rules prior to finalization of Federal NSR Reform regulations. The final Federal regulations measure emissions increases which result from a modification at existing major sources using the baseline actual-to-projected actual applicability test. The final rules also provide an exemption from the definition of major modification for sources with an actual Plantwide Applicability Limit (PAL). The Court in *New York v. EPA*, 413 F.3d 3, (D.C. Cir. June 24, 2005) struck down provisions of the regulations that provided for exemptions from major NSR applicability that were not based upon actual emissions. The Court held that the NSR modification requirement, which incorporates by reference Clean Air Act (Act) § 111(a)(4), "unambiguously defines 'increases' in terms of actual emissions." Therefore, many of our comments relate to how Flexible Permits are consistent with Federal major NSR requirements.

We have reviewed the Flexible Permit rules as they apply to minor sources and minor modifications for consistency with 40 CFR 51.160 and 51.161.

2. Voiding of Existing SIP-approved Permits

The Texas Commission on Environmental Quality (TCEQ) has stated that all existing permits applicable to the permittee are voided upon issuance of a Flexible Permit. The Flexible Permit becomes the controlling authority for the site, as explained at 10 TexReg 7336:

The applicant for a flexible permit may combine existing permitted facilities, grandfathered facilities, and new facilities into the flexible permit. The flexible permit will then become the controlling authorization for all facilities included in the permit, replacing any existing permits that may have been applicable to all or part of these facilities.

The rules provide for initial issuance of a flexible permit "as an alternative to obtaining a new source review permit" where the source triggers major NSR requirements. We understand that the resulting BACT or Lowest Achievable Emission Rate limits are not enforceable at the new or modified source. Nonattainment NSR (NNSR), prevention of

significant deterioration (PSD) or air quality, minor NSR permits, and permit application representations incorporated by reference into the permits previously issued under the Texas SIP are voided upon issuance of the Flexible Permit. We also understand that these permits are voided without public participation in many cases.

Please explain the legal authority under which TCEQ voids existing federally enforceable NNSR, PSD, and minor NSR permits.

Title I of the Act requires permitting authorities to establish in permits source specific terms and conditions necessary for sources to comply with the requirements of the PSD and NSR programs of parts C and D of the Act. EPA's long-held position is that these permits must remain in effect because they are the legal mechanism through which the underlying PSD or NSR requirements become applicable, and remain applicable, to individual sources.¹ 40 CFR 70.1 requires that each title V source permit assures compliance with all applicable requirements, including any term or condition of any preconstruction permit issued pursuant to programs approved or promulgated under title I of the Act. Amendments to PSD or NSR or minor NSR permits must be made in accordance with the SIP and approved permitting programs. Terms and conditions of construction permits are permanent and remain effective unless changed using title I procedures or a new construction permit is issued. The Federal PAL rule provides a procedure, including public participation, for the elimination of permit limits that were taken to avoid applicability of major NSR and are replaced by a PAL. Federal NSR regulations do not provide for a blanket elimination of emission limits at individual units. Operational flexibility under Federal regulations and policy can be obtained by preapproving future modifications or by setting an actual PAL in order to avoid major NSR netting.

The preamble to the final PAL rule provides:

Can a PAL Eliminate Existing Emission Limitations? An actual PAL may eliminate enforceable permit limits that a source may have previously taken to avoid the applicability of major NSR to new or modified emissions units. Under the major NSR regulations at §§ 52.21(r)(4), 51.166(r)(2), and 51.165(a)(5)(ii), if you relax these limits, the units become subject to major NSR as if construction had not yet commenced on the source or modification. Should you request a PAL, today's revised regulations allow the PAL to eliminate annual emissions or operational limits that you previously took at your stationary source to avoid major NSR for the PAL pollutant. This means that you may relax or remove these limits without triggering major NSR when the PAL becomes effective. Before removing the limits, your reviewing authority should make sure that you are meeting all other regulatory requirements and that the removal of the limits does not adversely impact the National Ambient Air Quality Standards (NAAQS) or PSD

¹See EPA Memorandum from John Seitz, to Robert Hodanbosi, dated May 20, 1999.

increments. We are not taking a position on whether compliance with requirements contained in a PAL permit could serve to demonstrate compliance with certain pre-existing requirements on individual units. The reviewing authority may assess on a case-by-case basis whether any streamlining would be appropriate in the title V permit consistent with part 70 procedures and our existing policies and guidance on permit streamlining.

See also the Federal PAL rule:

40 CFR 52.21(aa)(1) - Applicability, "(iii) Except as provided under paragraph (aa)(1)(ii)(c) of this section, a major stationary source shall continue to comply with all applicable Federal or State requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL."

The same requirement is found in 40 CFR 51.165(f)(1)(iv) and 51.166(w)(1)(iii).

The EPA has also addressed supersession of existing NSR permit requirements by title V permits. See May 20, 1999, letter to Robert Hodanbosi:

It is the Agency's view that title V permits may not supersede, void, replace, or otherwise eliminate the independent enforceability of terms and conditions in SIP-approved permits. To assure compliance with "applicable requirements" such as SIP-approved permits and conditions, title V permits must record those requirements, but may not eliminate their independent existence and enforceability under title I of the Clean Air Act (i.e., may not supersede them).

See also White Paper for Streamlined Development of part 70 permit Applications, Lydia Wegman, July 1995, (White Paper #1) which recommends an efficient procedure for revising NSR permits during title V review to eliminate obsolete or environmentally insignificant terms in NSR permits. See also, Approval of Wisconsin Construction Permit Permanency SIP Revision 71 FR 9934, April 28, 2006, and Notice of Deficiency for Clean Air Act Operating Program in Wisconsin, 69 FR 10167, March 4, 2004.

Our review of the Flexible Permit rules indicates that the voided NSR permits are federally enforceable terms and conditions which may be revised only through approved SIP procedures.

3. Definition of Modification

Please distinguish between the definition of "major modification" at 30 TAC 116.12(11) in Subchapter A, Nonattainment and Prevention of Significant Deterioration Review

Definitions, and the definition of "modification of an existing facility" at 30 TAC 116.10(11) of Subchapter A, General Definitions. The definition of "modification of existing facility" states:

Any physical change in, or change in the method of operation of, a facility in a manner that increases the amount of any air contaminant emitted by the facility into the atmosphere or that results in the emission of any air contaminant not previously emitted. The term does not include:

a physical change in, or change in the method of operation of, a facility where the change is within the scope of a flexible permit or a multiple plant permit;
or

Under the current Texas SIP, a permit amendment is required in order to vary from any representation or permit condition if the change will cause: (A) a change in the method of control of emissions; (B) a change in the character of the emissions; or (C) an increase in the emission rate of any air contaminant.

Please clarify whether the exemptions from the requirement to obtain a permit amendment in the submitted definition of "modification of an existing facility" apply to significant project emission increases or significant net emission increases at major sources or major modifications. Please explain how exemptions in the definition of "modification of an existing facility" relate to major modifications. We believe these definitions as written are vague and may be interpreted to provide an exemption to major NSR applicability.

4. Consistency with Federal Major NSR Requirements

Because Flexible Permits become the controlling authorization for major sources and authorize the source to make modifications without a permit amendment as required by the current SIP, the rules, as they are applicable to major sources, must be consistent with Federal NSR requirements and the PAL rule. We note that the rules eliminate permitting vehicles necessary to demonstrate netting for major sources. We have identified the following list which discusses some of the inconsistencies between the Flexible Permit rules and Federal regulations. Please provide information to explain how the following requirements are met under the Flexible Permit rules:

- A Please explain how the revisions meet the requirements of 40 CFR 51.160 to provide procedures that enable TCEQ to determine that modifications authorized under these rules will not result in (1) a violation of applicable portions of control strategy; or (2) interference with attainment or maintenance of a national standard in the State in which the proposed source (or modification) is located or in a neighboring State.

- B. The Flexible Permit emission cap is based upon allowable emissions rather than actual emissions. There are no regulatory requirements that the cap be set below actual emissions. The rules do not ensure that the emissions cap will be set at a level that does not trigger major NSR applicability for major sources or major modifications based upon the baseline actual to projected actual calculation in the State's NSR rules. Please explain how the flexible permit rules are inconsistent with the Federal PAL rule at 40 CFR 52.21(aa)(6).
- C. The rule allows an implementation schedule to install required BACT controls which may last for many years. The rule also allows sources to increase the emission cap for sources that "fail to install the additional control equipment as provided by the implementation schedule." How does the rule ensure that the emission cap is set below actual emissions during these periods? Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(6) and (11). Please explain whether a Flexible Permit always assumes current BACT in calculating the emission cap.
- D. The Flexible Permit authorizes modifications that do not exceed the emission cap. NSR compliance is required only upon initial issuance of the permit. Please explain how the rule ensures that modifications subject to major NSR and the public participation requirements of Part 51 are reviewed. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(5) and (11); and 51.161.
- E. For sources without a PAL, major NSR applicability must be determined by monitoring actual emissions on a unit by unit basis (rather than by compliance with the emissions cap) consistent with TCEQ's major NSR rules for baseline actual to projected actual emissions calculations. Please explain how the rule ensures that major sources determine major NSR applicability on a unit by unit basis. Our review indicates that the monitoring requirements from the Flexible Permit rule at §116.715(c)(6) requires "information and data sufficient to demonstrate continuous compliance with the emission caps and individual emission limitations contained in the flexible permit shall be maintained in a file at the plant site and made available at the request of personnel from the commission or any air pollution control program having jurisdiction." Please explain how the rule provides for monitoring, recordkeeping and reporting necessary to determine project emission increases and to enforce major NSR requirements on a unit by unit basis. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(a)(2)(iv)(a) through (d), and (f); 52.21(aa)(12) through (14).
- F. Please explain how the public participation requirements of Part 51 and the PAL rule are met by the Flexible Permit rules. Under Chapter 39 of the TAC,

initial issuance of and amendments to flexible permits are exempt from public notice requirements unless the action involves new construction or a modification that results in emissions increases above Texas' permits by rule limits (250 tons per year (tpy) of carbon monoxide, 250 tpy of nitrogen oxides, 25 tpy of volatile organic compounds, sulfur dioxide, or particulate matter less than 10 micrometers, or any other air contaminant except carbon dioxide, water, nitrogen, methane, ethane, hydrogen and oxygen). These provisions are inconsistent with Federal requirements which require modifications of existing sources to be subject to a 30-day notice and comment period and for the permitting authority to provide public information including the agency's analysis of the effect of the construction or modification on ambient air quality, including the agency's proposed approval or disapproval. These requirements apply to major and minor sources. Please provide a rationale for exemptions from these requirements and the current SIP. Please explain how the Flexible Permit rules are consistent with 40 CFR 51.161 and 52.21(aa)(5) and (11).

- G. The Flexible Permit rules allows sources to exclude units at a facility from the permit. Federal rules do not allow for partial PALs. Note that the Federal PAL rule requires that all units at a facility must be subject to the plantwide limit. See 40 CFR 52.21(aa)(6)(i) through (ii). Emission increases and decreases at all units at the facility must be considered to determine major NSR applicability. How does the Flexible Permit provide that increases and decreases are quantified, determined to be contemporaneous, and made practically enforceable for sources that are not subject to a PAL? Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(a)(2)(iv)(a) through (d) and (f).
- H. There is no requirement in the Flexible Permit rules that startup, shutdown and malfunction emissions must be included in determining compliance with the emission cap. This is inconsistent with the Federal PAL rule. Please explain how the Flexible Permit rules can ensure that non-routine emissions are not masked by the emission cap. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(7)(iv).
- I. There is no requirement in the Flexible Permit rules that compliance with the emission cap is determined on a 12-month rolling average, as required by the Federal PAL rule and EPA policy. We have reviewed Flexible Permits that base compliance on a calendar basis. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(4)(i)(a). Please explain how enforcement of Flexible Permits on a calendar year basis is enforceable as a practical matter.
- J. There is no requirement in the Flexible Permit rules that the owner or operator

must convert monitoring data to monthly and annual emission rates based upon a 12-month rolling average for each month. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(4)(i)(a) and 52.21(aa)(7)(vi).

- K. There is no requirement in the Flexible Permit rules that monitoring to determine compliance with the cap must be based upon continuous emissions monitoring systems, continuous emissions rate monitoring systems, predictive emissions monitoring system, continuous parameter monitoring system, or emission factors, or an equivalent method as approved by the permitting authority, as is required by the Federal PAL rule. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(12)(ii)(a) through (d).
- L. There are no requirements in the Flexible Permit rule for semi-annual reports or deviation reports as required by the Federal PAL rule. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(14)(i) through (ii).
- M. The record retention requirement in the Flexible Permit rules is for two years. This is inconsistent with the Federal PAL rule and title V which require five year recordkeeping. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(13)(ii).
- N. Are short-term limits under the emission cap required by the Flexible Permit rules? Please explain how short-term limits are calculated and how they ensure attainment and maintenance of the NAAQS. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(1)(iii).
- O. The Flexible Permit emission cap may be increased by 9% of total emissions, called an Insignificant Emissions Factor. The Flexible Permit rule in § 116.718 states, "An increase in emissions from operational or physical changes at an existing facility covered by a flexible permit is insignificant, for the purposes of state new source review under this subchapter, if the increase does not exceed either the emission cap or individual emission limitation. This section does not apply to an increase in emissions from a new facility nor to the emission of an air contaminant not previously emitted by an existing facility." Please explain how this definition is distinguishable from the terms "significant" and "insignificant" used elsewhere in your rules. We believe these terms must be clearly distinguishable to facilitate compliance and enforcement of the rules. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(b)(23) and 52.21(aa)(6)(i).

5. Minor Sources

We have reviewed the Flexible Permit rules as they apply to minor sources for

ATTACHMENT B



Carl Edlund/R6/USEPA/US

10/25/2010 07:26 PM

To: Al Armendariz/R6/USEPA/US@EPA

cc: Thomas Diggs/R6/USEPA/US@EPA, Lawrence Starfield/R6/USEPA/US@EPA

bcc:

Subject: Re: LCRA

I wasn't at the meeting but a couple of thoughts:

- LCRA partnered with EPA and TCEQ to explore options for permit flexibility before federal rules were established.

- Therefore OAQPS may be very sensitive about correspondence..recommend running it by Harnett.

Sent by EPA Wireless E-Mail Services

Al Armendariz

----- Original Message -----

From: Al Armendariz

Sent: 10/25/2010 07:42 PM EDT

To: Lawrence Starfield; "Carl Edlund" <edlund.carl@epa.gov>; Thomas Diggs; Jeffrey Robinson; "John Blevins" <blevins.john@epa.gov>; "Suzanne Murray" <murray.suzanne@epa.gov>; Suzanne Smith; David Garcia; "Layla Mansuri" <mansuri.layla@epa.gov>

Cc: "David Gray" <gray.david@epa.gov>

Subject: LCRA

Larry,

I think we should respond to LCRA about today's meeting, with a letter addressed from me to their CEO, with a cc: to Henry and their other attendees.

It sounds like Pam is advising them not to perform an examination of their operational and permitting history since getting a flex permit. Nor to get the commitment to get into the SIP memorialized in their title v permit.

I suppose that isn't surprising, considering that in her role representing BCCA and other folks suing us, Pam is in charge of making arguments that there is nothing wrong with flexible permits.

In the letter to LCRA, we should thank them for the meeting, say that it was a positive step forward, and acknowledge that LCRA presented information that appears to show that emissions reductions are taking place.

At the same time, I think we need to make clear that all companies need to be in an enforceable mechanism to true-up their permits,

We should then state that there are three routes available right now for this to happen: our audit, acceptance of the FHR process, direct negotiations with John under the enforcement side of the house.

Permit holders not on one of these paths, really soon, will be subject to Title V and enforcement tools, perhaps as soon as by the end of the year.

We might want to stress the rather quick nature of the Title V minor revision. Perhaps, if they prefer, we can offer to memorialize the same commitment to true-up in an AO from EPA to LCRA.

Also, we can remind them that those companies that follow the process we have worked out with FHR or follow the federal audit will continue to have TCEQ serve as their permitting authority under both NSR and Title V, and they get protection if we are petitioned to reopen their Title V permit.

For companies not on an enforceable path, they run the risk of EPA having to use its Title V authorities, which could make EPA the Title V permitting authority for the facility.

Also: John-- did they have internal counsel at the meeting? You and Suzanne might want to pull LCRA's materials you collected under the 114s, and spend an hour looking them over. Based on what we heard at the meeting about boiler tubes, call LCRA and give them a frank discussion about the agency's ongoing national enforcement initiative for NSR and coal-fired EGUs, and perhaps suggest that there are huge NSR benefits to coming in under the audit. With a stroke of a pen, all that tube nonsense can go away.

Thanks to all.

AI

AI Armendariz
Regional Administrator
U.S. EPA
Region 6
armendariz.ai@epa.gov
office: 214-665-2100

ATTACHMENT C

BAKER BOTTS LLP

005580.0135

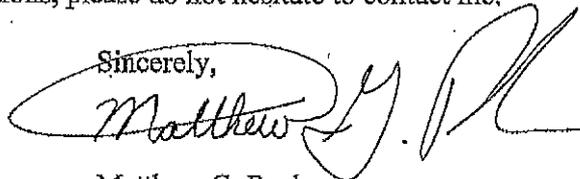
October 31, 2005

Ms. Joyce Spencer, MC 205
Texas Register Team,
Office of Legal Services,
Texas Commission on Environmental Quality
P.O. Box 13087
Air Permits Program
Austin, Texas 78711-3087

Re: Comments of the Texas Industry Project
Proposed NSR Reform Rule
Rule Project Number 2005-010-116-PR.

Enclosed please find the comments of the Texas Industry Project ("TIP") on the above proposal. Attachment A is a list of TIP-member companies. We have also included more detailed comments in Attachments B and C. TIP appreciates the opportunity to comment on the proposed rule. If you have any questions, please do not hesitate to contact me.

Sincerely,



Matthew G. Paulson
For the Texas Industry Project

Enclosure

cc: Susan Moore
Steve Hansen
Matt Kuryla

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October 31, 2005

**TEXAS INDUSTRY PROJECT
COMMENTS ON TCEQ PROPOSED FEDERAL NSR REFORM RULE**

Rule Project Number 2005-010-116-PR

The Texas Industry Project ("TIP")¹ appreciates the opportunity to submit these comments on the Texas Commission on Environmental Quality's ("TCEQ's") proposed rules implementing the federal New Source Review Reform ("Federal NSR Reform") rule promulgated by the U.S. Environmental Protection Agency ("EPA"). 67 Fed. Reg. 80,186 (December 31, 2002). TIP strongly supports the goals of Federal NSR Reform, and urges TCEQ to integrate all features of the EPA rule, including the federal approach to the Plantwide Applicability Limit ("PAL") flexibility option. TIP's detailed comments are set forth below, and in the attached redline markup of TCEQ's proposed rule language (Attachment B).

I. General Comments

A. TCEQ Has Historically Followed EPA Rules and Guidance in Applying Federal NSR, and Should Continue this Approach in Implementing Federal NSR Reform

1. Federal NSR is an EPA permitting process imposed on new air emitting sources and modifications that exceed EPA's major source thresholds. EPA's Federal NSR Reform streamlined the way that plant modifications are evaluated against EPA's thresholds. Nothing in EPA's Federal NSR Reform package would alter the comprehensive and protective Texas NSR program administered by TCEQ under the Texas Clean Air Act ("TCAA").
2. All projects, both those that trigger Federal NSR and those that do not, are subject to the TCAA air quality permitting rules, which independently apply the TCAA requirements of Best Available Control Technology ("BACT") and protection of human health and the environment, and which contain a well-developed system of incentives for better operation and emissions control.
3. Federal NSR applicability has traditionally been kept separate from the TCAA review process. TCEQ rules, guidance and interpretations regarding Federal NSR have remained consistent with federal rules, guidance and interpretations on the separate issue of which projects trigger Federal NSR.

¹TIP is composed of 53 companies in the chemical, refining, oil and gas, electronic, forest products, terminal, electric utility and transportation industries with operations in Texas. A list of TIP member companies is attached (Attachment A).

4. TCEQ can and should continue to address Federal NSR in a manner consistent with EPA's approach.

B. Substantive Departures from EPA's Federal NSR Rules Introduce Confusion and Inconsistency in Applying EPA Guidance

1. Many companies with operations in Texas also have operations in other states. Substantive changes from Federal NSR Reform will create confusion in applying a large body of EPA guidance, and inconsistencies for companies with multi-state operations.
2. There is no basis for rejecting EPA's reforms, developed with comment in over 50 stakeholder meetings across the country. Introducing different, less flexible triggers for Federal NSR generates an inherent competitive disadvantage for companies with multi-state operations who choose to operate in Texas.

C. The D.C. Circuit's Approval of EPA's Federal NSR Reforms is Strong Support for Implementation of the Reforms in Texas Without Substantive Changes

1. In *State of New York, et al. v. EPA*, No. 02-1387, June 24, 2005, the U.S. Court of Appeals for the D.C. Circuit upheld EPA's actual to Actual-to-Projected Actual test and Plantwide Applicability Limit ("PAL") reforms, among others. The court rejected EPA's Pollution Control Project and Clean Unit tests, and these rejected reforms have properly been omitted from the TCEQ proposal.
2. The D.C. Circuit's independent judicial validation of EPA's remaining reforms creates strong support for implementation of Federal NSR Reform in Texas without substantive changes.

II. Specific Comments

A. TIP Supports the Decision to Include the Actual-to-Projected Actual Test in the Proposed Rule

1. The TCEQ rule package includes an Actual-to-Projected-Actual test for triggering federal NSR at all sites. Previously, this test was restricted to electric generating facilities under TCEQ's informal application of EPA's 1992 "WEPCO" rule. TIP strongly supports TCEQ's decision to include the Actual-to-Projected-Actual test in the proposal.
2. Implementing the Actual-to-Projected-Actual test will help focus federal NSR on truly significant emission increases, and eliminate many of the anomalies with addressing "paper increases" via the existing Actual-to-Potential test.

B. TCEQ Should Adopt the Federal Plantwide Applicability Limit Option Without Substantive Revision

1. The Federal PAL option provides operational flexibility and regulatory certainty while encouraging emissions reductions and pollution prevention.
 - a. A PAL is a plantwide cap (thus, "Plantwide" Applicability Limit) that allows sites to replace the case-by-case NSR applicability analysis of physical or operational changes in favor of a simple plantwide emissions cap that functions as a trigger level for Federal NSR.
 - b. As part of the public process establishing Federal NSR Reform, EPA reviewed the environmental benefits associated with Federal PAL through several pilot permitting projects. *See 67 Fed. Reg. 80,186, 80,207 (Dec. 31, 2002).*
 - i. EPA concluded that significant environmental benefits occurred for each of the permits reviewed. *Id.*
 - ii. According to EPA, growth in emissions will tend to shift to cleaner units under the Federal PAL. *Id.*
 - c. Adding the Federal PAL will encourage innovations by simplifying authorizations. Sites with a Federal PAL will still obtain TCAA authorization for any changes, or apply qualified facility flexibility, a flexible permit or another TCAA mechanism.
 - d. The United States Court of Appeals for the D.C. Circuit specifically upheld the Federal PAL in *State of New York, et al. v. EPA*, No. 02-1387, noting that the petitioners failed to refute EPA's assessment of the environmental benefits of the federal PAL.
2. Implementing the Federal PAL is consistent with, and would not conflict with, other aspects of the state NSR permit program.
 - a. The federal PAL only addresses the narrow issue of triggering Federal NSR in connection with a project. All Texas air quality permitting requirements would remain unchanged.
 - b. Existing MAERT limits in permits would continue in effect and attainment requirements would continue to apply, including federal rules, area-specific Mass Emissions Cap and Trade ("MECT") caps, HRVOC caps, Chapter 117 requirements, and all other targeted control programs.
3. The proposed BACT criterion for a PAL defeats the purpose of a simple Federal PAL, requires split procedures for assessing Federal NSR, and is legally questionable.

- a. TCEQ's proposal is a hybrid PAL approach, modeled on TCEQ's existing flexible permit program. Under the proposal, sites would be required to apply BACT controls to any facilities entering a PAL cap.
 - b. *Plantwide* applicability limits are intended to operate site-wide. Few Texas sites have been able to secure full plant-wide BACT determinations. Many flexible permits exist, but few flexible permits cover an entire plant-site, in large part due to the practical difficulty of applying BACT across an entire plant-site. This concern is especially true in the case of larger, more complex plant-sites with a wide array of source types.
 - c. EPA has raised concerns on recent proposed permits regarding the approval of PALs covering less than a complete plant-site.
 - d. As a consequence of the proposed hybrid approach, the proposed rule contains a provision (Section 116.12(16)) subjecting to a traditional Federal NSR applicability review those portions of a project outside of the PAL coverage, while portions of the project within the PAL would be evaluated under the separate PAL provisions. There is no legal authority, and no practical guidance, for applying the netting, actual-to-actual, or other Federal NSR applicability tools to a portion of a plant-site or project.
 - e. The hybrid approach introduces a significant practical uncertainty into the process, and is legally questionable in light of the D.C. Circuit's recent affirmance of EPA's structure and the ambiguous status of split sites and projects. Under the federal rule, PALs operate plantwide. TCEQ should not turn the federal PAL into a complex and uncertain program that splits sites and projects for purposes of Federal NSR.
4. The proposal allows PAL applicants who are current flexible permit holders to use up to 10-year BACT. New PAL applicants, however, are required to use current BACT. This distinction introduces a strong inequity. If the PAL-wide BACT concept included in the proposed rule were retained, 10-year BACT, not current BACT, would be the proper standard for *all* applicants. 10-year BACT represents the well-controlled facility test established by the Texas Legislature for Qualified Facility Flexibility, a similar permit streamlining mechanism. Tex. S.B. 1126, 74th Leg., R.S. (1995). Moreover, the December 31, 2006 deadline for current flexible permit holders to apply for a PAL based on their earlier BACT review may not be sufficient, depending on the timing of rule adoption.

ATTACHMENT D

EPA letter to TCEQ

Q3: Compliance with "legacy permits": EPA's letter states that it expects our facility to comply with the SIP-approved permit conditions and terms that existed prior to issuance of our flexible permit. What does that mean for my facility?

Response: EPA maintains that SIP permits issued to a source remain effective until amended, modified, or revoked in accordance with the SIP-approved methods for effecting such permit changes. This means that all SIP permit conditions and terms, including any representations upon which the SIP permit was issued, are not, and have not been, superceded, voided, or replaced by the terms, conditions, or permit application representations associated with a flexible permit. Owners and operators of sources included in a TCEQ flexible permit should review their previously issued SIP permits ("legacy permits") to ensure that they are complying with those terms, conditions, and representations. To the extent that such conditions, terms and representations were rolled over into the flexible permit, then there should be no issue associated with compliance obligations and the source should simply continue to comply with those requirements. However, EPA understands that there may be some instances where specific terms, conditions, or representations made in the legacy permits have been "modified" or "changed" by the flexible permit. Therefore, in accordance with EPA's policy entitled "Revised Guidance on Enforcement During Pending SIP Revisions," (<http://www.epa.gov/compliance/resources/policies/civil/caa/stationary/enf-siprev-rpt.pdf>) dated March 1, 1991, EPA will assess its enforcement options on a case-by-case basis.

EPA 2007 letter to flexible permit holders
(excerpt)

well as the representations on which they are based, can be amended through the permitting process. See 30 TEX. ADMIN. CODE § 116.116(b). This does not indicate the improper elimination of major NSR permit terms, but rather appropriate amendment following case-by-case review.

Intervenors further allege that this and other Flexible Permits void the terms of pre-existing permits. Intervenors Br. at 24. They do not. It is common for a newly-issued permit, whether it be a traditional NSR permit or a Flexible Permit, to aggregate several pre-existing permits. When consolidating the pre-existing permits, TCEQ will void pre-existing permit numbers. However the terms of those pre-existing authorizations and the representations on which they are based persist—unless they are amended. See 30 TEX. ADMIN. CODE § 116.116(b). TCEQ does not and cannot void the terms of the pre-existing permits. Intervenors are correct that the voiding of pre-existing permit terms (*i.e.*, eliminating a term without a proper amendment) would violate Texas's SIP-approved regulations. See Intervenors Br. at 24 (citing 30 TEX. ADMIN. CODE § 101.221(d)); *see also* 30 TEX. ADMIN. CODE § 116.116(b). This proves Texas's point, that the Program does not allow for the elimination of major NSR permit terms except as properly authorized through amendment.

State of Texas et al v. US EPA,
Case No. 10-60614 (Fifth Circuit),
Reply Brief for Petitioners State of
Texas (March 17, 2011) (excerpt)

Mr. Hendrickson
August 20, 2003
Page 2

LCRA is also requesting that previously issued permits 3010 and 9233 be voided. Permit 3010 authorizes FPP Units 1 and 2 and the associated fuel handling system. Permit 9233 authorizes the operation of FPP Unit 3. With the issuance of flexible permit numbers 51770 and PSD-TX-486M3, which include a plant-wide applicability limit for the entire facility, the maximum allowable hourly and annual emission rates for the emission sources contained in permits 3010 and 9233 are no longer applicable. The flexible permits, which include new maximum allowable hourly emission rates for all boilers, material handling, and permit-by-rule authorizations, as well as new annual caps for all boilers and material handling emission sources, combine all point sources into one hourly and annual emission limit. In addition, the previous special conditions, operational requirements, fuel specifications, and recordkeeping and reporting requirements in permits 3010 and 9233 have been included in the flexible permits. Thus, the flexible permits make the conditions and emission limits in permits 3010 and 9233 obsolete.

Thank you for your assistance in this matter. If you have any questions or a need for additional information, please contact Joe Benley at (512) 473-3272 or Monte Gottier at (979) 349-8340.

Sincerely,



Dudley C. Philand, Jr., P.E.
Executive Manager, Wholesale Power Services

Attachments

cc: David Neleigh, EPA Region 6
Barry Kalda, TCEQ Region 11

LCRA 2003 letter to TCEQ requesting
alteration re "Voiding" of prior permits
(excerpt)



TEXAS AIR CONTROL BOARD

A CONSTRUCTION PERMIT
IS HEREBY ISSUED TO

LOWER COLORADO RIVER AUTHORITY
AUTHORIZING CONSTRUCTION OF
4735 MW BW/HR Lignite Fired Steam Generator
Unit #3

TO BE LOCATED AT
Lagrange, Fayette County, Texas
Lat. 30°55'02" Long. 96°45'02"

and which is to be constructed in accordance with and subject to the Texas Clean Air Act, as amended (Article 4477-5, V.A.T.S.) and all Rules, Regulations and Orders of the Texas Air Control Board. Said construction is subject to any additional or amended Rules, Regulations and Orders of the Board adopted pursuant to the Act, and to all of the following conditions:

1. This permit may not be transferred, assigned, or conveyed by the holder and applies only to the location specified herein.
2. This permit is automatically void if construction is not begun within one year of the date of issuance.
3. This permit is automatically void when an operating permit is issued or denied.
4. The facility covered by this permit shall be constructed as specified in the application for permit to construct.
5. The Board shall be notified prior to the start-up of the facility authorized by this permit in such a manner that a representative of the Texas Air Control Board may be present at the time of start-up.
6. The Board shall be notified prior to the start of any required monitoring of the facility authorized by this permit in such a manner that a representative of the Texas Air Control Board may be present during monitoring.
7. This permit is not a guarantee that the facility will receive an operating permit at the end of the construction period, nor does it absolve the holder from the responsibility for the consequences of non-compliance with all Rules and Regulations and orders of the Texas Air Control Board or with the intent of the Texas Clean Air Act.
8. Emissions from this facility must not cause or contribute to a condition of air pollution as defined in Section 1.01 of the Texas Clean Air Act or violate Section 4.01 of the Texas Clean Air Act, Article 4477-5, V.A.T.S. If the Executive Director of the Texas Air Control Board determines that such a condition of violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition of violation.
9. Special Provisions: See attachments labeled "General Provisions C-9233" - 1-5.
Acceptance of this permit constitutes an acknowledgment and agreement that the holder will comply with all Rules, Regulations and Orders of the Board issued in conformity with the Act and the conditions precedent to the granting of this permit. Failure to comply with all special provisions of this permit will subject the holder to the enforcement provisions of the Texas Clean Air Act, Article 4477-5, V.A.T.S.

PERMIT NO. C-9233 DATE 12-22-83


EXECUTIVE DIRECTOR
TEXAS AIR CONTROL BOARD

Deputy Director
(Control & Prevention)



A PERMIT IS HEREBY ISSUED TO
Lower Colorado River Authority
AUTHORIZING THE CONSTRUCTION AND OPERATION OF A
Sam Seymour (Fayette Power Project)
LOCATED AT
La Grange, Fayette County, Texas
LATITUDE 29° 55' 03" LONGITUDE 096° 45' 03"



- 1 Facilities covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code § 116.116 (30 TAC § 116.116)]
- 2 Voiding of Permit. A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of date of issuance, discontinues construction for more than 18 consecutive months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant a one-time 18-month extension of the date to begin construction. [30 TAC § 116.115(0)(2)(A)]

Permit No. 51770/PSD-TX-486M3 (2002)
(excerpt)

additional post-combustion controls. Thus, the final hourly cap should only reflect the burner modifications required for the SIP and the interim caps.

5.4 PM/PM₁₀ Caps

5.4.1 Annual Caps

The Unit 1 and 2 boilers are subject to NSPS Subpart D, and the Unit 3 boiler is subject to NSPS Subpart Da, which have 0.10 and 0.03 lb/mmBtu PM limits, respectively. The test method specified by EPA for determining compliance with these limits does not include the back-half PM catch; however, the TNRCC requires the back-half to be included in the emission limit in the air permit, including emissions caps for flexible permits. No stack test data exists for Unit 1 and 2 that includes back-half PM. The initial compliance test for Unit 3 included back-half PM, but no recent test data exists. The front-half data that does exist shows compliance with the applicable NSPS with a margin of about a factor of two for all three units. The combined front and back-half PM is estimated to be about twice the front-half alone, or approximately equal to the NSPS levels. Thus, the NSPS limits have been used to provide the best estimate of current actual front-half plus back-half PM/PM₁₀ emissions from the FPP boilers. These factors were applied to the actual heat input for each unit for the 12-month period ending November 1999, then summed to calculate current actual PM/PM₁₀ emissions for the three units combined. A 14 tpy insignificant factor (the PSD PM₁₀ significance level of 15 tpy – 1 tpy) was then added to the actual emissions rate to obtain the initial annual cap.

FPP PM Cap for Flexible/PAL Permit 6/28/02

Annual Caps:

Initial Cap Basis:

1. Insufficient PM stack test data is available to calculate a reliable actual emission rate for use as a permit limit. Data is dated and does not include back-half for Units 1 & 2. Therefore, actual emissions are based on actual firing rate and NSPS limits, which is the best estimate of actual emission rates (front + back half).
2. For Units 1 and 2, use NSPS D limit of 0.1 lb/mmBtu applied to actual 12-month heat input for period ending Nov. 1999.
3. For Unit 3, use NSPS Da limit of 0.03 lb/mmBtu applied to actual 12-month heat input for period ending Nov. 1999.
4. 14 tpy insignificant amount added to cap.

PM cap contributions (current actual emissions):

Unit 1: 44,156,272 mmBtu/yr x 0.1 lb/mmBtu x 1ton/2000lb = 2,207.8 tpy
 Unit 2: 44,786,985 mmBtu/yr x 0.1 lb/mmBtu x 1ton/2000lb = 2,239.3 tpy
 Unit 3: 37,766,075 mmBtu/yr x 0.03 lb/mmBtu x 1ton/2000lb = 566.5 tpy
 Total Actual: 5,013.7 tpy

Initial Cap = 2,207.8 + 2,239.3 + 566.5 + 14 = 5,027.7 tpy

We could have the same issue for PM/PM10. And that cap will be much higher, with only a 14 tpy addition to the actuals to determine the cap. That will equate to less than a 1% increase over past actual. You will have to calculate compliance with the PM cap using an emission factor applied to the heat input since there is CEMS. Until the scrubbers are installed on Units 1 and 2, unless you make some other actual physical change that would improve the control efficiency, I would assume you may be using the same emission factor to calculate compliance with the cap that we use to calculate the cap itself. Both these calculations are for "actual" emissions, so it would be hard to justify anything else. Since the 14 tpy that we can add to actual is negligible in this instance, this could restrict actual firing rates to exactly the rates used to calculate the cap. Perhaps there is a strategy that can be used to provide a little relief here. Otherwise, PM could be the most restrictive cap, in which case, you would want to pick a 12 month period that maximizes PM emissions. And that makes it all the more important that this be a 12 month basis rather than a 24 month basis.

Email from Steve Langevin, URS
Corp, to Joe Bentley, LCRA (4/26/02)
(Dkt. 43-2, p. 6) (excerpt)

LCRA FPP PAL Emission Limit Determination Issues

1. Actual emission rates used to determine PAL must be based on same 12 month (or 2 year) period for all facilities (per TNRCC PAL proposal).

I would interpret this to also mean we must use the same year for all pollutants. In other words, we can't use 1999 for all facilities for SO₂ and 2000 for all facilities for CO. If peak year is based on heat inputs, we don't have an issue with this. If peak years are determined from CEMS data, it may not match peak heat input years. And this requirement specifically states we can't use one peak heat input year for Unit 1 and then another year for Unit 2 and/or 3. Thus we will need to select the year with the highest site-wide heat input. Still it is possible, due to differences in emission rates among the three units, that the peak heat input year will not result in peak emission rates for all pollutants. Because the capacity factors are similar for all three units, we can probably ignore this difference.

2. The PAL cannot exceed the current actual emission rates by more than the PSD significance levels for each pollutant.

LCRA has reported actual emission rates to TNRCC each year in its annual Emissions Inventory for FPP. There could be an issue with claiming an actual rate for the PAL that exceeds these previously reported levels. For example, we may wish to permit PM emissions based on the NSPS limit of 0.03 lb/mmBtu, and in previous EIQs, Unit 3 emissions have been reported based on stack test data which shows 0.01 lb/mmBtu. After scrubbers are installed on Units 1 and 2, PM emissions will likely come down, eventually eliminating this concern. However, this will not occur until several years into the life of the PAL permit. LCRA may want to consider doing a stack test to determine current PM levels since no recent test data exists.

3. Emission rates (PAL) must be reduced by any control requirements found in the SIP in nonattainment areas.

Although this says "in nonattainment areas", this requirement is based in part on federal PSD requirements, and it is not limited to nonattainment areas. As such, I think we can assume that the Chapter 117 NO_x limit that applies to FPP is covered by this requirement. Thus, I would interpret this to mean that we would need to apply the NO_x SIP limit of 0.165 lb/mmBtu to the annual heat input selected from the peak operating year. The NO_x cap would then not be allowed to exceed this level. However, the final cap must be set based on the BACT level of 0.11 lb/mmBtu specified by TNRCC. And prior to the proposed burner work and/or the effective date of the Chapter 117 limit, NO_x emissions will not meet a cap based on 0.165. Thus, we will likely need to calculate at least 3 NO_x caps: pre-Chapter 117, post-Chapter 117, and final BACT cap.

4. All facilities must be upgraded to BACT and must be capable of operating at the previous activity level.

The requirement to upgrade to BACT is not effective immediately, and BACT can be phased in. We have preliminary agreement with TNRCC on an approximate schedule for BACT. My interpretation of the second part of this requirement is to mean that you cannot inflate the activity level (e.g., heat input) used to calculate the cap to an unrealistic level in order to inflate the cap to a level that could allow circumvention of the BACT requirement. First, I believe this is an issue only for those pollutants that will require BACT upgrades. If there are no BACT upgrades (i.e., emission reductions) for a pollutant, and we set the PAL based on a peak short term heat input, the resulting PAL would far exceed highest 12 month actual emission rate, which is not allowed. Once again, the primary pollutant of concern is NO_x. TNRCC has given some indication that they will allow the "BACT emission rate" (this would be the final NO_x PAL) to be determined based on the historical maximum daily heat input for each unit. I believe the initial (prior to controls being implemented) NO_x caps would need to be based on actual peak annual heat input such that the magnitude of the PAL is never set at a level that would trigger a PSD review.

5. Installation of controls required by SIP allows for collateral increases in other pollutants.

LCRA anticipates that CO emissions may increase as a result of the burner work being done to reduce NOx emissions for SIP purposes. Both TNRCC and EPA allow for this increase to be exempt from PSD review. At the same time, the PAL requirements dictate that the PAL be set at current actual emission rates (plus an insignificant amount, or 100 tpy for CO) unless the applicant elects to go through a PSD permit review for that pollutant. Considering these two conflicting requirements, how will we set the CO PAL? The best case would be to choose a ppm level projected to be needed or guaranteed by ALSTOM, convert it to a lb/mmbtu equivalent, and then apply it to the agreed to peak 12 month annual heat input. Because there are no additional BACT requirements expected for CO, and the PSD exemption does not eliminate the need to demonstrate that the CO increase will not cause a NAAQS violation, TNRCC may agree to this approach. I don't see any other easily workable method to set the CO PAL.

6. Additional Pollutant-Specific Issues and Conclusions:

NOx. Since the initial NOx cap, prior to controls, will need to be set higher than either the interim (SIP-based) or final (BACT-based) caps, how will we determine this value? Will we strictly look at CEMS data and then set the PAL at this level plus 39 tpy? Or can we select an emission factor and apply it to the actual 12-month peak heat input, which would likely give an annual emission rate that exceeds the rate indicated by the CEMS.

SO2. The same issue exists for the initial SO2 cap as for NOx. Prior to installing the scrubbers on Units 1 and 2, the SO2 cap must be set at past actual levels plus an insignificant amount (39 tpy). Will this be strictly based on CEMS data for the selected peak year(s)? If TNRCC allows the peak daily heat input to be used to calculate the final (BACT-based) NOx PAL, I assume we would propose to use this rate for the final SO2 PAL. We can use this higher heat input for the final PAL because the additional controls will still result in an emission limit that is less than the current actual 12-month peak rates. However, this peak daily heat input cannot be used for the initial (prior to control) PAL because it would result in an allowable emission rate that would exceed the current actual 12-month peak rates and thus trigger a PSD review.

PM. There are no CEMS for PM. There is no recent compliance test data. Thus, current actual emissions are hard to define. Most desirable approach for LCRA is to set final (BACT-based) equal to NSPS limit of 0.03 lb/mmbtu for all three units. This is a reduction in actual emissions for Units 1 and 2, but would be an increase for Unit 3, which is currently doing better than 0.03. Initial cap that will be in place prior to scrubbing Units 1 and 2 must be higher. Can we use a factor that allows some cushion and apply this factor to 12 month actual peak heat input and call this an actual emission rate? What about conflict with past EIQs? Will a compliance test be required when Flex permit is issued? Should LCRA consider testing now to determine what current emission rates are rather than rely on old test data?

CO. All CO issues discussed above under collateral increases.

VOC. Permitted VOC emissions are relatively low, such that a 39 tpy insignificant increase represents a significant increase in operating rates (relative to other criteria pollutants). Probably not a significant issue.

All Pollutants. An alternative to setting PALs at past 10 year actual level is to undergo a PSD permit review for any pollutant that needs a higher limit. For CO and VOC, this is a possible approach if actual levels present operational problems because PSD review would not result in need to add controls for these pollutants. Hourly caps must also be established for each pollutant. At this time, no specific problems are envisioned; however, there has been not discussion with TNRCC as to how much flexibility exists in setting these limits.

06/04/02

TALKING POINTS FOR FLEX PERMIT

- EPA and DOJ have filed lawsuits against 11 coal-fired utility companies over the past few years for violation of New Source Review (NSR) rules. Approximately 50 other utilities have received notices of violation (NOV) or requests for information concerning past capital projects. In Texas, Alcoa has received a NOV from EPA/TNRCC and Marathon Oil is negotiating a flex permit.
- EPA claiming widespread non-compliance involves making "non-routine" modifications resulting in an increase in air emissions without the utility first obtaining permits. Settlement penalties include adding SO₂, NO_x, and PM controls as well as several million dollars in civil penalties and other environmental projects.
- Bush administration ordered 90-day review of NSR last spring but still no reforms announced. Any attempt to relax NSR would be very unpopular with Congress and some states. Legislative NSR reform may be tied to multi-pollutant strategy announced in February (Bush administration's Clear Skies Initiative).
- FPP is seeking a "safe harbor" from NSR enforcement action for future maintenance (superheater replacement) and efficiency improvement projects. FPP activities fit the profile of projects EPA has said triggers NSR (due to cost, frequency, purpose, and nature and scope).
- Permitting tool available at federal level is Plantwide Applicability Limit (PAL). "Flexible" permit is available at State level. A PAL doesn't require emission controls; just setting new limits based on recent emission history. The TNRCC doesn't like the PAL process because doesn't result in "well controlled" unit. It is just a paper reduction. TNRCC will throw in a federal PAL with a state flexible permit though.
- Flex permit is similar to a PAL in that in consideration for future emission reductions, pre-approved maintenance and efficiency improvement projects over a 10-year period will not trigger NSR. Flex permit establishes an emission "cap" for all units based on the highest emissions during any 12-month period over the last 10 years. After 10 years, facility must meet Best Available Control Technology (i.e., SO₂ scrubbers) to establish "well controlled" status.
- Flex permit benefits: (1) eliminates case-by-case project review and establishes "bright line" NSR test; (2) time frames for emission reductions in flex permit may be similar to requirements of other federal legislation (Clear Skies); (3) early SO₂ reduction could generate revenue by selling excess SO₂ allowances (over \$8 million banked already); (4) demonstrates environmental leadership.
- The cost for scrubbing FPP Units 1 and 2 to BACT levels is approximately \$100 million. The level of NO_x reductions required by a flex permit will be available in about 10 days.

Joe Bentley - NOx Cap Calculation

From: <Steve_Langevin@URSCorp.com>
To: <joe.bentley@lcra.org>
Date: 4/26/02 10:11 AM
Subject: NOx Cap Calculation

Joe

I put together a spreadsheet calculating NOx caps with different alternatives. First, I took your spreadsheet that had 1995 through 2001 NOx emission rates in tpy and lb/mmbtu factors shown. I used these two numbers to back calculate mmbtu/yr for each year for each unit. I'm sure there is some round off error due to round off in the two digit lb/mmbtu factors in your spreadsheet, so if you can send me the actual heat inputs, I can refine this.

I assumed that we would need 3 NOx caps: Initial cap, cap after SIP controls are installed, and final cap to meet BACT.

For the initial cap, we have 4 possible options to calculate the cap. First, we must pick a peak period. As I had suspected, the peak emissions periods based on CEMS date is not the same as the peak heat input period. But you may choose either period. If we were only concerned with NOx, obviously you would choose the year with peak emissions. However, we have other pollutants to consider, and for some of those, like PM, where there is no CEMS, we will need to calculate the cap by applying an emission factor to historical heat inputs. So, for PM you would want to use the period with the peak heat input. But as I indicated in my memo that I e-mailed to you yesterday, I believe we are required to use the same period for all pollutants and all 3 units. Then there is the question of whether we can use the highest 12-month out of 10 years or do we have to use the highest 2 year average out of the last 5 years. So this gives 4 possible ways to calculate the initial caps. My spreadsheet includes all 4. There is about a 300 tpy spread from highest to lowest, which is only 1.5% of the value of the cap. And the difference between using the max year vs. the max 2-year is even less. I should point out also that if we are allowed to use the highest 12-months, that could give a slightly higher value than the highest calendar year. If the data is not readily available by month, considering the small difference between the 1-year vs. 2-year, this difference should be even less, and not worth pursuing.

For the Cap after SIP controls, I assumed that we would calculate the cap based on the required SIP level of 0.165 lb/mmbtu rather than the ALSTOM guarantee. You don't know what you will get exactly, and you don't have a guarantee for Unit 3 yet. And the difference is also not great. As the spreadsheet shows, the big decrease is getting from current levels to the SIP levels. I have assumed for this calculation that the cap cannot exceed the prior "actual" NOx emission rate that the facility would have had if it was operating at the SIP levels. This is a typical PSD applicability requirement imposed to prevent facilities from taking credit for decreases due to required SIP controls. I don't see it presenting any real constraints because it is calculated based on 0.165 while we assume you will meet 0.15 lb/mmbtu. I show the maximum expected NOx emissions after controls (from your spreadsheet) and it provides a comfortable margin of compliance with this interim cap.

Finally, I show the final cap. This is simply the number from your spreadsheet that is calculated based on the historical daily maximum from each unit. When we last talked, I said I thought we would be required to use the historical daily maximum from the same year for each unit. But I'm not sure I still think that. That requirement is tied to the PSD requirement that says that we can't increase emissions by more than 40 tpy above prior actual rates. And that has nothing to do with how TNRCC allows you to calculate the BACT level.

Take a look at the spreadsheet and call me with anything you want to discuss. If you can provide me with stack test data for other pollutants (perhaps that only means PM) and actual heat input (rather than my back calculation), I will put together some similar spreadsheet for the other criteria pollutants. I think I have SO2 CEMS data.

(See attached file: NOx Cap Calculation.xls)

file://C:\TEMP\GW\00003.HTM

4/29/02

Joe Bentley - More on NOx and SO2 caps

From: <Steve_Langevin@URSCorp.com>
To: <joe.bentley@lcra.org>
Date: 4/26/02 2:29 PM
Subject: More on NOx and SO2 caps

Joe

I did a little more with the cap investigation using the baseline NOx and SO2 emissions spreadsheet that you sent me some time ago. Got some pretty interesting results. These were monthly emissions data, so that allowed calculation of 12 month rolling totals and not just the calendar year totals. Even looking at the 24-month averages that you already had calculated, we get some pretty significant differences. For NOx, the peak 12 month average emission rate is over 21,000 tpy, which is more than 1100 tpy greater (about 5%) than the calendar year maximum. And it's also 900 tpy more than the peak 24-month average in your spreadsheet. The difference for the SO2 data is also about 5%.

Another thing I did with this is I noted on the SO2 sheet which 12-month period was maximum for NOx and vice versa. They don't coincide, and this comparison shows you how much you lose from one pollutant when you select the peak period based on another pollutant. You loose about 1000 tpy of NOx (5%) if you select the peak 12 months based on the SO2 maximum. I think it's a little less for SO2, but still significant. Since this is significant, I'd like to get month by month heat inputs as well.

These are significant differences since they effectively make a 5% difference on the annual operating rate. So, that tells us we don't want to just use the 24-month average out of last 5 years if we don't have to. So we should push TNRC to push EPA to agree to this part of the PAL Proposal.

(See attached file: baseline.xls)

Thanks
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(512) 454-8807 (fax)

Joe Bentley - VOC

From: <Steve_Langevin@URSCorp.com>
To: <joe.bentley@lcra.org>
Date: 4/26/02 5:24 PM
Subject: VOC

Joe

The Unit 3 renewal uses a VOC factor of 0.06 lb/ton. Is this the same factor used for Units 1 and 2? Have you ever tested for VOC, and if so, can you provide the data? Even though I ask that, I'd prefer to use the emission factor (assuming it is higher) to establish the cap. VOC emissions aren't high, so I don't think TNRCC is going to pay a lot of attention to it.

I had some thoughts on this as well. For VOC, if we use an emission factor to calculate actual emissions to set the cap, and then you determine compliance with the cap using the same emission factor, basically, there is no room to increase the operating rate by keeping the emissions low, since the emissions factor is assumed to never change.

For VOC, this may not be a problem. If the emission factor is the same for units 1 and 2, we will have actual VOC emissions of around 500 tpy. So the cap would be 500 tpy plus 39 tpy. In the case of VOC, that represents an 8% increase in operating rate compared to past actual. That might be better than we have for most.

We could have the same issue for PM/PM10. And that cap will be much higher, with only a 14 tpy addition to the actuals to determine the cap. That will equate to less than a 1% increase over past actual. You will have to calculate compliance with the PM cap using an emission factor applied to the heat input since there is CEMS. Until the scrubbers are installed on Units 1 and 2, unless you make some other actual physical change that would improve the control efficiency, I would assume you may be using the same emission factor to calculate compliance with the cap that we use to calculate the cap itself. Both these calculations are for "actual" emissions, so it would be hard to justify anything else. Since the 14 tpy that we can add to actual is negligible in this instance, this could restrict actual firing rates to exactly the rates used to calculate the cap. Perhaps there is a strategy that can be used to provide a little relief here. Otherwise, PM could be the most restrictive cap, in which case, you would want to pick a 12 month period that maximizes PM emissions. And that makes it all the more important that this be a 12 month basis rather than a 24 month basis.

Thanks
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Joe Bentley - Resolved/Unresolved from yesterday's PAL meeting

From: <Steve_Langevin@URSCorp.com>
To: <joe.bentley@lcra.org>, <Henry.Eby@lcra.org>
Date: 5/13/02 9:57 AM
Subject: Resolved/Unresolved from yesterday's PAL meeting

Joe and Henry

I thought it would be good to write down what we got agreement on and what is still open after yesterday's meeting. I think we all agreed that everything we heard was pretty positive, but we don't have final answers on everything, and on some things, we will probably just need to propose what we want in the application, and it will be reviewed at the time. And I'd like to think that means that if we present a good basis for what we want, it will be approved. Let me know if I missed anything.

1. No further direction on 12 month vs. 24 month for basis of current actual emissions calculation. TNRCC supports this, but EPA hasn't signed off. Plan is to proceed with 12-month basis until/unless we are told otherwise.
2. Use of max daily heat input to calculate final "BACT" caps. This has been presented to Erik and Randy. We asked if they were okay with the way the calculation was done (without specifically pointing out that max daily heat input exceeds design input), and they said yes. This is a state-only issue and should not impact EPA PAL requirements (even at the higher tpy this gives us, we are still below past actual rates, even after adjustment to SIP level of 0.165 lb/mmbtu).
3. Current actual PM/PM10 emissions (for initial cap) have been calculated using NSPS limits applied to actual firing rates due to lack of reliable actual data for front half plus back half PM. Final BACT cap is based on all units meeting 0.03 lb/mmbtu. Erik and Randy focused primarily on this final BACT number, which they considered to be on the low side, so they had no problem with the initial cap basis. This is a federal PSD issue, and I don't believe it is a real TNRCC concern. EPA could take issue with it during their review. Plan for now is to move forward with the calculation as is. (On the final BACT cap, LCRA should confirm that Units 1 and 2 can meet 0.03 (including back half) after scrubbers are added.)
4. Annual SO2 BACT cap. Erik and Randy kept flip-flopping on this. We used 90% control of current annual average uncontrolled (per Unit 1/2 CEMS) to calculate the annual SO2 cap. Erik seemed okay with 90%. Randy was leaning toward 95%. He seemed to prefer 95% for Units 1 and 2 and 85% for Unit 3. The basis for this is that Units 1 and 2 will have new scrubbers and should reflect today's BACT. Unit 3 is currently achieving about 85%, so perhaps that could stay as is as BACT. This would give a little higher than 90% for the average removal. This was left open for LCRA to make their case in the permit application.
5. CO Cap. CO will increase due to NOx work. This is allowed by PSD rules since it is for required pollution control. Erik and Randy had not problems with using the 200 ppm ALSTOM guarantee as cap basis. (May need to correct existing calc for 3% O2).
6. H2SO4 and Pb. Erik and Randy felt our numbers looked low for both of

these. Randy initially felt that we needed to address BACT and determine the caps for these on this basis. He was concerned that adding the PSD insignificance levels to actual emissions more or less ignored BACT requirements. Erik seemed to feel differently. He just didn't see issues with these pollutants. Final resolution seemed to go with Erik's view. But we should probably confirm that the proposed caps are not too low. There was some discussion around not having a cap for Pb and H₂SO₄. I felt the caps were needed to avoid having to deal with PSD applicability for each new project. Erik agreed. Henry and Joe indicated that EPA is okay with an actual to future actual calculation for PSD applicability, and as long as this type of calculation is not expected to trigger PSD review, then perhaps we don't want to have a cap. Further discussion between URS and LCRA is probably needed.

7. We do not need hourly caps, but we cannot leave current hourly limits as is unless they represent BACT. Erik and Randy indicated that we could propose a higher max hourly basis than used for annual BACT levels to calculate max hourly rates. No specific guidance was given. We need to propose something and provide justification. I believe this primarily applies to NO_x and SO₂. CO hourly basis should probably be the same as annual (unless ALSTOM indicates that the 200 ppm level is not a short term max). Other pollutants will not have CEMS, and compliance will be based on one time stack tests. Therefore, there is no real way to demonstrate compliance with a lower annual average limit, so no point in using a different basis for other pollutants. TNRCC (and I) suggest that hourly caps be established, even though not required, because there will be hourly limits, and the cap would simply be the sum of the individual unit limits, which provides more flexibility than individual limits.

8. We briefly discussed the timing on interim and final caps. Only NO_x will have an interim cap that is different from initial and final. We proposed that the interim NO_x cap, based on 0.165 lb/mmBtu (SIP limit) become effective May 2005 when SIP controls must be in place. Thus, the interim short term NO_x levels would become effective at that time. However, the first actual compliance demonstration date for the interim annual cap would be May 2006 since any 12-month average prior to that could include months prior to installation of interim NO_x controls. Final caps for SO₂, PM, and NO_x would all become effective around 2010.

9. We also discussed what was needed for BACT support in the permit application. Erik didn't want us to submit cost information. We should mainly rely on qualitative arguments. He suggested looking at what was in Clearinghouse and in the data he compiled and do a little bit of a statistical analysis of the control levels and show how we fit in.

Thanks
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(512) 454-8807 (fax)

Henry Eby - Re: Resolved/Unresolved from yesterday's PAL meeting

From: <Steve_Langevin@URSCorp.com>
To: "Henry Eby" <Henry.Eby@lcra.org>
Date: 5/13/02 1:03 PM
Subject: Re: Resolved/Unresolved from yesterday's PAL meeting
CC: <Joe.Bentley@lcra.org>

Thanks.

I think the next step for NOx hourly limits is to look at the variation that you currently have. I realize that we will have a whole different animal after the burner work is done, but it's a start. And, as I said, we can do that if we have the hourly data, or a summary of it. Another thing to look at for NOx is what ALSTOM has to say. Do they give any absolute maximum NOx guarantee, or just a long term average? Even if they don't give a guarantee, I would think that they can provide some input on what kind of variation to expect. If you give us an okay to call them to discuss this and let them know we will be calling, I can do that also.

On the SO2, I could talk to Greg Brown here about expected variation, but my understanding is that for what we are proposing, worst case SO2 removal will be better than the annual level that we want to permit for. But I'll talk to him anyway about variation if modules are down. For Unit 3, we could also do the same thing I'm suggesting for NOx, and look at historical variation. Again, I would need more data. This might be a reasonable approach for Unit 3, especially if we propose a lower (same as currently achieved) removal efficiency than for the other units. We could base the max hourly on the 70% removal that I think you indicated is the current permit basis.

As for the 95/95/85 vs 90/90/90 bases for annual SO2, I really think TNRCC would sign off on either. The 95/95/85 is a little more stringent, so that TNRCC would like it better and may help negotiations on other limits that you may have more concern with. I think we should also make sure we are taking into account all possible fuel scenarios. Even with the current PRB coal, if you look at the upper end of the range of possible sulfur content, rather than what you've been burning, assuming there is a difference, what kind of removal efficiency does our currently proposed tpy cap correspond to? What would the cap be assuming 90% removal with worst case coal? That might also be part of the basis for the peak hourly rate (max sulfur content).

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 (512) 454-8807 (fax)

"Henry Eby"
 <Henry.Eby@lcra.org>
 To: "Joe Bentley" <Joe.Bentley@lcra.org>,
 <Steve_Langevin@URSCorp.com>
 cc:
 05/13/2002 10:27 AM Subject: Re: Resolved/Unresolved from yesterday's PAL meeting

Steve,

Great job summarizing the meeting and remaining issues. I don't think your missing anything. What's our next step for firming up our position on the outstanding issues, e.g. SO2 BACT, hourly caps...

Thanks,

Henry

>>> <Steve_Langevin@URSCorp.com> 05/13/02 09:50AM >>>

Joe and Henry

I thought it would be good to write down what we got agreement on and what is still open after yesterday's meeting. I think we all agreed that everything we heard was pretty positive, but we don't have final answers on everything, and on some things, we will probably just need to propose what we want in the application, and it will be reviewed at the time. And I'd like to think that means that if we present a good basis for what we want, it will be approved. Let me know if I missed anything.

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Thanks
Steve Langevin
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(512) 419-5332 (voice)
(512) 454-8807 (fax)

**AIR OPERATING PRACTICES AND PROCEDURES MANUAL
FOR
LCRA'S
FAYETTE POWER PROJECT**



Submitted For:

LCRA
3701 LAKE AUSTIN BLVD.
AUSTIN, TX 78703

Submitted By:

ZEPHYR ENVIRONMENTAL CORPORATION
1515 CAPITAL OF TEXAS HIGHWAY SOUTH, SUITE 300
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DECEMBER 2010



Air Operating Practices and Procedures Manual

Fayette Power Project

Manual Control Number: Master

Issued To: Central files

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 5. 12/31/09 By: [Signature]
 6. 2/21/10 By: [Signature]
 7. _____ By: _____
 8. _____ By: _____

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Submitted For:

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DECEMBER 2010



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AIR OPERATING PRACTICES AND PROCEDURES MANUAL
LCRA – FAYETTE POWER PROJECT

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LCRA – FAYETTE POWER PROJECT

Significant deterioration is said to occur when the amount of new pollution would exceed the applicable PSD increment. Currently, there are no Class III increment areas in Texas and only one Class I area (Big Bend National Park). The remainder of the state is classified as Class II. The PSD permit program is a federal program that has been delegated to the TCEQ; therefore, the TCEQ now issues these permits, after review and comment by EPA. Applications for PSD permits are discussed in Section 8.0--Permit Applications, Renewals and Amendments.

Maximum Increments by Area Classification			
Pollutant	Maximum allowable increase (micrograms per cubic meter)		
	Class I	Class II	Class III
Particulate matter:			
PM-10, annual arithmetic mean	4	17	34
PM-10, 24-hr maximum	8	30	60
Sulfur dioxide:			
Annual arithmetic mean	2	20	40
24-hr maximum	5	91	182
3-hr maximum	25	512	700
Nitrogen dioxide:			
Annual arithmetic mean	2.5	25	50

FPP is currently exempt from the provisions of State and Federal NSR provided a modification does not cause the emissions from the facility to exceed the emissions limit in the flexible permit and does not result in the emissions of an air pollutant not previously emitted. The FPP flexible permit also includes a plant-wide applicability limit. This flexible permit, issued in October 2002, authorizes all modifications for a period of ten years. In exchange for this NSR certainty, FPP is required to meet BACT by the time the permit expires in 2012. This will include the installation of flue gas desulfurization equipment on Units 1 & 2.

In addition to the PSD or NA permits, all major sources are required to obtain a Federal Operating Permit (also referred to as a Title V permit). The Title V permit records in one document all of the air pollution control requirements that apply to the source and requires the source to certify each year whether or not it has met the air pollution requirements in its Title V permit. Associated with the Title V Operating Permit is an Acid Rain permit, which limits the amount of SO₂ and NO_x emitted from a facility.

In addition to the three federal permit programs discussed above, the Texas Clean Air Act requires all new and modified sources, regardless of size or location, to obtain a TCEQ new source review permit or qualify for a Permit-By-Rule (PBR) (formerly known as a standard exemption). FPP has the flexible permit discussed above, several standard exemptions, a Title V permit, a PSD permit, and an Acid Rain permit. FPP's permits contain conditions establishing emission limits and standards, monitoring and testing requirements, and recordkeeping, reporting and notification requirements. These permit conditions are outlined in the tables contained in Sections 4.0 through 6.0 of this manual. Section 8.0 of this manual includes a discussion of the types of activities that may trigger the need for a new source review permit after the flexible permit expires.

8.0 PERMIT APPLICATIONS, RENEWALS AND AMENDMENTS

The discussion below is a summary of new source review rules and would generally apply to FPP. However, as discussed in earlier section, FPP is exempt from NSR under the flexible permit as long as plant-wide emissions remain below established caps. The information below will apply to FPP after the flexible permit expires and is not renewed.

Before a new facility can be constructed or an existing facility modified, TCEQ Regulation VI (30 TAC Chapter 116) requires that LCRA first obtain a permit, amend an existing permit, or qualify for a Permit by Rule (PBR). Facilities constructed before September 1, 1971 are considered "grandfathered" and not subject to the permit requirements unless they are modified after that date. Furthermore, section 382.0518(g) of the Texas Clean Air Act includes as grandfathered facilities those for which a contract to construct was executed before September 1, 1971. If the new facility or modification is large enough to be considered a major source or a major modification under EPA's Prevention of Significant Deterioration (PSD) permit program, the requirements for a PSD permit must also be met (40 CFR 52). The PSD program has been delegated to TCEQ, which means that TCEQ issues the permit.

8.1 NEW SOURCE REVIEW / PSD PERMITS

A physical change or change in the method of operation at FPP that results in a "significant" increase in air emissions is considered a major modification and subject to PSD permit review. An increase is considered significant for the following pollutants at the listed levels:

<u>Pollutant</u>	<u>Emission Rate (tons/year)</u>
Carbon monoxide	100
Nitrogen oxides	40
Sulfur dioxide	40
Particulate matter (PM/ PM ₁₀)	25/15
Ozone (VOC)	40
Sulfuric acid mist	7
Hydrogen sulfide (H ₂ S)	10
Total reduced sulfur compounds (including H ₂ S)	10

If a PSD permit is required, FPP may have to collect continuous ambient monitoring data as part of the air quality analysis for any criteria pollutant (ozone (VOC), PM₁₀, SO₂, NO_x, CO) that FPP proposes to emit in significant amounts. If, however, either (1) the predicted ambient impact, i.e., the highest modeled concentration for the applicable averaging time, caused by the proposed new source or modification is less than the significant emissions increase (or significant net emissions increase), or (2) the existing ambient pollutant concentrations are less than the prescribed significant monitoring value (see Table 8-1), the TCEQ has discretionary authority to exempt FPP from this ambient data collection requirement. If these data are required, they generally must be gathered over a period of at least 1 year and represent at least the 12-month period immediately *preceding* receipt of the PSD application.

Wholesale Power Services NSR Checklist Form

PROJECT INFORMATION		
Today's Date: <u>11/29/2006</u>	Date work is scheduled to begin: <u>Mar 08</u>	Facility: <u>FPP</u>
Project Manager: <u>Gary Pavaok</u>	Extension: <u>3574</u>	Unit(s): <u>2</u>
Project Name: <u>FPP Unit 2 Upper Arch Replacement</u>		
Project Description: <u>Project will replace all 260 furnace upper arch tubes in kind from just below the seal box below the hanger tube down to the center of the vertical section of the nose.</u>		
<u>Project will also replace the side waterwall tube panels along the length of the replaced upper arch at least one foot immediately above the upper arch.</u>		

SECTION 1

PLEASE ANSWER YES OR NO TO THE FOLLOWING QUESTIONS: <i>To be completed by project manager or designee</i>		Yes	No																																				
1.	Will the project result in a physical change to the plant? (i.e., replacing equipment, installing new equipment, etc.)	X																																					
2.	Will the project result in a change in the method of operation of the plant or a change in the method of controlling emissions?		X																																				
3.	Will the project involve the replacement of equipment with identical parts that must be routinely changed for plant operations?	X																																					
4.	Is this a capital project?	X																																					
5.	Will the project cost greater than \$100,000 to implement?	X																																					
6.	Will the project involve the replacement of an item that normally lasts greater than 3 years?	X																																					
7.	Will the project include replacement, partial replacement, modification or overhaul of any of the following items?																																						
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Yes</th> <th style="text-align: center;">No</th> <th></th> <th style="text-align: center;">Yes</th> <th style="text-align: center;">No</th> </tr> </thead> <tbody> <tr> <td>Boiler Tubes</td> <td style="text-align: center;">X</td> <td></td> <td>Condenser Tubes</td> <td></td> <td style="text-align: center;">X</td> </tr> <tr> <td>Steam Drum</td> <td></td> <td style="text-align: center;">X</td> <td>Coal Pulverizer</td> <td></td> <td style="text-align: center;">X</td> </tr> <tr> <td>Economizer</td> <td></td> <td style="text-align: center;">X</td> <td>Burners</td> <td></td> <td style="text-align: center;">X</td> </tr> <tr> <td>Turbine Blades</td> <td></td> <td style="text-align: center;">X</td> <td>Boiler Feed Pumps</td> <td></td> <td style="text-align: center;">X</td> </tr> <tr> <td>Furnace Walls</td> <td style="text-align: center;">X</td> <td></td> <td>Forced Draft or Induced Draft Fans</td> <td></td> <td style="text-align: center;">X</td> </tr> </tbody> </table>		Yes	No		Yes	No	Boiler Tubes	X		Condenser Tubes		X	Steam Drum		X	Coal Pulverizer		X	Economizer		X	Burners		X	Turbine Blades		X	Boiler Feed Pumps		X	Furnace Walls	X		Forced Draft or Induced Draft Fans		X		
	Yes	No		Yes	No																																		
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Turbine Blades		X	Boiler Feed Pumps		X																																		
Furnace Walls	X		Forced Draft or Induced Draft Fans		X																																		
8.	Will the project cause the fuel firing rate or material throughput to increase?		X																																				
9.	Is one purpose of the project to reduce the number of forced outages?	X																																					

10.	Is the project intended to eliminate safety concerns related to condition of the subject equipment?		X
11.	Is the project intended to address reliability problems posed by the present condition of the equipment to be worked on?	X	
12.	Is the project intended to correct unit problems that are resulting in a unit de-rating or capacity limitations on the unit?		X
13.	Does the project involve the addition or replacement of pollution control equipment?		X

SECTION 2

To be completed by WPS Environmental Program Manager

1. Indicate the reasons why the proposed Project is not a physical or operational change within the meaning of the "modification" rule under the PSD and/or NSR regulations.
 - Rerouting maintenance, repair, or replacement
 - Pollution control project
 - Increase in production rate or hours of operation
 - Switch to Alternative Fuels
 - Other exclusions

Please Specify: This project does not trigger New Source Review due to the provisions in the FPP Flexible Permit authorizing modifications to the three units as long as the changes do not result in an exceedance of the plantwide hourly and annual emissions caps in the permit. Adequate cushion was included in the cap calculations to guard against potential exceedances of the emission limits that may be associated with this type of project. All emissions will continue to be tracked and reported to demonstrate compliance. In addition, due to the Flexible Permit, it is not necessary to perform the pre- and post-change emission test below.

2. Calculate the unit's average annual actual emissions rate (expressed in tons per year) for each regulated air pollutant during the representative baseline period prior to the construction start date of the project. The representative baseline period may be any single 24-month period within five (5) years prior to the planned construction start date. Calculate the unit's future actual emissions, on an average annual basis measured in tons per year, based on the projected Btu heat input and actual emissions rates that are expected to be actually achieved after the completion date of the project. This calculation should equal average annual rate (expressed in tons per year) at which the unit is projected to emit after completion of the project.

Pollutant	Representative Baseline Emissions	Projected Future Actual Emissions (TPY)		
	Average Annual Emissions Rate in Baseline Period (TPY)	BTU Input	Average Lbs/mmBTU	Projected Future Actual (TPY)
NO _x				
SO ₂				
PM				
Other				

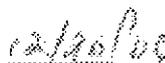
Note: Please note that election of this emissions test for PSD/NSR applicability will require LCRA to track actual emissions after completion of the project. Actual emissions (on a twelve (12) month rolling average) should not exceed the baseline levels above the applicable de minimis levels for any regulated pollutant. Such tracking of actual emissions should be undertaken for at least five (5) years to confirm the projected emission calculations.

De Minimis Emission Increase Levels Under PSD Regulations

Regulated Pollutant	De Minimis Emissions Rate
Carbon Monoxide	100 tpy
Nitrogen Oxide	40 tpy
Sulfur Dioxide	40 tpy
Particulate Matter	25 tpy (particulate emissions) 15 tpy (PM10)
Lead	0.6 tpy
Fluorides	3 tpy
Sulfuric Acid Mist	7 tpy

Additional Information/Comments: The project will not trigger revised New Source Performance Standards since the project will not cause the fuel firing rate or material throughput to increase. A project does not trigger NSPS without an actual increase in the maximum hourly emissions from the unit as a direct result of a project.


 Joe Bentley
 Environmental Program Manager


 Date



PM OPA HR
MAY 23 2011
D17

1303 San Antonio Street, Suite 200
Austin TX, 78701
p: 512-637-9477 f: 512-584-8019
www.environmentalintegrity.org

May 20, 2011

Ms. LaDonna Castañuela
Office of the Chief Clerk, MC-105
TCEQ
P.O. Box 13087
Austin, TX 78711-3087

NSR
74973

2011 MAY 24 AM 9:50
CHIEF CLERK'S OFFICE
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Re: Comments, Request for Public Meeting, and Request for Contested Case Hearing on Lower Colorado River Authority's Application for an Amendment to Permit No. 51770 & PSD-TX-486M3 (Fayette Power Plant's "De-Flexing" Application)

Dear Ms. Castañuela:

On behalf of the Sierra Club, we are submitting these comments, a request for a public meeting, and request for contested case hearing in response to the Notice of Receipt of Application and Intent to Obtain Air Permit, dated April 15, 2011, and published on April 22, 2011.

The Lower Colorado River Authority's (LCRA) has filed an Application to convert its existing illegal Flexible Air Permit for the Fayette (a.k.a. Sam Seymour) power plant to a federal Clean Air Act-compliant air permit. As discussed below, this Application contains errors and omissions and fails to comply with federal Clean Air Act standards. The Application fails to demonstrate how the proposed emission limits meet the *best available control technology* ("BACT") standard. The Application fails to demonstrate that the emissions will not cause or contribute to violations of health-based ambient air quality standards. The LCRA Fayette plant is currently operating in violation of the federal Clean Air Act because the plant is a major stationary source that is currently operating without the required federal Clean Air Act *prevention of significant deterioration* ("PSD") permit.

LCRA touts its long-delayed scrubber installations, which will thankfully reduce sulfur dioxide emissions, yet LCRA has steadfastly refused to reduce dangerous particulate matter ("PM") emissions to the maximum achievable levels.

Unless corrected as described below, the Application should not be granted.

I. Request for Contested Case Hearing

We request a contested case hearing. The requestor is the Sierra Club. The Sierra Club is one of the oldest and largest grassroots environmental organizations in the country. Sierra Club is a nonprofit corporation with offices, programs and members in Texas. Sierra Club's Austin, Texas offices are at 1202 San Antonio Street, Austin, Texas 78701, (512) 477-1729

Handwritten signature

(phone), (512) 477-8526 (fax). Among the goals of the Sierra Club are preserving and enhancing the natural environment and protecting public health. The Sierra Club has the specific goal of improving outdoor air quality. The Sierra Club and its members have a significant interest in ensuring that the LCRA Fayette plant complies with the Clean Air Act and reduces air emissions that endanger public health and property. Sierra Club has an interest in ensuring that the LCRA's Fayette power plant air pollution permit, at issue here, complies with the federal and Texas Clean Air Act and is protective of public health and the environment.

Sierra Club members own property, reside, and/or recreate nearby and downwind of the power plant. One such Sierra Club member is Ms. Carol Daniels. Ms. Daniels resides at 3701 FM 609, La Grange, Texas, 78945. This is approximately 10 miles, as the crow flies, from the power plant. Ms. Daniels is a retired nurse. Ms. Daniels is concerned about air quality and wants the Fayette power plant to comply with anti-pollution laws and have an air pollution permit that protects public health and the environment. Ms. Daniels has standing to request a hearing in her own right.

Please direct all communications or questions regarding this request to Ilan Levin, Senior Attorney, Environmental Integrity Project, at (512) 637-9479, or ilevin@environmentalintegrity.org

II. Request for a Public Meeting

We request a public meeting.

III. Comments

A. General Comments

TCEQ's Flexible Permit program has never been approved as part of the Texas State Implementation Plan, and thus it has never been a legal mechanism to change or void pre-existing construction permits.¹ This means that LCRA's Fayette power plant is currently operating in violation of the federal Clean Air Act and the Texas State Implementation Plan ("SIP"), because the power plant is required to have a federal Clean Air Act prevention of significant deterioration ("PSD") permit, but does not have one. To remedy this serious violation, TCEQ should require LCRA to demonstrate that the plant meets current best available control technology, and that maximum allowable emissions will not cause an exceedance of any national ambient air quality standard.

¹ See, Letter from David Neleigh, US EPA Region 6, to Steve Hagle, TCEQ Air Permits Division, regarding EPA's Comments on Texas' SIP Revisions for Flexible Permits, April 11, 2006 ("EPA's long-held position is that these [Title I, or SIP-approved permits] must remain in effect because they are the legal mechanism through which the underlying PSD or NSR requirements become applicable, and remain applicable, to individual sources." "Terms and conditions of construction permits are permanent and remain effective unless changed using title I procedures or a new construction permit is issued." (Attachment A)

Evidence suggests that LCRA violated new source review requirements and has used its Flex Permit to circumvent NSR. For example, recently-obtained documents from U.S. EPA, in response to a Freedom of Information Act request, contain references to a “boiler tube” issue² that was discussed during a meeting between representatives of LCRA, Austin Energy, and U.S. EPA on October 25, 2010.³ TCEQ should conduct a thorough examination of the Fayette plant’s permitting and operational history, from the last SIP-approved permit to the new proposed permit, in order to ensure that LCRA has not circumvented the federal or Texas Clean Air Acts or triggered New Source Review without meeting *best available control technology* (“BACT”).

In the alternative, if TCEQ is unwilling to require the rigorous BACT and ambient impacts analyses required by the federal Clean Air Act for issuance of a new PSD permit to a major source that currently lacks a valid permit, then TCEQ should require emission limits *no less stringent than* those contained in the following tables.

² Boiler tube replacement is a common power plant major modification that triggers the Clean Air Act’s “New Source Review,” which requires the power plant to meet modern emission standards and best available control technology. See, *United States v. Ohio Edison Co.*, 276 F.Supp.2d 829 (S.D. Ohio 2003) (holding that replacement of boiler tubes was not routine maintenance.) See also, Consent Decree (*U.S. v. Illinois Power Company*), which settles EPA’s NSR claim for modifications including boiler tube replacement at Baldwin station; available at: <http://www.epa.gov/compliance/resources/decrees/civil/caa/dmgfinal-cd.pdf>. See also, Consent Decree in *U.S. v. AEP*, settling NSR claim for major modifications including boiler tube replacement at several coal-fired power plants; available at: <http://www.epa.gov/compliance/resources/decrees/civil/caa/americanelectricpower-cd.pdf>.

³ Email from Al Armendariz, EPA Regional Administrator, to Larry Starfield, EPA Region 6, et al, Re: LCRA, October 25, 2010 (“Based on what we heard at the meeting about boiler tubes, call LCRA and give them a frank discussion about the agency’s ongoing national enforcement initiative for NSR and coal-fired EGUs,...”), Attachment B.

Unit 1				
Pollutant	lb/MMBTU (Averaging period)	lb/hr	tons/yr	Compliance Method
CO	0.187 (1-hr)	1,122.0	4,128.6	CEMS
H ₂ SO ₄	0.006 (3-hr)	36.0	132.5	Method 8
NO _x	0.10 (1-hr)	600.0	2,207.8	CEMS
PM _{Total}	0.05 (3-hr)	300.0	1,103.9	Method 5, 201/202*
PM ₁₀ (total)	0.035 (3-hr)	210.0	772.7	Method 5, 201/202*
PM ₁₀ (filter)	0.025 (3-hr)	150.0	552.0	CEMS
SO ₂	95% Removal	315.0	1,159.1	CEMS
VOC	0.00375 (3-hr)	22.5	82.8	Method 25A

Unit 2				
Pollutant	lb/MMBTU (Averaging Period)	lb/hr	tons/yr	Compliance Method
CO	0.187 (1-hr)	1,122.0	4,187.6	CEMS
H ₂ SO ₄	0.006 (3-hr)	36.0	132.5	Method 8
NO _x	0.10 (1-hr)	600.0	2,239.3	CEMS
PM _{Total}	0.05 (3-hr)	300.0	1,119.7	Method 5, 201/202*
PM ₁₀ (total)	0.035 (3-hr)	210.0	783.8	Method 5, 201/202*
PM ₁₀ (filter)	0.025 (3-hr)	150.0	559.8	CEMS
SO ₂	95% Removal	315.0	1,175.7	CEMS
VOC	0.00375 (3-hr)	22.5	84.0	Method 25A

Unit 3				
Pollutant	lb/MMBTU	lb/hr	tons/yr	Compliance Method
CO	0.187 (1-hr)	885.4	3,531.1	CEMS
H ₂ SO ₄	0.006 (3-hr)	28.4	113.3	Method 8
NO _x	0.10 (1-hr)	473.5	1,888.3	CEMS
PM _{Total}	0.03 (3-hr)	142.1	566.5	Method 5, 201/202*
PM ₁₀ (total)	0.02 (3-hr)	94.7	377.7	Method 5, 201/202*
PM ₁₀ (filter)	0.015 (3-hr)	71.0	283.2	CEMS
SO ₂	90% Removal	497.2	1,982.7	CEMS
VOC	0.00375 (3-hr)	17.8	70.8	Method 25A

* Method 5, 201/202, modified as follows:

Year 1: Two stack tests w/in first year. Stack test to include at least five runs, each of at least two hours duration. At least two runs during cold startup. Stack test to measure PM_{Total}, PM₁₀ and PM_{2.5}. Operating conditions during stack test used to set CAM parameters.

Year 2 and beyond: Annual stack test; same as year 1. Condensable PM from stack test is added to filterables measured by PM CEMS to determine hourly concentration.

Mass determined by multiplying mmbtu * concentration.

B. The De-Flex Application is one of three separate, but inextricably connected, permitting actions that should be considered together

LCRA's Application for an Amendment to Permit No. 51770 & PSD-TX-486M3 (Fayette Power Plant's "De-Flexing" Application) is being processed separately from two related permitting actions. These two related actions are: (1) LCRA's application for planned maintenance, startup, and shutdown ("MSS") emissions,⁴ and (2) LCRA's "stand-alone PAL" permit.⁵

Together, these three separate permitting actions will establish the maximum allowable emission limits of air contaminants, and these three permitting actions should be combined into a single application, so that the plant's emissions and ambient impacts can be adequately and fully considered.

⁴ LCRA's Application was submitted on January 4, 2011.

⁵ LCRA's Application was submitted on January 27, 2011; the Permit (PAL2) was issued by Executive Director on April 14, 2011; A motion to overturn the Executive Director's action is currently pending before the commission.

i. LCRA's MSS Application Cannot be Severed from the De-Flex Application

LCRA's MSS Application requests particulate matter startup emissions of *3,002 pounds per hour* each for Units 1 and 2, and *2,739 pounds per hour* for Unit 3, for *up to 600 hours per year*. If LCRA obtained these limits, the Fayette power plant could emit a maximum combined total of 2,622 tons of particulates during MSS events. The current Flex Permit authorizes up to 5,171 tons annually, which means that under the preceding scenario, LCRA could emit no more than 2,533 tons the rest of the year. The plant is now authorized to emit 1,441 pounds an hour, but if the MSS emissions that LCRA is requesting are accurate, then the plant would be limited to an average of no more than 602 pounds per hour during "normal" operations. LCRA's MSS Application cannot be considered in a vacuum, given that it requests emission limits that would consume more than half of the plant's annual allowable emissions during less than ten percent of operating hours. The scenario gets even more pronounced under the "final" Flex Permit cap, which limits PM emissions to 4,363 tons per year, and no more than 1,060 pounds per hour. If LCRA's MSS emissions approach the levels for which it is seeking a permit (600 hours x the maximum hourly emissions per unit), the plant could average no more than 426 pounds an hour for the remainder of the year, less than half the Flex Permit's final cap.

Therefore, if TCEQ takes the MSS Permit Application into consideration, as law and common sense dictate, then LCRA would receive significantly lower PM limits as part of this amendment. Put another way, TCEQ should establish substantially lower PM emission limits for "normal operations" than the limits LCRA seeks in this permit amendment.

ii. LCRA's recently issued PAL Permit Cannot be Severed from the De-Flex Application

There is absolutely no question that, in 2002, when TCEQ originally issued Permit No. 51770/PSD-TX-486M3 (the "Flex Permit" that contained the PAL), the two concepts were inseparably bound together. At that time, there was no federal PAL rule or a Texas PAL rule. The TCEQ clearly stated, when it issued this permit in 2002, that: "TCEQ implement[ed] the federal PAL concept through the flexible permit program pursuant to Texas air quality regulations."⁶ Even the venerable law firm currently representing LCRA, Baker Botts, admitted that TCEQ's "legally questionable" PAL rule "is a hybrid PAL approach, modeled on TCEQ's existing flexible permit program."⁷

As EPA noted in its December 6, 2010 letter to Thomas Mason, LCRA General Manager, "FPP's flex permit is distinctive in that it incorporates a plantwide applicability limit (PAL) component... The PAL permit, like the flexible permit, is not a SIP-approved permit, and that situation needs to be addressed." Attachment D. Issuing a stand-alone PAL permit – an action

⁶ Permit No 51770 and PSD-TX-486M, Technical Review Document prepared by the TCEQ's permit engineer, 2002.

⁷ Letter from Matthew Paulson, Baker Botts, LLP, to Ms. Joyce Spencer, TCEQ, regarding Comments of the Texas Industry Project on Proposed NSR Reform Rule, October 31, 2005. Attachment C.

that is currently the subject of a pending motion to overturn – simply perpetuates many of the same problems that exist under the Flex Permit. One example is that the PAL, just like the Flex Permit, is based on allowable emissions rather than actual emissions.

TCEQ can remedy these problems by overturning the Executive Director's April 14, 2010 issuance of Permit No. PAL2, and considering LCRA's requests for any site wide caps under the federal PAL rules. This analysis should be done as part of this permit amendment process (i.e., it cannot be severed and issued as a stand-alone PAL).

C. LCRA's De-Flex Application seeks to "incorporate by reference" dozens of permits-by-rule ("PBRs") and standard permits

LCRA should include the emissions increases associated with each of these authorizations in its application, and include these emissions in ambient impacts analyses.

D. The Application contains no explanation of the chosen BACT limits, or why the chosen emission rates represent BACT

PM limits are particularly troubling and confusing. The Application should justify all proposed limits, contain separate limits for all regulated pollutants, and specify the monitoring method used for compliance with those limits.

E. Certain proposed emission limits are significantly higher than the emission limits contained in LCRA's prior SIP-approved ("legacy") permit

Annual and hourly proposed carbon monoxide limits are far in excess of previously authorized SIP-approved permit limits. Annual and hourly proposed lead limits are higher than previously authorized SIP-approved limits. Hourly and annual proposed interim PM limits are higher than previously authorized SIP-approved emission limits.

F. LCRA Must Explain How Capacity for Unit 3 Was Able to Creep Up by 30 Percent

LCRA should explain how its 4,735 mmBtu/hour (maximum rated capacity) Unit 3 boiler was able to grow into a boiler with 30 percent more capacity than originally permitted. LCRA made conflicting representations in its 2002 Flexible Permit applications: on the one hand LCRA requested and received from the State emission caps based on a maximum heat input rate for Unit 3 that is roughly 30 percent greater than the pre-existing federally-enforceable (i.e., SIP-approved permit's) limit of 4,735 mmBtu/hour; but on the other hand, LCRA represented that the boiler operations and design (including the maximum capacity) was the same as when the unit was first authorized.

TCEQ and LCRA should explain why it is appropriate to base annual and hourly allowables on heat input rates far in excess of the maximum capacity represented in all pre-existing SIP-approved, PSD, or federally-enforceable permits. If LCRA seeks to increase maximum heat input capacity beyond previous maximum representations made in SIP-approved

PSD permits, then the Application should demonstrate that the plant meets BACT and does not violate ambient air quality standards.

G. The Application contains no ambient impacts analyses

TCEQ should require LCRA to submit modeling to demonstrate that its proposed emissions will not cause or contribute to air pollution.

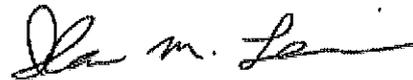
H. Stack tests show LCRA Fayette Plant can meet lower emission levels

The Application incorrectly states that “[f]or SO₂ and PM/PM₁₀/PM_{2.5}, reduced emission limits are being proposed based on stack test data and/or ESP/scrubber data that was unavailable at the time of the original Flexible Permit application submittal.” (Application at 5-1). This statement is simply untrue, because stack test data was available at the time of the original Flex Permit application, showing that the power plant can emit at levels well below those incorporated in its Flex Permit, and that “front-half” (or filterable) PM is approximately half of “total” (filterable plus condensable) PM.⁸

Given LCRA’s inconsistent statements, and considering the available stack test data, TCEQ should impose PM emission limits that meet BACT.

Thank you for your attention to this matter.

Sincerely,



Ilan Levin
Senior Attorney
Environmental Integrity Project
1303 San Antonio St., Ste 200
Austin, Texas 78701
(512) 637-9479
ilevin@environmentalintegrity.org

⁸ Stack test reports from 1979 to September 2002 present actual PM “front-half” emission levels of 0.01 lb/mmBtu (see, e.g., Unit 1, 1979 stack test); 0.02 (Unit 1 “front-half,” September 2002 stack test); 0.04 lb/mmBtu (Unit 1 “total” PM, September 2002 stack test); 0.02 (Unit 2, 1981 stack test); 0.01 lb/mmBtu (Unit 3, Aug. 1988 stack test).

ATTACHMENT A

APR 11 2006

Mr. Steve Hagle
Special Assistant
Air Permits Division (MC-163)
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

RE: U.S. Environmental Protection Agency (EPA) Comments on Texas' State
Implementation Plan (SIP) Revisions for Flexible Permits

Dear Mr. Hagle:

This letter is a follow-up to our meeting in Austin on October 12, 2005, and subsequent discussions concerning revisions to the Texas SIP related to Flexible Permits, Subchapter G of Chapter 116 of Title 30 of the Texas Administrative Code (30 TAC). We have reviewed the rules and identified the items of concern that are described in the Enclosure. We request that you address these concerns and respond to us concerning how these rules meet Federal requirements or identify changes you will make to address our concerns. We will review and take action on these rules prior to taking final action on your New Source Review (NSR) Reform regulations.

If you have any questions, please call Mr. Stanley M. Spruiell of my staff at (214) 665-7212.

Sincerely yours,

Originally Signed
by David Neleigh

David Neleigh
Chief
Air Permits Section

Enclosure

Spruiell/ss:6PD-R:x7212/4/6/06\Comments.Fp.wpd(Spruiell #2 Disk)

Comments on Texas SIP revisions, Subchapter G, Chapter 116, Flexible Permits

1. General Comment

We understand that the Flexible Permit rules apply to major and minor sources and that the rules are designed to provide an exemption from minor NSR requirements if sources do not exceed an allowable emissions cap. In general, the allowable emissions cap assumes Best Available Control Technology (BACT) emission rate plus up to 9% for all units under the permit. Partial Flexible Permits are allowed.

We reviewed the Flexible Permit rule as it applies to major sources for consistency with Federal major NSR regulations and 40 CFR 51.160 and 51.161. Texas adopted the Flexible Permit rules prior to finalization of Federal NSR Reform regulations. The final Federal regulations measure emissions increases which result from a modification at existing major sources using the baseline actual-to-projected actual applicability test. The final rules also provide an exemption from the definition of major modification for sources with an actual Plantwide Applicability Limit (PAL). The Court in *New York v. EPA*, 413 F.3d 3, (D.C. Cir. June 24, 2005) struck down provisions of the regulations that provided for exemptions from major NSR applicability that were not based upon actual emissions. The Court held that the NSR modification requirement, which incorporates by reference Clean Air Act (Act) § 111(a)(4), "unambiguously defines 'increases' in terms of actual emissions." Therefore, many of our comments relate to how Flexible Permits are consistent with Federal major NSR requirements.

We have reviewed the Flexible Permit rules as they apply to minor sources and minor modifications for consistency with 40 CFR 51.160 and 51.161.

2. Voiding of Existing SIP-approved Permits

The Texas Commission on Environmental Quality (TCEQ) has stated that all existing permits applicable to the permittee are voided upon issuance of a Flexible Permit. The Flexible Permit becomes the controlling authority for the site, as explained at 10 TexReg 7336:

The applicant for a flexible permit may combine existing permitted facilities, grandfathered facilities, and new facilities into the flexible permit. The flexible permit will then become the controlling authorization for all facilities included in the permit, replacing any existing permits that may have been applicable to all or part of these facilities.

The rules provide for initial issuance of a flexible permit "as an alternative to obtaining a new source review permit" where the source triggers major NSR requirements. We understand that the resulting BACT or Lowest Achievable Emission Rate limits are not enforceable at the new or modified source. Nonattainment NSR (NNSR), prevention of

significant deterioration (PSD) or air quality, minor NSR permits, and permit application representations incorporated by reference into the permits previously issued under the Texas SIP are voided upon issuance of the Flexible Permit. We also understand that these permits are voided without public participation in many cases.

Please explain the legal authority under which TCEQ voids existing federally enforceable NNSR, PSD, and minor NSR permits.

Title I of the Act requires permitting authorities to establish in permits source specific terms and conditions necessary for sources to comply with the requirements of the PSD and NSR programs of parts C and D of the Act. EPA's long-held position is that these permits must remain in effect because they are the legal mechanism through which the underlying PSD or NSR requirements become applicable, and remain applicable, to individual sources.¹ 40 CFR 70.1 requires that each title V source permit assures compliance with all applicable requirements, including any term or condition of any preconstruction permit issued pursuant to programs approved or promulgated under title I of the Act. Amendments to PSD or NSR or minor NSR permits must be made in accordance with the SIP and approved permitting programs. Terms and conditions of construction permits are permanent and remain effective unless changed using title I procedures or a new construction permit is issued. The Federal PAL rule provides a procedure, including public participation, for the elimination of permit limits that were taken to avoid applicability of major NSR applicability and are replaced by a PAL. Federal NSR regulations do not provide for a blanket elimination of emission limits at individual units. Operational flexibility under Federal regulations and policy can be obtained by preapproving future modifications or by setting an actual PAL in order to avoid major NSR netting.

The preamble to the final PAL rule provides:

Can a PAL Eliminate Existing Emission Limitations? An actuals PAL may eliminate enforceable permit limits that a source may have previously taken to avoid the applicability of major NSR to new or modified emissions units. Under the major NSR regulations at §§ 52.21(r)(4), 51.166(r)(2), and 51.165(a)(5)(ii), if you relax these limits, the units become subject to major NSR as if construction had not yet commenced on the source or modification. Should you request a PAL, today's revised regulations allow the PAL to eliminate annual emissions or operational limits that you previously took at your stationary source to avoid major NSR for the PAL pollutant. This means that you may relax or remove these limits without triggering major NSR when the PAL becomes effective. Before removing the limits, your reviewing authority should make sure that you are meeting all other regulatory requirements and that the removal of the limits does not adversely impact the National Ambient Air Quality Standards (NAAQS) or PSD

¹See EPA Memorandum from John Seitz, to Robert Hodanbosi, dated May 20, 1999.

increments. We are not taking a position on whether compliance with requirements contained in a PAL permit could serve to demonstrate compliance with certain pre-existing requirements on individual units. The reviewing authority may assess on a case-by-case basis whether any streamlining would be appropriate in the title V permit consistent with part 70 procedures and our existing policies and guidance on permit streamlining.

See also the Federal PAL rule:

40 CFR 52.21(aa)(1) - Applicability, "(iii) Except as provided under paragraph (aa)(1)(ii)(c) of this section, a major stationary source shall continue to comply with all applicable Federal or State requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL."

The same requirement is found in 40 CFR 51.165(f)(1)(iv) and 51.166(w)(1)(iii).

The EPA has also addressed supersession of existing NSR permit requirements by title V permits. See May 20, 1999, letter to Robert Hodanbosi:

It is the Agency's view that title V permits may not supersede, void, replace, or otherwise eliminate the independent enforceability of terms and conditions in SIP-approved permits. To assure compliance with "applicable requirements" such as SIP-approved permits and conditions, title V permits must record those requirements, but may not eliminate their independent existence and enforceability under title I of the Clean Air Act (i.e., may not supersede them).

See also White Paper for Streamlined Development of part 70 permit Applications, Lydia Wegman, July 1995, (White Paper #1) which recommends an efficient procedure for revising NSR permits during title V review to eliminate obsolete or environmentally insignificant terms in NSR permits. See also, Approval of Wisconsin Construction Permit Permanency SIP Revision 71 FR 9934, April 28, 2006, and Notice of Deficiency for Clean Air Act Operating Program in Wisconsin, 69 FR 10167, March 4, 2004.

Our review of the Flexible Permit rules indicates that the voided NSR permits are federally enforceable terms and conditions which may be revised only through approved SIP procedures.

3. Definition of Modification

Please distinguish between the definition of "major modification" at 30 TAC 116.12(11) in Subchapter A, Nonattainment and Prevention of Significant Deterioration Review

Definitions, and the definition of "modification of an existing facility" at 30 TAC 116.10(11) of Subchapter A, General Definitions. The definition of "modification of existing facility" states:

Any physical change in, or change in the method of operation of, a facility in a manner that increases the amount of any air contaminant emitted by the facility into the atmosphere or that results in the emission of any air contaminant not previously emitted. The term does not include:

a physical change in, or change in the method of operation of, a facility where the change is within the scope of a flexible permit or a multiple plant permit;
or

Under the current Texas SIP, a permit amendment is required in order to vary from any representation or permit condition if the change will cause: (A) a change in the method of control of emissions; (B) a change in the character of the emissions; or (C) an increase in the emission rate of any air contaminant.

Please clarify whether the exemptions from the requirement to obtain a permit amendment in the submitted definition of "modification of an existing facility" apply to significant project emission increases or significant net emission increases at major sources or major modifications. Please explain how exemptions in the definition of "modification of an existing facility" relate to major modifications. We believe these definitions as written are vague and may be interpreted to provide an exemption to major NSR applicability.

4. Consistency with Federal Major NSR Requirements

Because Flexible Permits become the controlling authorization for major sources and authorize the source to make modifications without a permit amendment as required by the current SIP, the rules, as they are applicable to major sources, must be consistent with Federal NSR requirements and the PAL rule. We note that the rules eliminate permitting vehicles necessary to demonstrate netting for major sources. We have identified the following list which discusses some of the inconsistencies between the Flexible Permit rules and Federal regulations. Please provide information to explain how the following requirements are met under the Flexible Permit rules:

- A Please explain how the revisions meet the requirements of 40 CFR 51.160 to provide procedures that enable TCBQ to determine that modifications authorized under these rules will not result in (1) a violation of applicable portions of control strategy; or (2) interference with attainment or maintenance of a national standard in the State in which the proposed source (or modification) is located or in a neighboring State.

- B. The Flexible Permit emission cap is based upon allowable emissions rather than actual emissions. There are no regulatory requirements that the cap be set below actual emissions. The rules do not ensure that the emissions cap will be set at a level that does not trigger major NSR applicability for major sources or major modifications based upon the baseline actual to projected actual calculation in the State's NSR rules. Please explain how the flexible permit rules are inconsistent with the Federal PAL rule at 40 CFR 52.21(aa)(6).
- C. The rule allows an implementation schedule to install required BACT controls which may last for many years. The rule also allows sources to increase the emission cap for sources that "fail to install the additional control equipment as provided by the implementation schedule." How does the rule ensure that the emission cap is set below actual emissions during these periods? Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(6) and (11). Please explain whether a Flexible Permit always assumes current BACT in calculating the emission cap.
- D. The Flexible Permit authorizes modifications that do not exceed the emission cap. NSR compliance is required only upon initial issuance of the permit. Please explain how the rule ensures that modifications subject to major NSR and the public participation requirements of Part 51 are reviewed. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(5) and (11); and 51.161.
- E. For sources without a PAL, major NSR applicability must be determined by monitoring actual emissions on a unit by unit basis (rather than by compliance with the emissions cap) consistent with TCEQ's major NSR rules for baseline actual to projected actual emissions calculations. Please explain how the rule ensures that major sources determine major NSR applicability on a unit by unit basis. Our review indicates that the monitoring requirements from the Flexible Permit rule at §116.715(c)(6) requires "information and data sufficient to demonstrate continuous compliance with the emission caps and individual emission limitations contained in the flexible permit shall be maintained in a file at the plant site and made available at the request of personnel from the commission or any air pollution control program having jurisdiction." Please explain how the rule provides for monitoring; recordkeeping and reporting necessary to determine project emission increases and to enforce major NSR requirements on a unit by unit basis. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(a)(2)(iv)(a) through (d), and (f); 52.21(aa)(12) through (14).
- F. Please explain how the public participation requirements of Part 51 and the PAL rule are met by the Flexible Permit rules. Under Chapter 39 of the TAC,

initial issuance of and amendments to flexible permits are exempt from public notice requirements unless the action involves new construction or a modification that results in emissions increases above Texas' permits by rule limits (250 tons per year (tpy) of carbon monoxide, 250 tpy of nitrogen oxides, 25 tpy of volatile organic compounds, sulfur dioxide, or particulate matter less than 10 micrometers, or any other air contaminant except carbon dioxide, water, nitrogen, methane, ethane, hydrogen and oxygen). These provisions are inconsistent with Federal requirements which require modifications of existing sources to be subject to a 30-day notice and comment period and for the permitting authority to provide public information including the agency's analysis of the effect of the construction or modification on ambient air quality, including the agency's proposed approval or disapproval. These requirements apply to major and minor sources. Please provide a rationale for exemptions from these requirements and the current SIP. Please explain how the Flexible Permit rules are consistent with 40 CFR 51.161 and 52.21(aa)(5) and (11).

- G. The Flexible Permit rules allows sources to exclude units at a facility from the permit. Federal rules do not allow for partial PALs. Note that the Federal PAL rule requires that all units at a facility must be subject to the plantwide limit. See 40 CFR 52.21(aa)(6)(i) through (ii). Emission increases and decreases at all units at the facility must be considered to determine major NSR applicability. How does the Flexible Permit provide that increases and decreases are quantified, determined to be contemporaneous, and made practically enforceable for sources that are not subject to a PAL? Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(a)(2)(iv)(a) through (d) and (f).
- H. There is no requirement in the Flexible Permit rules that startup, shutdown and malfunction emissions must be included in determining compliance with the emission cap. This is inconsistent with the Federal PAL rule. Please explain how the Flexible Permit rules can ensure that non-routine emissions are not masked by the emission cap. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(7)(iv).
- I. There is no requirement in the Flexible Permit rules that compliance with the emission cap is determined on a 12-month rolling average, as required by the Federal PAL rule and EPA policy. We have reviewed Flexible Permits that base compliance on a calendar basis. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(4)(i)(a). Please explain how enforcement of Flexible Permits on a calendar year basis is enforceable as a practical matter.
- J. There is no requirement in the Flexible Permit rules that the owner or operator

must convert monitoring data to monthly and annual emission rates based upon a 12-month rolling average for each month. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(4)(i)(a) and 52.21(aa)(7)(vi).

- K. There is no requirement in the Flexible Permit rules that monitoring to determine compliance with the cap must be based upon continuous emissions monitoring systems, continuous emissions rate monitoring systems, predictive emissions monitoring system, continuous parameter monitoring system, or emission factors, or an equivalent method as approved by the permitting authority, as is required by the Federal PAL rule. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(12)(ii)(a) through (d).
- L. There are no requirements in the Flexible Permit rule for semi-annual reports or deviation reports as required by the Federal PAL rule. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(14)(i) through (ii).
- M. The record retention requirement in the Flexible Permit rules is for two years. This is inconsistent with the Federal PAL rule and title V which require five year recordkeeping. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(13)(ii).
- N. Are short-term limits under the emission cap required by the Flexible Permit rules? Please explain how short-term limits are calculated and how they ensure attainment and maintenance of the NAAQS. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(1)(ii).
- O. The Flexible Permit emission cap may be increased by 9% of total emissions, called an Insignificant Emissions Factor. The Flexible Permit rule in § 116.718 states, "An increase in emissions from operational or physical changes at an existing facility covered by a flexible permit is insignificant, for the purposes of state new source review under this subchapter, if the increase does not exceed either the emission cap or individual emission limitation. This section does not apply to an increase in emissions from a new facility nor to the emission of an air contaminant not previously emitted by an existing facility." Please explain how this definition is distinguishable from the terms "significant" and "insignificant" used elsewhere in your rules. We believe these terms must be clearly distinguishable to facilitate compliance and enforcement of the rules. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(b)(23) and 52.21(aa)(6)(i).

5. Minor Sources

We have reviewed the Flexible Permit rules as they apply to minor sources for

ATTACHMENT B



Carl Edlund/R6/USEPA/US
10/25/2010 07:26 PM

To: Al Armendariz/R6/USEPA/US@EPA
cc: Thomas Diggs/R6/USEPA/US@EPA, Lawrence
Starfield/R6/USEPA/US@EPA
bcc:
Subject: Re: LCRA

I wasn't at the meeting but a couple of thoughts:

- LCRA partnered with EPA and TCEQ to explore options for permit flexibility before federal rules were established.

- Therefore OAQPS may be very sensitive about correspondence..recommend running it by Harnett.

Sent by EPA Wireless E-Mail Services

Al Armendariz

----- Original Message -----

From: Al Armendariz

Sent: 10/25/2010 07:42 PM EDT

To: Lawrence Starfield; "Carl Edlund" <edlund.carl@epa.gov>; Thomas Diggs; Jeffrey Robinson; "John Blevins" <blevins.john@epa.gov>; "Suzanne Murray" <murray.suzanne@epa.gov>; Suzanne Smith; David Garcia; "Layla Mansuri" <mansuri.layla@epa.gov>

Cc: "David Gray" <gray.david@epa.gov>

Subject: LCRA

Larry,

I think we should respond to LCRA about today's meeting, with a letter addressed from me to their CEO, with a cc: to Henry and their other attendees.

It sounds like Pam is advising them not to perform an examination of their operational and permitting history since getting a flex permit. Nor to get the commitment to get into the SIP memorialized in their title v permit.

I suppose that isn't surprising, considering that in her role representing BCCA and other folks suing us, Pam is in charge of making arguments that there is nothing wrong with flexible permits.

In the letter to LCRA, we should thank them for the meeting, say that it was a positive step forward, and acknowledge that LCRA presented information that appears to show that emissions reductions are taking place.

At the same time, I think we need to make clear that all companies need to be in an enforceable mechanism to true-up their permits,

We should then state that there are three routes available right now for this to happen: our audit, acceptance of the FHR process, direct negotiations with John under the enforcement side of the house.

Permit holders not on one of these paths, really soon, will be subject to Title V and enforcement tools, perhaps as soon as by the end of the year.

We might want to stress the rather quick nature of the Title V minor revision. Perhaps, if they prefer, we can offer to memorialize the same commitment to true-up in an AO from EPA to LCRA.

Also, we can remind them that those companies that follow the process we have worked out with FHR or follow the federal audit will continue to have TCEQ serve as their permitting authority under both NSR and Title V, and they get protection if we are petitioned to reopen their Title V permit.

For companies not on an enforceable path, they run the risk of EPA having to use its Title V authorities, which could make EPA the Title V permitting authority for the facility.

Also: John-- did they have internal counsel at the meeting? You and Suzanne might want to pull LCRA's materials you collected under the 114s, and spend an hour looking them over. Based on what we heard at the meeting about boiler tubes, call LCRA and give them a frank discussion about the agency's ongoing national enforcement initiative for NSR and coal-fired EGUs, and perhaps suggest that there are huge NSR benefits to coming in under the audit. With a stroke of a pen, all that tube nonsense can go away.

Thanks to all.

AI

AI Armendariz
Regional Administrator
U.S. EPA
Region 6
armendariz.ai@epa.gov
office: 214-665-2100

ATTACHMENT C

BAKER BOTTS LLP

005580.0135

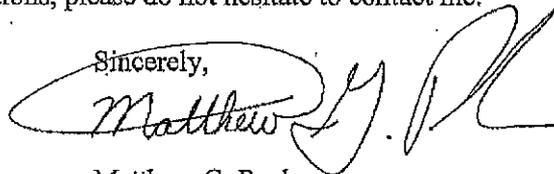
October 31, 2005

Ms. Joyce Spencer, MC 205
Texas Register Team,
Office of Legal Services,
Texas Commission on Environmental Quality
P.O. Box 13087
Air Permits Program
Austin, Texas 78711-3087

Re: Comments of the Texas Industry Project
Proposed NSR Reform Rule
Rule Project Number 2005-010-116-PR.

Enclosed please find the comments of the Texas Industry Project ("TIP") on the above proposal. Attachment A is a list of TIP-member companies. We have also included more detailed comments in Attachments B and C. TIP appreciates the opportunity to comment on the proposed rule. If you have any questions, please do not hesitate to contact me.

Sincerely,



Matthew G. Paulson
For the Texas Industry Project

Enclosure

cc: Susan Moore
Steve Hansen
Matt Kuryla

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October 31, 2005

**TEXAS INDUSTRY PROJECT
COMMENTS ON TCEQ PROPOSED FEDERAL NSR REFORM RULE**

Rule Project Number 2005-010-116-PR

The Texas Industry Project ("TIP")¹ appreciates the opportunity to submit these comments on the Texas Commission on Environmental Quality's ("TCEQ's") proposed rules implementing the federal New Source Review Reform ("Federal NSR Reform") rule promulgated by the U.S. Environmental Protection Agency ("EPA"). 67 Fed. Reg. 80,186 (December 31, 2002). TIP strongly supports the goals of Federal NSR Reform, and urges TCEQ to integrate all features of the EPA rule, including the federal approach to the Plantwide Applicability Limit ("PAL") flexibility option. TIP's detailed comments are set forth below, and in the attached redline markup of TCEQ's proposed rule language (Attachment B).

I. General Comments

A. TCEQ Has Historically Followed EPA Rules and Guidance in Applying Federal NSR, and Should Continue this Approach in Implementing Federal NSR Reform

1. Federal NSR is an EPA permitting process imposed on new air emitting sources and modifications that exceed EPA's major source thresholds. EPA's Federal NSR Reform streamlined the way that plant modifications are evaluated against EPA's thresholds. Nothing in EPA's Federal NSR Reform package would alter the comprehensive and protective Texas NSR program administered by TCEQ under the Texas Clean Air Act ("TCAA").
2. All projects, both those that trigger Federal NSR and those that do not, are subject to the TCAA air quality permitting rules, which independently apply the TCAA requirements of Best Available Control Technology ("BACT") and protection of human health and the environment, and which contain a well-developed system of incentives for better operation and emissions control.
3. Federal NSR applicability has traditionally been kept separate from the TCAA review process. TCEQ rules, guidance and interpretations regarding Federal NSR have remained consistent with federal rules, guidance and interpretations on the separate issue of which projects trigger Federal NSR.

¹TIP is composed of 53 companies in the chemical, refining, oil and gas, electronic, forest products, terminal, electric utility and transportation industries with operations in Texas. A list of TIP member companies is attached (Attachment A).

4. TCEQ can and should continue to address Federal NSR in a manner consistent with EPA's approach.

B. Substantive Departures from EPA's Federal NSR Rules Introduce Confusion and Inconsistency in Applying EPA Guidance

1. Many companies with operations in Texas also have operations in other states. Substantive changes from Federal NSR Reform will create confusion in applying a large body of EPA guidance, and inconsistencies for companies with multi-state operations.
2. There is no basis for rejecting EPA's reforms, developed with comment in over 50 stakeholder meetings across the country. Introducing different, less flexible triggers for Federal NSR generates an inherent competitive disadvantage for companies with multi-state operations who choose to operate in Texas.

C. The D.C. Circuit's Approval of EPA's Federal NSR Reforms is Strong Support for Implementation of the Reforms in Texas Without Substantive Changes

1. In *State of New York, et al. v. EPA*, No. 02-1387, June 24, 2005, the U.S. Court of Appeals for the D.C. Circuit upheld EPA's actual to Actual-to-Projected Actual test and Plantwide Applicability Limit ("PAL") reforms, among others. The court rejected EPA's Pollution Control Project and Clean Unit tests, and these rejected reforms have properly been omitted from the TCEQ proposal.
2. The D.C. Circuit's independent judicial validation of EPA's remaining reforms creates strong support for implementation of Federal NSR Reform in Texas without substantive changes.

II. Specific Comments

A. TIP Supports the Decision to Include the Actual-to-Projected Actual Test in the Proposed Rule

1. The TCEQ rule package includes an Actual-to-Projected-Actual test for triggering federal NSR at all sites. Previously, this test was restricted to electric generating facilities under TCEQ's informal application of EPA's 1992 "WEPCO" rule. TIP strongly supports TCEQ's decision to include the Actual-to-Projected-Actual test in the proposal.
2. Implementing the Actual-to-Projected-Actual test will help focus federal NSR on truly significant emission increases, and eliminate many of the anomalies with addressing "paper increases" via the existing Actual-to-Potential test.

B. TCEQ Should Adopt the Federal Plantwide Applicability Limit Option Without Substantive Revision

1. The Federal PAL option provides operational flexibility and regulatory certainty while encouraging emissions reductions and pollution prevention.
 - a. A PAL is a plantwide cap (thus, "*Plantwide*" Applicability Limit) that allows sites to replace the case-by-case NSR applicability analysis of physical or operational changes in favor of a simple plantwide emissions cap that functions as a trigger level for Federal NSR.
 - b. As part of the public process establishing Federal NSR Reform, EPA reviewed the environmental benefits associated with Federal PAL through several pilot permitting projects. *See 67 Fed. Reg.* 80,186, 80,207 (Dec. 31, 2002).
 - i. EPA concluded that significant environmental benefits occurred for each of the permits reviewed. *Id.*
 - ii. According to EPA, growth in emissions will tend to shift to cleaner units under the Federal PAL. *Id.*
 - c. Adding the Federal PAL will encourage innovations by simplifying authorizations. Sites with a Federal PAL will still obtain TCAA authorization for any changes, or apply qualified facility flexibility, a flexible permit or another TCAA mechanism.
 - d. The United States Court of Appeals for the D.C. Circuit specifically upheld the Federal PAL in *State of New York, et al. v. EPA*, No. 02-1387, noting that the petitioners failed to refute EPA's assessment of the environmental benefits of the federal PAL.
2. Implementing the Federal PAL is consistent with, and would not conflict with, other aspects of the state NSR permit program.
 - a. The federal PAL only addresses the narrow issue of triggering Federal NSR in connection with a project. All Texas air quality permitting requirements would remain unchanged.
 - b. Existing MAERT limits in permits would continue in effect and attainment requirements would continue to apply, including federal rules, area-specific Mass Emissions Cap and Trade ("MECT") caps, HRVOC caps, Chapter 117 requirements, and all other targeted control programs.
3. The proposed BACT criterion for a PAL defeats the purpose of a simple Federal PAL, requires split procedures for assessing Federal NSR, and is legally questionable.

- a. TCEQ's proposal is a hybrid PAL approach, modeled on TCEQ's existing flexible permit program. Under the proposal, sites would be required to apply BACT controls to any facilities entering a PAL cap.
 - b. *Plantwide* applicability limits are intended to operate site-wide. Few Texas sites have been able to secure full plant-wide BACT determinations. Many flexible permits exist, but few flexible permits cover an entire plant-site, in large part due to the practical difficulty of applying BACT across an entire plant-site. This concern is especially true in the case of larger, more complex plant-sites with a wide array of source types.
 - c. EPA has raised concerns on recent proposed permits regarding the approval of PALs covering less than a complete plant-site.
 - d. As a consequence of the proposed hybrid approach, the proposed rule contains a provision (Section 116.12(16)) subjecting to a traditional Federal NSR applicability review those portions of a project outside of the PAL coverage, while portions of the project within the PAL would be evaluated under the separate PAL provisions. There is no legal authority, and no practical guidance, for applying the netting, actual-to-actual, or other Federal NSR applicability tools to a portion of a plant-site or project.
 - e. The hybrid approach introduces a significant practical uncertainty into the process, and is legally questionable in light of the D.C. Circuit's recent affirmance of EPA's structure and the ambiguous status of split sites and projects. Under the federal rule, PALs operate plantwide. TCEQ should not turn the federal PAL into a complex and uncertain program that splits sites and projects for purposes of Federal NSR.
4. The proposal allows PAL applicants who are current flexible permit holders to use up to 10-year BACT. New PAL applicants, however, are required to use current BACT. This distinction introduces a strong inequity. If the PAL-wide BACT concept included in the proposed rule were retained, 10-year BACT, not current BACT, would be the proper standard for *all* applicants. 10-year BACT represents the well-controlled facility test established by the Texas Legislature for Qualified Facility Flexibility, a similar permit streamlining mechanism. Tex. S.B. 1126, 74th Leg., R.S. (1995). Moreover, the December 31, 2006 deadline for current flexible permit holders to apply for a PAL based on their earlier BACT review may not be sufficient, depending on the timing of rule adoption.

ATTACHMENT D



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

December 6, 2010

Thomas G. Mason
General Manager and Chief Executive Officer
LCRA
P.O. Box 220
Austin, Texas 78767

Dear Mr. Mason:

My staff and I appreciated the opportunity to speak with LCRA and Austin Energy representatives on October 25, 2010, regarding LCRA's flexible and PAL air permit for the Fayette Power Plant (FPP). Thank you also for your letter to me dated November 18, 2010. We agree that the dialogue at the meeting was productive and believe that it was a positive step forward. We also appreciate the information presented by LCRA as it appears to show that emissions reductions are taking place.

In the Environmental Protection Agency's (EPA's) September 20, 2010 Opportunity to Confer letter, we outlined three acceptable options moving forward: EPA's Audit Program; direct negotiations with EPA on a streamlined enforcement path; and a flexible permit transition process consistent with the general elements of the four-step process that we jointly discussed with the Texas Commission on Environmental Quality (TCEQ) and stakeholders on September 16, 2010, or the Flint Hills Resources four-step process dated October 21, 2010. Each of these paths involves an enforceable commitment as well as an appropriate "look back" in order to arrive at federally enforceable unit-specific emission limits. As you are aware, completion of the Audit Program or a streamlined enforcement process also offers flexible permit holders a potentially significant release of liability. And as my staff discussed with Patti Hershey via telephone the week of October 25, given LCRA's potential New Source Review (NSR) exposure under the national enforcement initiative for NSR and coal-fired utilities, we encourage LCRA to reconsider moving forward with either the audit or a negotiated enforcement settlement.

In your November 18 letter, LCRA stated its intention to use a State Implementation Plan (SIP)-approved permit amendment process to convert FPP's flexible permit to a federally-approved permit (under 30 TAC Chapter 116, Subchapter B). The first step in your conversion process appears to be the submission of a permit amendment to TCEQ, pursuant to the recently adopted revisions to the TCEQ's public notice rules. While we appreciate your commitment to transition out of a flexible permit

through an amendment process with public notice, we have some concerns regarding elements of your proposed process.

First, we re-emphasize the importance of using a federally enforceable mechanism to memorialize your commitment and schedule for transitioning your flexible permit to a SIP-approved permit. We reiterate that there are several available mechanisms, such as a minor Clean Air Act (CAA) Title V permit modification (step one of the four-step transition process); a statement in the company's annual CAA Title V certification of compliance; or an Administrative Order on consent. We are open to discussing other enforceable mechanisms as well. Companies that do not make an enforceable commitment to obtain SIP-approved permits run the risk that, during the 6-12 month delay while the new Subchapter B permit application is being developed, EPA will decide (or be petitioned) to use its CAA Title V authorities to object to or reopen their permits on the basis that a facility is operating under a non-SIP compliant flexible permit.

Second, you state in your November 18, 2010 letter that LCRA's permit amendment process will be relatively straightforward, and may not require the rigor of analysis described in Step 2 of the four-step transition process. We are willing to discuss streamlining steps that are appropriate to your circumstances. For instance, EPA understands that establishing unit-specific limits for decommissioned units is not necessary, and that recently constructed equipment already with unit-specific limits may not have a long or involved permitting or operational history, and thus the limits can be identified more quickly. However, it is EPA's position that an essential component of the permit application is a thorough examination of the facility's permitting and operational history from the last SIP-approved permit to the new proposed permit revision. This is critical in order to ensure that future permits contain all SIP and federally applicable requirements, and that pre-flexible permit, SIP-approved permit conditions are either brought forward or their omission is justified. We are open to discussing an appropriate Step 2 analysis with you.

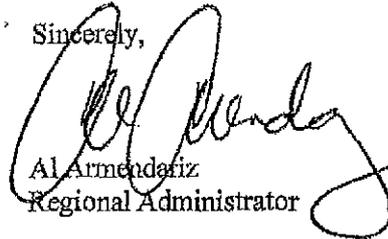
Third, we note that FPP's flexible permit is distinctive in that it incorporates a plantwide applicability limit (PAL) component. While the Opportunity to Confer letter did not specifically discuss the PAL, this is an issue of concern. You correctly note that EPA lent support in 2002 to the idea of piloting a PAL; however, the Agency has since issued federal PAL rules, and those rules have not yet been adopted by the State and included in the SIP. The PAL permit, like the flexible permit, is not a SIP-approved permit, and that situation needs to be addressed. Of course, you may wish to maintain the PAL as a State-only requirement in addition to SIP-approved unit-specific emissions limits required by federal law and, as we discussed on October 25, you may wish to consider including in your CAA Title V permit some alternative operating scenarios, which can provide LCRA with additional operational flexibility.

Finally, we would like to clarify that Region 6, through its September 20, 2010 letter, has, in fact, provided LCRA with notice of specific violations – they are set out in the attachment to that letter. The Agency believes that LCRA can return to compliance by following any of the three paths described in this letter. The opportunity to confer

with EPA regarding those violations will remain open until December 22, 2010. Please do not hesitate to contact Patricia Welton if you would like to schedule another meeting.

Again, thank you for meeting with Region 6 and your willingness to obtain a SIP-approved authorization for the FPP. I am confident we can work together to resolve the flexible permit concerns as they relate to the Fayette Power Plant.

Sincerely,



Al Armendariz
Regional Administrator

cc: Joe Bentley, LCRA
Henry Eby, LCRA
Patti Hershey, LCRA
Pam Giblin, Baker Botts
Derek McDonald, Baker Botts
Matt Russell, City of Austin/Austin Energy



PM OPA HR
MAY 23 2011
BY AM

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Austin TX, 78701
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www.environmentalintegrity.org

May 20, 2011

Ms. LaDonna Castañuela
Office of the Chief Clerk, MC-105
TCEQ
P.O. Box 13087
Austin, TX 78711-3087

NSP
7/6/73

CHIEF CLERKS OFFICE

2011 MAY 20 PM 4: 28

TEXAS
COMMISSION
ON ENVIRONMENTAL
QUALITY

Re: Comments, Request for Public Meeting, and Request for Contested Case Hearing on Lower Colorado River Authority's Application for an Amendment to Permit No. 51770 & PSD-TX-486M3 (Fayette Power Plant's "De-Flexing" Application)

Dear Ms. Castañuela:

On behalf of the Sierra Club we are submitting these comments, a request for a public meeting, and request for contested case hearing in response to the Notice of Receipt of Application and Intent to Obtain Air Permit, dated April 15, 2011, and published on April 22, 2011.

The Lower Colorado River Authority's (LCRA) has filed an Application to convert its existing illegal Flexible Air Permit for the Fayette (a.k.a. Sam Seymour) power plant to a federal Clean Air Act-compliant air permit. As discussed below, this Application contains errors and omissions and fails to comply with federal Clean Air Act standards. The Application fails to demonstrate how the proposed emission limits meet the *best available control technology* ("BACT") standard. The Application fails to demonstrate that the emissions will not cause or contribute to violations of health-based ambient air quality standards. The LCRA Fayette plant is currently operating in violation of the federal Clean Air Act because the plant is a major stationary source that is currently operating without the required federal Clean Air Act *prevention of significant deterioration* ("PSD") permit.

LCRA touts its long-delayed scrubber installations, which will thankfully reduce sulfur dioxide emissions, yet LCRA has steadfastly refused to reduce dangerous particulate matter ("PM") emissions to the maximum achievable levels.

Unless corrected as described below, the Application should not be granted.

I Request for Contested Case Hearing

We request a contested case hearing. The requestor is the Sierra Club. The Sierra Club is one of the oldest and largest grassroots environmental organizations in the country. Sierra Club is a nonprofit corporation with offices, programs and members in Texas. Sierra Club's Austin, Texas offices are at 1203 San Antonio Street, Austin, Texas 78701 (512) 477-1729

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(phone), (512) 477-8526 (fax). Among the goals of the Sierra Club are preserving and enhancing the natural environment and protecting public health. The Sierra Club has the specific goal of improving outdoor air quality. The Sierra Club and its members have a significant interest in ensuring that the LCRA Fayette plant complies with the Clean Air Act and reduces air emissions that endanger public health and property. Sierra Club has an interest in ensuring that the LCRA's Fayette power plant air pollution permit, at issue here, complies with the federal and Texas Clean Air Act and is protective of public health and the environment.

Sierra Club members own property, reside, and/or recreate nearby and downwind of the power plant. One such Sierra Club member is Ms. Carol Daniels. Ms. Daniels resides at 3701 FM 609, La Grange, Texas, 78945. This is approximately 10 miles, as the crow flies, from the power plant. Ms. Daniels is a retired nurse. Ms. Daniels is concerned about air quality and wants the Fayette power plant to comply with anti-pollution laws and have an air pollution permit that protects public health and the environment. Ms. Daniels has standing to request a hearing in her own right.

Please direct all communications or questions regarding this request to Ilan Levin, Senior Attorney, Environmental Integrity Project, at (512) 637-9479, or ilevin@environmentalintegrity.org

II. Request for a Public Meeting

We request a public meeting.

III. Comments

A. General Comments

TCEQ's Flexible Permit program has never been approved as part of the Texas State Implementation Plan, and thus it has never been a legal mechanism to change or void pre-existing construction permits.¹ This means that LCRA's Fayette power plant is currently operating in violation of the federal Clean Air Act and the Texas State Implementation Plan ("SIP"), because the power plant is required to have a federal Clean Air Act prevention of significant deterioration ("PSD") permit, but does not have one. To remedy this serious violation, TCEQ should require LCRA to demonstrate that the plant meets current best available control technology, and that maximum allowable emissions will not cause an exceedance of any national ambient air quality standard.

¹ See Letter from David Neleigh, US EPA Region 6, to Steve Hagle, TCEQ Air Permits Division, regarding EPA's Comments on Texas' SIP Revisions for Flexible Permits, April 11, 2006 ("EPA's long-held position is that these [Title I, or SIP-approved permits] must remain in effect because they are the legal mechanism through which the underlying PSD or NSR requirements become applicable, and remain applicable, to individual sources." Terms and conditions of construction permits are permanent and remain effective unless changed using title I procedures or a new construction permit is issued." (Attachment A)

Evidence suggests that LCRA violated new source review requirements and has used its Flex Permit to circumvent NSR. For example, recently-obtained documents from U.S. EPA, in response to a Freedom of Information Act request, contain references to a "boiler tube" issue² that was discussed during a meeting between representatives of LCRA, Austin Energy, and U.S. EPA on October 25, 2010.³ TCEQ should conduct a thorough examination of the Fayette plant's permitting and operational history, from the last SIP-approved permit to the new proposed permit, in order to ensure that LCRA has not circumvented the federal or Texas Clean Air Acts or triggered New Source Review without meeting *best available control technology* ("BACT").

In the alternative, if TCEQ is unwilling to require the rigorous BACT and ambient impacts analyses required by the federal Clean Air Act for issuance of a new PSD permit to a major source that currently lacks a valid permit, then TCEQ should require emission limits *no less stringent than* those contained in the following tables.

Boiler tube replacement is a common power plant major modification that triggers the Clean Air Act's "New Source Review," which requires the power plant to meet modern emission standards and best available control technology. See, *United States v. Ohio Edison Co.*, 276 F.Supp.2d 829 (S.D. Ohio 2003) (holding that replacement of boiler tubes was not routine maintenance.) See also, Consent Decree (*U.S. v. Illinois Power Company*), which settles EPA's NSR claim for modifications including boiler tube replacement at Baldwin station; available at: <http://www.epa.gov/compliance/resources/decrees/civil/cao/dmgfinal-cd.pdf>. See also, Consent Decree in *U.S. v. AEP*, settling NSR claim for major modifications including boiler tube replacement at several coal-fired power plants; available at: <http://www.epa.gov/compliance/resources/decrees/civil/ean/americanelectricpower-cd.pdf>.

Email from Al Armendariz, EPA Regional Administrator, to Larry Starfield, EPA Region 6, et al, Re: LCRA, October 25, 2010 ("Based on what we heard at the meeting about boiler tubes, call LCRA and give them a frank discussion about the agency's ongoing national enforcement initiative for NSR and coal-fired EGUs..."), Attachment B

Unit 1				
Pollutant	lb/MMBTU (Averaging period)	lb/hr	tons/yr	Compliance Method
CO	0.187 (1-hr)	1,122.0	4,128.6	CEMS
H ₂ SO ₄	0.006 (3-hr)	36.0	132.5	Method 8
NO _x	0.10 (1-hr)	600.0	2,207.8	CEMS
PM _{Total}	0.05 (3-hr)	300.0	1,103.9	Method 5, 201/202*
PM ₁₀ (total)	0.035 (3-hr)	210.0	772.7	Method 5, 201/202*
PM ₁₀ (filter)	0.025 (3-hr)	150.0	552.0	CEMS
SO ₂	95% Removal	315.0	1,159.1	CEMS
VOC	0.00375 (3-hr)	22.5	82.8	Method 25A

Unit 2				
Pollutant	lb/MMBTU (Averaging Period)	lb/hr	tons/yr	Compliance Method
CO	0.187 (1-hr)	1,122.0	4,187.6	CEMS
H ₂ SO ₄	0.006 (3-hr)	36.0	132.5	Method 8
NO _x	0.10 (1-hr)	600.0	2,239.3	CEMS
PM _{Total}	0.05 (3-hr)	300.0	1,119.7	Method 5, 201/202*
PM ₁₀ (total)	0.035 (3-hr)	210.0	783.8	Method 5, 201/202*
PM ₁₀ (filter)	0.025 (3-hr)	150.0	559.8	CEMS
SO ₂	95% Removal	315.0	1,175.7	CEMS
VOC	0.00375 (3-hr)	22.5	84.0	Method 25A

Unit 3				
Pollutant	lb/MMBTU	lb/hr	tons/yr	Compliance Method
CO	0.187 (1-hr)	885.4	3,531.1	CEMS
H ₂ SO ₄	0.006 (3-hr)	28.4	113.3	Method 8
NO _x	0.10 (1-hr)	473.5	1,888.3	CEMS
PM _{Total}	0.03 (3-hr)	142.1	566.5	Method 5, 201/202*
PM ₁₀ (total)	0.02 (3-hr)	94.7	377.7	Method 5, 201/202*
PM ₁₀ (filter)	0.015 (3-hr)	71.0	283.2	CEMS
SO ₂	90% Removal	497.2	1,982.7	CEMS
VOC	0.00375 (3-hr)	17.8	70.8	Method 25A

* Method 5, 201/202, modified as follows:

Year 1: Two stack tests w/in first year. Stack test to include at least five runs, each of at least two hours duration. At least two runs during cold startup. Stack test to measure PM_{Total}, PM₁₀ and PM_{2.5}. Operating conditions during stack test used to set CAM parameters

Year 2 and beyond: Annual stack test; same as year 1. Condensable PM from stack test is added to filterables measured by PM CEMS to determine hourly concentration.

Mass determined by multiplying mmbtu * concentration.

B The De-Flex Application is one of three separate, but inextricably connected, permitting actions that should be considered together

LCRA's Application for an Amendment to Permit No. 51770 & PSD-FX-486M3 (Fayette Power Plant's "De-Flexing" Application) is being processed separately from two related permitting actions. These two related actions are: (1) LCRA's application for planned maintenance, startup, and shutdown ("MSS") emissions,⁴ and (2) LCRA's stand-alone PAL⁵ permit.

Together, these three separate permitting actions will establish the maximum allowable emission limits of air contaminants, and these three permitting actions should be combined into a single application, so that the plant's emissions and ambient impacts can be adequately and fully considered

⁴ LCRA's Application was submitted on January 4, 2011.

⁵ LCRA's Application was submitted on January 27, 2011; the Permit (PAL2) was issued by Executive Director on April 14, 2011; A motion to overturn the Executive Director's action is currently pending before the commission

LCRA's MSS Application Cannot be Severed from the De-Flex Application

LCRA's MSS Application requests particulate matter startup emissions of *3,002 pounds per hour* each for Units 1 and 2, and *2,739 pounds per hour* for Unit 3, for up to 600 hours per year. If LCRA obtained these limits, the Fayette power plant could emit a maximum combined total of 2.622 tons of particulates during MSS events. The current Flex Permit authorizes up to 5.171 tons annually, which means that under the preceding scenario, LCRA could emit no more than 2.533 tons the rest of the year. The plant is now authorized to emit 1,441 pounds an hour, but if the MSS emissions that LCRA is requesting are accurate, then the plant would be limited to an average of no more than 602 pounds per hour during "normal" operations. LCRA's MSS Application cannot be considered in a vacuum, given that it requests emission limits that would consume more than half of the plant's annual allowable emissions during less than ten percent of operating hours. The scenario gets even more pronounced under the "final" Flex Permit cap, which limits PM emissions to 4,363 tons per year, and no more than 1,060 pounds per hour. If LCRA's MSS emissions approach the levels for which it is seeking a permit (600 hours x the maximum hourly emissions per unit), the plant could average no more than 426 pounds an hour for the remainder of the year, less than half the Flex Permit's final cap.

Therefore, if TCEQ takes the MSS Permit Application into consideration, as law and common sense dictate, then LCRA would receive significantly lower PM limits as part of this amendment. Put another way, TCEQ should establish substantially lower PM emission limits for "normal operations" than the limits LCRA seeks in this permit amendment.

LCRA's recently issued PAL Permit Cannot be Severed from the De-Flex Application

There is absolutely no question that, in 2002, when TCEQ originally issued Permit No. 51770/PSD-TX-486M3 (the "Flex Permit" that contained the PAL), the two concepts were inseparably bound together. At that time, there was no federal PAL rule or a Texas PAL rule. The TCEQ clearly stated, when it issued this permit in 2002, that: "TCEQ implement[ed] the federal PAL concept through the flexible permit program pursuant to Texas air quality regulations"⁶ Even the venerable law firm currently representing LCRA, Baker Botts, admitted that TCEQ's "legally questionable" PAL rule "is a hybrid PAL approach, modeled on TCEQ's existing flexible permit program."⁷

As EPA noted in its December 6, 2010 letter to Thomas Mason, LCRA General Manager, "EPA's Flex permit is distinctive in that it incorporates a plantwide applicability limit (PAL) component. The PAL permit, like the flexible permit, is not a SIP-approved permit, and that situation needs to be addressed." Attachment D. Issuing a stand-alone PAL permit – an action

⁶ Permit No 51770 and PSD-TX-486M. Technical Review Document prepared by the TCEQ's permit engineer, 2002.

⁷ Letter from Matthew Paulson, Baker Botts, LLP, to Ms. Joyce Spencer, TCEQ, regarding Comments of the Texas Industry Project on Proposed NSR Reform Rule, October 31, 2005. Attachment C.

that is currently the subject of a pending motion to overturn simply perpetuates many of the same problems that exist under the Flex Permit. One example is that the PAL, just like the Flex Permit, is based on allowable emissions rather than actual emissions.

TCEQ can remedy these problems by overturning the Executive Director's April 14, 2010 issuance of Permit No. PAL2, and considering LCRA's requests for any site wide caps under the federal PAL rules. This analysis should be done as part of this permit amendment process (i.e., it cannot be severed and issued as a stand-alone PAL).

C LCRA's De-Flex Application seeks to "incorporate by reference" dozens of permits-by-rule ("PBRs") and standard permits

LCRA should include the emissions increases associated with each of these authorizations in its application, and include these emissions in ambient impacts analyses.

D The Application contains no explanation of the chosen BACT limits, or why the chosen emission rates represent BACT

PM limits are particularly troubling and confusing. The Application should justify all proposed limits, contain separate limits for all regulated pollutants, and specify the monitoring method used for compliance with those limits.

E Certain proposed emission limits are significantly higher than the emission limits contained in LCRA's prior SIP-approved ("legacy") permit

Annual and hourly proposed carbon monoxide limits are far in excess of previously authorized SIP-approved permit limits. Annual and hourly proposed lead limits are higher than previously authorized SIP-approved limits. Hourly and annual proposed interim PM limits are higher than previously authorized SIP-approved emission limits.

F LCRA Must Explain How Capacity for Unit 3 Was Able to Creep Up by 30 Percent

LCRA should explain how its 4,735 mmBtu/hour (maximum rated capacity) Unit 3 boiler was able to grow into a boiler with 30 percent more capacity than originally permitted. LCRA made conflicting representations in its 2002 Flexible Permit applications: on the one hand LCRA requested and received from the State emission caps based on a maximum heat input rate for Unit 3 that is roughly 30 percent greater than the pre-existing federally-enforceable (i.e., SIP-approved permit's) limit of 4,735 mmBtu/hour; but on the other hand, LCRA represented that the boiler operations and design (including the maximum capacity) was the same as when the unit was first authorized.

TCEQ and LCRA should explain why it is appropriate to base annual and hourly allowables on heat input rates far in excess of the maximum capacity represented in all pre-existing SIP-approved, PSD, or federally-enforceable permits. If LCRA seeks to increase maximum heat input capacity beyond previous maximum representations made in SIP-approved

PSD permits, then the Application should demonstrate that the plant meets BACT and does not violate ambient air quality standards.

G. The Application contains no ambient impacts analyses

TCEQ should require LCRA to submit modeling to demonstrate that its proposed emissions will not cause or contribute to air pollution.

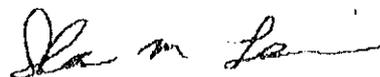
H. Stack tests show LCRA Fayette Plant can meet lower emission levels

The Application incorrectly states that “[f]or SO₂ and PM/PM₁₀/PM_{2.5}, reduced emission limits are being proposed based on stack test data and/or ESP/scrubber data that was unavailable at the time of the original Flexible Permit application submittal” (Application at 5-1). This statement is simply untrue, because stack test data was available at the time of the original Flex Permit application, showing that the power plant can emit at levels well below those incorporated in its Flex Permit, and that “front-half” (or filterable) PM is approximately half of “total” (filterable plus condensable) PM.⁸

Given LCRA’s inconsistent statements, and considering the available stack test data, TCEQ should impose PM emission limits that meet BACT.

Thank you for your attention to this matter.

Sincerely,



Ilan Levin
Senior Attorney
Environmental Integrity Project
1303 San Antonio St., Ste 200
Austin, Texas 78701
(512) 637-9479
ilevin@environmentalintegrity.org

⁸ Stack test reports from 1979 to September 2002 present actual PM “front-half” emission levels of 0.01 lb/mmBtu (see, e.g., Unit 1, 1979 stack test); 0.02 (Unit 1 “front-half,” September 2002 stack test); 0.04 lb/mmBtu (Unit 1 “total” PM, September 2002 stack test); 0.02 (Unit 2, 1981 stack test); 0.01 lb/mmBtu (Unit 3, Aug. 1988 stack test)

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ATTACHMENT A

APR 11 2006

Mr. Steve Hagle
Special Assistant
Air Permits Division (MC-163)
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

RE: U.S. Environmental Protection Agency (EPA) Comments on Texas' State
Implementation Plan (SIP) Revisions for Flexible Permits

Dear Mr. Hagle:

This letter is a follow-up to our meeting in Austin on October 12, 2005, and subsequent discussions concerning revisions to the Texas SIP related to Flexible Permits, Subchapter G of Chapter 116 of Title 30 of the Texas Administrative Code (30 TAC). We have reviewed the rules and identified the items of concern that are described in the Enclosure. We request that you address these concerns and respond to us concerning how these rules meet Federal requirements or identify changes you will make to address our concerns. We will review and take action on these rules prior to taking final action on your New Source Review (NSR) Reform regulations.

If you have any questions, please call Mr. Stanley M. Spruiell of my staff at
(214) 665-7212.

Sincerely yours,

Originally Signed
by David Noleigh

David Noleigh
Chief
Air Permits Section

Enclosure

Spruiell/ss:6PD-R:\7212\4\6\06\Comments.Fp.wpd(Spruiell #2 Disk)

Comments on Texas SIP revisions, Subchapter G, Chapter 116, Flexible Permits

1. General Comment

We understand that the Flexible Permit rules apply to major and minor sources and that the rules are designed to provide an exemption from minor NSR requirements if sources do not exceed an allowable emissions cap. In general, the allowable emissions cap assumes Best Available Control Technology (BACT) emission rate plus up to 9% for all units under the permit. Partial Flexible Permits are allowed. We reviewed the Flexible Permit rule as it applies to major sources for consistency with Federal major NSR regulations and 40 CFR 51.160 and 51.161. Texas adopted the Flexible Permit rules prior to finalization of Federal NSR Reform regulations. The final Federal regulations measure emissions increases which result from a modification at existing major sources using the baseline actual-to-projected actual applicability test. The final rules also provide an exemption from the definition of major modification for sources with an actual Plantwide Applicability Limit (PAL). The Court in *New York v. EPA*, 413 F.3d 3, (D.C. Cir. June 24, 2005) struck down provisions of the regulations that provided for exemptions from major NSR applicability that were not based upon actual emissions. The Court held that the NSR modification requirement, which incorporates by reference Clean Air Act (Act) § 111(a)(4), "unambiguously defines 'increases' in terms of actual emissions." Therefore, many of our comments relate to how Flexible Permits are consistent with Federal major NSR requirements.

We have reviewed the Flexible Permit rules as they apply to minor sources and minor modifications for consistency with 40 CFR 51.160 and 51.161.

2. Voiding of Existing SIP-approved Permits

The Texas Commission on Environmental Quality (TCEQ) has stated that all existing permits applicable to the permittee are voided upon issuance of a Flexible Permit. The Flexible Permit becomes the controlling authority for the site, as explained at 10 TexReg 7336:

The applicant for a flexible permit may combine existing permitted facilities, grandfathered facilities, and new facilities into the flexible permit. The flexible permit will then become the controlling authorization for all facilities included in the permit, replacing any existing permits that may have been applicable to all or part of these facilities.

The rules provide for initial issuance of a flexible permit "as an alternative to obtaining a new source review permit" where the source triggers major NSR requirements. We understand that the resulting BACT or Lowest Achievable Emission Rate limits are not enforceable at the new or modified source. Nonattainment NSR (NNSR), prevention of

significant deterioration (PSD) or air quality, minor NSR permits, and permit application representations incorporated by reference into the permits previously issued under the Texas SIP are voided upon issuance of the Flexible Permit. We also understand that these permits are voided without public participation in many cases.

Please explain the legal authority under which TCEQ voids existing federally enforceable NNSR, PSD, and minor NSR permits.

Title I of the Act requires permitting authorities to establish in permits source specific terms and conditions necessary for sources to comply with the requirements of the PSD and NSR programs of parts C and D of the Act. EPA's long-held position is that these permits must remain in effect because they are the legal mechanism through which the underlying PSD or NSR requirements become applicable, and remain applicable, to individual sources.¹ 40 CFR 70.1 requires that each title V source permit assures compliance with all applicable requirements, including any term or condition of any preconstruction permit issued pursuant to programs approved or promulgated under title I of the Act. Amendments to PSD or NSR or minor NSR permits must be made in accordance with the SIP and approved permitting programs. (Terms and conditions of construction permits are permanent and remain effective unless changed using title I procedures or a new construction permit is issued.) The Federal PAL rule provides a procedure, including public participation, for the elimination of permit limits that were taken to avoid applicability of major NSR applicability and are replaced by a PAL. Federal NSR regulations do not provide for a blanket elimination of emission limits at individual units. Operational flexibility under Federal regulations and policy can be obtained by preapproving future modifications or by setting an actual PAL in order to avoid major NSR netting.

The preamble to the final PAL rule provides:

Can a PAL Eliminate Existing Emission Limitations? An actual PAL may eliminate enforceable permit limits that a source may have previously taken to avoid the applicability of major NSR to new or modified emissions units. Under the major NSR regulations at §§52.21(r)(4), 51.166(r)(2), and 51.165(a)(5)(ii), if you relax these limits, the units become subject to major NSR as if construction had not yet commenced on the source or modification. Should you request a PAL, today's revised regulations allow the PAL to eliminate annual emissions or operational limits that you previously took at your stationary source to avoid major NSR for the PAL pollutant. This means that you may relax or remove these limits without triggering major NSR when the PAL becomes effective. Before removing the limits, your reviewing authority should make sure that you are meeting all other regulatory requirements and that the removal of the limits does not adversely impact the National Ambient Air Quality Standards (NAAQS) or PSD

¹See EPA Memorandum from John Seitz, to Robert Hodanbosi, dated May 20, 1999.

increments. We are not taking a position on whether compliance with requirements contained in a PAL permit could serve to demonstrate compliance with certain pre-existing requirements on individual units. The reviewing authority may assess on a case-by-case basis whether any streamlining would be appropriate in the title V permit consistent with part 70 procedures and our existing policies and guidance on permit streamlining.

See also the Federal PAL rule:

40 CFR 52.21(aa)(1) - Applicability, "(iii) Except as provided under paragraph (aa)(1)(ii)(c) of this section, a major stationary source shall continue to comply with all applicable Federal or State requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL."

The same requirement is found in 40 CFR 51.165(f)(1)(iv) and 51.166(w)(1)(iii).

The EPA has also addressed supersession of existing NSR permit requirements by title V permits. See May 20, 1999, letter to Robert Hodanbosi:

It is the Agency's view that title V permits may not supersede, void, replace, or otherwise eliminate the independent enforceability of terms and conditions in SIP-approved permits. To assure compliance with "applicable requirements" such as SIP-approved permits and conditions, title V permits must record those requirements, but may not eliminate their independent existence and enforceability under title I of the Clean Air Act (i.e., may not supersede them).

See also White Paper for Streamlined Development of part 70 permit Applications, Lydia Wegman, July 1995, (White Paper #1) which recommends an efficient procedure for revising NSR permits during title V review to eliminate obsolete or environmentally insignificant terms in NSR permits. See also, Approval of Wisconsin Construction Permit Permanency SIP Revision 71 FR 9934, April 28, 2006, and Notice of Deficiency for Clean Air Act Operating Program in Wisconsin, 69 FR 10167, March 4, 2004.

Our review of the Flexible Permit rules indicates that the voided NSR permits are federally enforceable terms and conditions which may be revised only through approved SIP procedures.

3. Definition of Modification

Please distinguish between the definition of "major modification" at 30 TAC 116.12(11) in Subchapter A, Nonattainment and Prevention of Significant Deterioration Review

Definitions, and the definition of "modification of an existing facility" at 30 TAC 116.10(11) of Subchapter A, General Definitions. The definition of "modification of existing facility" states:

Any physical change in, or change in the method of operation of, a facility in a manner that increases the amount of any air contaminant emitted by the facility into the atmosphere or that results in the emission of any air contaminant not previously emitted. The term does not include:

a physical change in, or change in the method of operation of, a facility where the change is within the scope of a flexible permit or a multiple plant permit;
or

Under the current Texas SIP, a permit amendment is required in order to vary from any representation or permit condition if the change will cause: (A) a change in the method of control of emissions; (B) a change in the character of the emissions; or (C) an increase in the emission rate of any air contaminant.

Please clarify whether the exemptions from the requirement to obtain a permit amendment in the submitted definition of "modification of an existing facility" apply to significant project emission increases or significant net emission increases at major sources or major modifications. Please explain how exemptions in the definition of "modification of an existing facility" relate to major modifications. We believe these definitions as written are vague and may be interpreted to provide an exemption to major NSR applicability.

4. Consistency with Federal Major NSR Requirements

Because Flexible Permits become the controlling authorization for major sources and authorize the source to make modifications without a permit amendment as required by the current SIP, the rules, as they are applicable to major sources, must be consistent with Federal NSR requirements and the PAL rule. We note that the rules eliminate permitting vehicles necessary to demonstrate netting for major sources. We have identified the following list which discusses some of the inconsistencies between the Flexible Permit rules and Federal regulations. Please provide information to explain how the following requirements are met under the Flexible Permit rules:

- A Please explain how the revisions meet the requirements of 40 CFR 51.160 to provide procedures that enable TCEQ to determine that modifications authorized under these rules will not result in (1) a violation of applicable portions of control strategy; or (2) interference with attainment or maintenance of a national standard in the State in which the proposed source (or modification) is located or in a neighboring State.

- B. The Flexible Permit emission cap is based upon allowable emissions rather than actual emissions. There are no regulatory requirements that the cap be set below actual emissions. The rules do not ensure that the emissions cap will be set at a level that does not trigger major NSR applicability for major sources or major modifications based upon the baseline actual to projected actual calculation in the State's NSR rules. Please explain how the flexible permit rules are inconsistent with the Federal PAL rule at 40 CFR 52.21(aa)(6).
- C. The rule allows an implementation schedule to install required BACT controls which may last for many years. The rule also allows sources to increase the emission cap for sources that "fail to install the additional control equipment as provided by the implementation schedule." How does the rule ensure that the emission cap is set below actual emissions during these periods? Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(6) and (11). Please explain whether a Flexible Permit always assumes current BACT in calculating the emission cap.
- D. The Flexible Permit authorizes modifications that do not exceed the emission cap. NSR compliance is required only upon initial issuance of the permit. Please explain how the rule ensures that modifications subject to major NSR and the public participation requirements of Part 51 are reviewed. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(5) and (11); and 51.161.
- E. For sources without a PAL, major NSR applicability must be determined by monitoring actual emissions on a unit by unit basis (rather than by compliance with the emissions cap) consistent with TCEQ's major NSR rules for baseline actual to projected actual emissions calculations. Please explain how the rule ensures that major sources determine major NSR applicability on a unit by unit basis. Our review indicates that the monitoring requirements from the Flexible Permit rule at §116.715(c)(6) requires "information and data sufficient to demonstrate continuous compliance with the emission caps and individual emission limitations contained in the flexible permit shall be maintained in a file at the plant site and made available at the request of personnel from the commission or any air pollution control program having jurisdiction." Please explain how the rule provides for monitoring, recordkeeping and reporting necessary to determine project emission increases and to enforce major NSR requirements on a unit by unit basis. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(a)(2)(iv)(a) through (d), and (f); 52.21(aa)(12) through (14).
- F. Please explain how the public participation requirements of Part 51 and the PAL rule are met by the Flexible Permit rules. Under Chapter 39 of the TAC,

initial issuance of and amendments to flexible permits are exempt from public notice requirements unless the action involves new construction or a modification that results in emissions increases above Texas' permits by rule limits (250 tons per year (tpy) of carbon monoxide, 250 tpy of nitrogen oxides, 25 tpy of volatile organic compounds, sulfur dioxide, or particulate matter less than 10 micrometers, or any other air contaminant except carbon dioxide, water, nitrogen, methane, ethane, hydrogen and oxygen). These provisions are inconsistent with Federal requirements which require modifications of existing sources to be subject to a 30-day notice and comment period and for the permitting authority to provide public information including the agency's analysis of the effect of the construction or modification on ambient air quality, including the agency's proposed approval or disapproval. These requirements apply to major and minor sources. Please provide a rationale for exemptions from these requirements and the current SIP. Please explain how the Flexible Permit rules are consistent with 40 CFR 51.161 and 52.21(aa)(5) and (11).

- G. The Flexible Permit rules allows sources to exclude units at a facility from the permit. Federal rules do not allow for partial PALs. Note that the Federal PAL rule requires that all units at a facility must be subject to the plantwide limit. See 40 CFR 52.21(aa)(6)(i) through (ii). Emission increases and decreases at all units at the facility must be considered to determine major NSR applicability. How does the Flexible Permit provide that increases and decreases are quantified, determined to be contemporaneous, and made practically enforceable for sources that are not subject to a PAL? Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(a)(2)(iv)(a) through (d) and (f).
- H. There is no requirement in the Flexible Permit rules that startup, shutdown and malfunction emissions must be included in determining compliance with the emission cap. This is inconsistent with the Federal PAL rule. Please explain how the Flexible Permit rules can ensure that non-routine emissions are not masked by the emission cap. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(7)(iv).
- I. There is no requirement in the Flexible Permit rules that compliance with the emission cap is determined on a 12-month rolling average, as required by the Federal PAL rule and BPA policy. We have reviewed Flexible Permits that base compliance on a calendar basis. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(4)(i)(a). Please explain how enforcement of Flexible Permits on a calendar year basis is enforceable as a practical matter.
- J. There is no requirement in the Flexible Permit rules that the owner or operator

must convert monitoring data to monthly and annual emission rates based upon a 12-month rolling average for each month. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(4)(i)(a) and 52.21(aa)(7)(vi).

- K. There is no requirement in the Flexible Permit rules that monitoring to determine compliance with the cap must be based upon continuous emissions monitoring systems, continuous emissions rate monitoring systems, predictive emissions monitoring system, continuous parameter monitoring system, or emission factors, or an equivalent method as approved by the permitting authority, as is required by the Federal PAL rule. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(12)(ii)(a) through (d).
- L. There are no requirements in the Flexible Permit rule for semi-annual reports or deviation reports as required by the Federal PAL rule. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(14)(i) through (ii).
- M. The record retention requirement in the Flexible Permit rules is for two years. This is inconsistent with the Federal PAL rule and title V which require five year recordkeeping. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(13)(ii).
- N. Are short-term limits under the emission cap required by the Flexible Permit rules? Please explain how short-term limits are calculated and how they ensure attainment and maintenance of the NAAQS. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(1)(iii).
- O. The Flexible Permit emission cap may be increased by 9% of total emissions, called an Insignificant Emissions Factor. The Flexible Permit rule in § 116.718 states, "An increase in emissions from operational or physical changes at an existing facility covered by a flexible permit is insignificant, for the purposes of state new source review under this subchapter, if the increase does not exceed either the emission cap or individual emission limitation. This section does not apply to an increase in emissions from a new facility nor to the emission of an air contaminant not previously emitted by an existing facility." Please explain how this definition is distinguishable from the terms "significant" and "insignificant" used elsewhere in your rules. We believe these terms must be clearly distinguishable to facilitate compliance and enforcement of the rules. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(b)(23) and 52.21(aa)(6)(i).

5. Minor Sources

We have reviewed the Flexible Permit rules as they apply to minor sources for

Received:

MAY-20-2011 15:58 From: EIP

5125848019

May 20 2011 04:20pm

To: 5/ 239 3311

P. 19/31

ATTACHMENT B



Carl Edlund/R6/USEPA/US

10/25/2010 07:26 PM

To: Al Armendariz/R6/USEPA/US@EPA

cc: Thomas Diggs/R6/USEPA/US@EPA, Lawrence Starfield/R6/USEPA/US@EPA

bcc:

Subject: Re: LCRA

I wasn't at the meeting but a couple of thoughts:

- LCRA partnered with EPA and TCEQ to explore options for permit flexibility before federal rules were established.

- Therefore OAQPS may be very sensitive about correspondence...recommend running it by Harnett.

Sent by EPA Wireless E-Mail Services

Al Armendariz

----- Original Message -----

From: Al Armendariz

Sent: 10/25/2010 07:42 AM EDT

To: Lawrence Starfield; "Carl Edlund" <edlund.carl@epa.gov>; Thomas Diggs; Jeffrey Robinson; "John Blevins" <blevins.john@epa.gov>; "Suzanne Murray" <murray.suzanne@epa.gov>; Suzanne Smith; David Garcia; "Layla Mansuri" <mansuri.layla@epa.gov>

Co: "David Gray" <gray.david@epa.gov>

Subject: LCRA

Larry

I think we should respond to LCRA about today's meeting, with a letter addressed from me to their CEO, with a cc: to Henry and their other attendees.

It sounds like Pam is advising them not to perform an examination of their operational and permitting history since getting a flex permit. Nor to get the commitment to get into the SIP memorialized in their title v permit

I suppose that isn't surprising, considering that in her role representing BCCA and other folks suing us, Pam is in charge of making arguments that there is nothing wrong with flexible permits.

In the letter to LCRA, we should thank them for the meeting, say that it was a positive step forward, and acknowledge that LCRA presented information that appears to show that emissions reductions are taking place

At the same time, I think we need to make clear that all companies need to be in an enforceable mechanism to true-up their permits,

We should then state that there are three routes available right now for this to happen: our audit, acceptance of the FHR process, direct negotiations with John under the enforcement side of the house.

Permit holders not on one of these paths, really soon, will be subject to Title V and enforcement tools, perhaps as soon as by the end of the year

We might want to stress the rather quick nature of the Title V minor revision. Perhaps, if they prefer, we can offer to memorialize the same commitment to true-up in an AO from EPA to LCRA

Also, we can remind them that those companies that follow the process we have worked out with FHR or follow the federal audit will continue to have TCEQ serve as their permitting authority under both NSR and Title V, and they get protection if we are petitioned to reopen their Title V permit

For companies not on an enforceable path, they run the risk of EPA having to use its Title V authorities, which could make EPA the Title V permitting authority for the facility.

Also: John— did they have internal counsel at the meeting? You and Suzanne might want to pull LCRA's materials you collected under the 114s, and spend an hour looking them over. Based on what we heard at the meeting about boiler tubes, call LCRA and give them a frank discussion about the agency's ongoing national enforcement initiative for NSR and coal-fired EGUs, and perhaps suggest that there are huge NSR benefits to coming in under the audit. With a stroke of a pen, all that tube nonsense can go away.

Thanks to all.

AI

Al Armendariz
Regional Administrator
U.S. EPA
Region 6
armendariz.al@epa.gov
office: 214-665-2100

Received:

MAY-20-2011 15:58 From: EIP

5125848019

May 20, 2011 04:20pm

To: 51 239 311

P.22/31

ATTACHMENT C

BAKER BOTTS LLP

005580.0135

October 31, 2005

Ms. Joyce Spencer, MC 205
 Texas Register Team,
 Office of Legal Services,
 Texas Commission on Environmental Quality
 P O. Box 13087
 Air Permits Program
 Austin, Texas 78711-3087

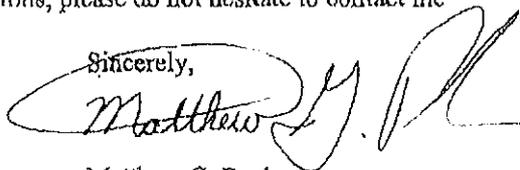
1500 SAN JACINTO CENTER AUSTIN
 98 SAN JACINTO BLVD. DALLAS
 AUSTIN, TEXAS DUBAI
 78701-4078 HONG KONG
 HOUSTON
 TEL +1 512.322.2500 LONDON
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 RIYADH
 WASHINGTON

Matthew G. Paulson
 TEL +1 512.322.2502
 FAX +1 512.322.8329
 matthew.paulson@bakerbotts.com

Re: Comments of the Texas Industry Project
 Proposed NSR Reform Rule
 Rule Project Number 2005-010-116-PR

Enclosed please find the comments of the Texas Industry Project ("TIP") on the above proposal. Attachment A is a list of TIP-member companies. We have also included more detailed comments in Attachments B and C. TIP appreciates the opportunity to comment on the proposed rule. If you have any questions, please do not hesitate to contact me

Sincerely,



Matthew G. Paulson
 For the Texas Industry Project

Enclosure

cc Susan Moore
 Steve Hansen
 Matt Kuryla

BAKER BOTTS LLP

October 31, 2005

**TEXAS INDUSTRY PROJECT
COMMENTS ON TCEQ PROPOSED FEDERAL NSR REFORM RULE****Rule Project Number 2005-010-116-PR**

The Texas Industry Project ("TIP")¹ appreciates the opportunity to submit these comments on the Texas Commission on Environmental Quality's ("TCEQ's") proposed rules implementing the federal New Source Review Reform ("Federal NSR Reform") rule promulgated by the U.S. Environmental Protection Agency ("EPA"). 67 Fed. Reg. 80,186 (December 31, 2002). TIP strongly supports the goals of Federal NSR Reform, and urges TCEQ to integrate all features of the EPA rule, including the federal approach to the Plantwide Applicability Limit ("PAL") flexibility option. TIP's detailed comments are set forth below, and in the attached redline markup of TCEQ's proposed rule language (Attachment B)

I. General Comments**A. TCEQ Has Historically Followed EPA Rules and Guidance in Applying Federal NSR, and Should Continue this Approach in Implementing Federal NSR Reform**

1. Federal NSR is an EPA permitting process imposed on new air emitting sources and modifications that exceed EPA's major source thresholds. EPA's Federal NSR Reform streamlined the way that plant modifications are evaluated against EPA's thresholds. Nothing in EPA's Federal NSR Reform package would alter the comprehensive and protective Texas NSR program administered by TCEQ under the Texas Clean Air Act ("TCAA").
2. All projects, both those that trigger Federal NSR and those that do not, are subject to the TCAA air quality permitting rules, which independently apply the TCAA requirements of Best Available Control Technology ("BACT") and protection of human health and the environment, and which contain a well-developed system of incentives for better operation and emissions control.
3. Federal NSR applicability has traditionally been kept separate from the TCAA review process. TCEQ rules, guidance and interpretations regarding Federal NSR have remained consistent with federal rules, guidance and interpretations on the separate issue of which projects trigger Federal NSR.

¹TIP is composed of 53 companies in the chemical, refining, oil and gas, electronic, forest products, terminal, electric utility and transportation industries with operations in Texas. A list of TIP member companies is attached (Attachment A).

4. ~~TCEQ can and should continue to address Federal NSR in a manner consistent with EPA's approach.~~

B. ~~Substantive Departures from EPA's Federal NSR Rules Introduce Confusion and Inconsistency in Applying EPA Guidance~~

1. Many companies with operations in Texas also have operations in other states. Substantive changes from Federal NSR Reform will create confusion in applying a large body of EPA guidance, and inconsistencies for companies with multi-state operations.
2. There is no basis for rejecting EPA's reforms, developed with comment in over 50 stakeholder meetings across the country. Introducing different, less flexible triggers for Federal NSR generates an inherent competitive disadvantage for companies with multi-state operations who choose to operate in Texas.

C. ~~The D.C. Circuit's Approval of EPA's Federal NSR Reforms is Strong Support for Implementation of the Reforms in Texas Without Substantive Changes~~

1. In *State of New York, et al. v. EPA*, No. 02-1387, June 24, 2005, the U.S. Court of Appeals for the D.C. Circuit upheld EPA's actual to Actual-to-Projected Actual test and Plantwide Applicability Limit ("PAL") reforms, among others. The court rejected EPA's Pollution Control Project and Clean Unit tests, and these rejected reforms have properly been omitted from the TCEQ proposal.
2. The D.C. Circuit's independent judicial validation of EPA's remaining reforms creates strong support for implementation of Federal NSR Reform in Texas without substantive changes.

II. Specific Comments

A. ~~TIP Supports the Decision to Include the Actual-to-Projected Actual Test in the Proposed Rule~~

1. The TCEQ rule package includes an Actual-to-Projected-Actual test for triggering federal NSR at all sites. Previously, this test was restricted to electric generating facilities under TCEQ's informal application of EPA's 1992 "WEPCO" rule. TIP strongly supports TCEQ's decision to include the Actual-to-Projected-Actual test in the proposal.
2. Implementing the Actual-to-Projected-Actual test will help focus federal NSR on truly significant emission increases, and eliminate many of the anomalies with addressing "paper increases" via the existing Actual-to-Potential test.

B. TCEQ Should Adopt the Federal Plantwide Applicability Limit Option Without Substantive Revision

1. The Federal PAL option provides operational flexibility and regulatory certainty while encouraging emissions reductions and pollution prevention.
 - a. A PAL is a plantwide cap (thus, "Plantwide" Applicability Limit) that allows sites to replace the case-by-case NSR applicability analysis of physical or operational changes in favor of a simple plantwide emissions cap that functions as a trigger level for Federal NSR.
 - b. As part of the public process establishing Federal NSR Reform, EPA reviewed the environmental benefits associated with Federal PAL through several pilot permitting projects. *See 67 Fed. Reg. 80,186, 80,207 (Dec 31, 2002).*
 - i. EPA concluded that significant environmental benefits occurred for each of the permits reviewed. *Id.*
 - ii. According to EPA, growth in emissions will tend to shift to cleaner units under the Federal PAL. *Id.*
 - c. Adding the Federal PAL will encourage innovations by simplifying authorizations. Sites with a Federal PAL will still obtain TCAA authorization for any changes, or apply qualified facility flexibility, a flexible permit or another TCAA mechanism.
 - d. The United States Court of Appeals for the D.C. Circuit specifically upheld the Federal PAL in *State of New York, et al. v. EPA*, No. 02-1387, noting that the petitioners failed to refute EPA's assessment of the environmental benefits of the federal PAL.
2. Implementing the Federal PAL is consistent with, and would not conflict with, other aspects of the state NSR permit program.
 - a. The federal PAL only addresses the narrow issue of triggering Federal NSR in connection with a project. All Texas air quality permitting requirements would remain unchanged.
 - b. Existing MAERT limits in permits would continue in effect and attainment requirements would continue to apply, including federal rules, area-specific Mass Emissions Cap and Trade ("MECT") caps, HRVOC caps, Chapter 117 requirements, and all other targeted control programs.

The proposed BACT criterion for a PAL defeats the purpose of a simple Federal PAL, requires split procedures for assessing Federal NSR, and is legally questionable.

- a. ~~TCEQ's proposal is a hybrid PAL approach, modeled on TCEQ's existing flexible permit program.~~ Under the proposal, sites would be required to apply BACT controls to any facilities entering a PAL cap.
 - b. *Plantwide* applicability limits are intended to operate site-wide. Few Texas sites have been able to secure full plant-wide BACT determinations. Many flexible permits exist, but few flexible permits cover an entire plant-site, in large part due to the practical difficulty of applying BACT across an entire plant-site. This concern is especially true in the case of larger, more complex plant-sites with a wide array of source types.
 - c. EPA has raised concerns on recent proposed permits regarding the approval of PALs covering less than a complete plant-site.
 - d. As a consequence of the proposed hybrid approach, the proposed rule contains a provision (Section 116.12(16)) subjecting to a traditional Federal NSR applicability review those portions of a project outside of the PAL coverage, while portions of the project within the PAL would be evaluated under the separate PAL provisions. There is no legal authority, and no practical guidance, for applying the netting, actual-to-actual, or other Federal NSR applicability tools to a portion of a plant-site or project.
 - e. ~~The hybrid approach introduces a significant practical uncertainty into the process, and is legally questionable in light of the D.C. Circuit's recent affirmation of EPA's structure and the ambiguous status of split sites and projects. Under the federal rule, PALs operate plantwide. TCEQ should not turn the federal PAL into a complex and uncertain program that splits sites and projects for purposes of Federal NSR.~~
4. The proposal allows PAL applicants who are current flexible permit holders to use up to 10-year BACT. New PAL applicants, however, are required to use current BACT. This distinction introduces a strong inequity. If the PAL-wide BACT concept included in the proposed rule were retained, 10-year BACT, not current BACT, would be the proper standard for *all* applicants. 10-year BACT represents the well-controlled facility test established by the Texas Legislature for Qualified Facility Flexibility, a similar permit streamlining mechanism. Tex. S.B. 1126, 74th Leg., R.S. (1995). Moreover, the December 31, 2006 deadline for current flexible permit holders to apply for a PAL based on their earlier BACT review may not be sufficient, depending on the timing of rule adoption.

Received:

MAY-20-2011 16:00 From: EIP

S125848019

May 20 2011 04:21pm

To: 51 239 3311

P. 28/31

ATTACHMENT D



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2739

December 6, 2010

Thomas G. Mason
General Manager and Chief Executive Officer
LCRA
P.O. Box 220
Austin, Texas 78767

Dear Mr. Mason:

My staff and I appreciated the opportunity to speak with LCRA and Austin Energy representatives on October 25, 2010, regarding LCRA's flexible and PAL air permit for the Fayette Power Plant (FPP). Thank you also for your letter to me dated November 18, 2010. We agree that the dialogue at the meeting was productive and believe that it was a positive step forward. We also appreciate the information presented by LCRA as it appears to show that emissions reductions are taking place.

In the Environmental Protection Agency's (EPA's) September 20, 2010 Opportunity to Confer letter, we outlined three acceptable options moving forward: EPA's Audit Program; direct negotiations with EPA on a streamlined enforcement path; and a flexible permit transition process consistent with the general elements of the four-step process that we jointly discussed with the Texas Commission on Environmental Quality (TCEQ) and stakeholders on September 16, 2010, or the Flint Hills Resources four-step process dated October 21, 2010. Each of these paths involves an enforceable commitment as well as an appropriate "look back" in order to arrive at federally enforceable unit-specific emission limits. As you are aware, completion of the Audit Program or a streamlined enforcement process also offers flexible permit holders a potentially significant release of liability. And as my staff discussed with Patti Hershey via telephone the week of October 25, given LCRA's potential New Source Review (NSR) exposure under the national enforcement initiative for NSR and coal-fired utilities, we encourage LCRA to reconsider moving forward with either the audit or a negotiated enforcement settlement.

In your November 18 letter, LCRA stated its intention to use a State Implementation Plan (SIP)-approved permit amendment process to convert FPP's flexible permit to a federally-approved permit (under 30 TAC Chapter 116, Subchapter B). The first step in your conversion process appears to be the submission of a permit amendment to TCEQ, pursuant to the recently adopted revisions to the TCEQ's public notice rules. While we appreciate your commitment to transition out of a flexible permit

through an amendment process with public notice, we have some concerns regarding elements of your proposed process.

First, we re-emphasize the importance of using a federally enforceable mechanism to memorialize your commitment and schedule for transitioning your flexible permit to a SIP-approved permit. We reiterate that there are several available mechanisms, such as a minor Clean Air Act (CAA) Title V permit modification (step one of the four-step transition process); a statement in the company's annual CAA Title V certification of compliance; or an Administrative Order on consent. We are open to discussing other enforceable mechanisms as well. Companies that do not make an enforceable commitment to obtain SIP-approved permits run the risk that, during the 6-12 month delay while the new Subchapter B permit application is being developed, EPA will decide (or be petitioned) to use its CAA Title V authorities to object to or reopen their permits on the basis that a facility is operating under a non-SIP compliant flexible permit.

Second, you state in your November 18, 2010 letter that LCRA's permit amendment process will be relatively straightforward, and may not require the rigor of analysis described in Step 2 of the four-step transition process. We are willing to discuss streamlining steps that are appropriate to your circumstances. For instance, EPA understands that establishing unit-specific limits for decommissioned units is not necessary, and that recently constructed equipment already with unit-specific limits may not have a long or involved permitting or operational history, and thus the limits can be identified more quickly. However, it is EPA's position that an essential component of the permit application is a thorough examination of the facility's permitting and operational history from the last SIP-approved permit to the new proposed permit revision. This is critical in order to ensure that future permits contain all SIP and federally applicable requirements, and that pre-flexible permit, SIP-approved permit conditions are either brought forward or their omission is justified. We are open to discussing an appropriate Step 2 analysis with you.

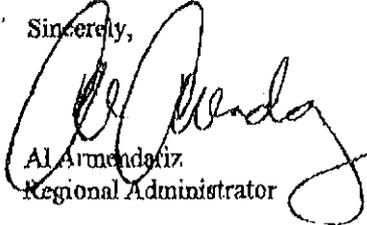
Third, we note that FPP's flexible permit is distinctive in that it incorporates a plantwide applicability limit (PAL) component. While the Opportunity to Confer letter did not specifically discuss the PAL, this is an issue of concern. You correctly note that EPA lent support in 2002 to the idea of piloting a PAL; however, the Agency has since issued federal PAL rules, and those rules have not yet been adopted by the State and included in the SIP. The PAL permit, like the flexible permit, is not a SIP-approved permit, and that situation needs to be addressed. Of course, you may wish to maintain the PAL as a State-only requirement in addition to SIP-approved unit-specific emissions limits required by federal law and, as we discussed on October 25, you may wish to consider including in your CAA Title V permit some alternative operating scenarios, which can provide LCRA with additional operational flexibility.

Finally, we would like to clarify that Region 6, through its September 20, 2010 letter, has, in fact, provided LCRA with notice of specific violations — they are set out in the attachment to that letter. The Agency believes that LCRA can return to compliance by following any of the three paths described in this letter. The opportunity to confer

with EPA regarding those violations will remain open until December 22, 2010. Please do not hesitate to contact Patricia Welton if you would like to schedule another meeting.

Again, thank you for meeting with Region 6 and your willingness to obtain a SIP-approved authorization for the FPP. I am confident we can work together to resolve the flexible permit concerns as they relate to the Fayette Power Plant.

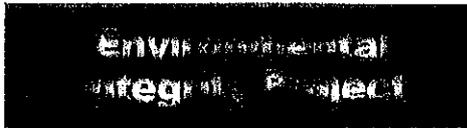
Sincerely,



Al Armendariz
Regional Administrator

cc. Joe Bentley, LCRA
Henry Eby, LCRA
Patti Hershey, LCRA
Pam Giblin, Baker Botts
Derek McDonald, Baker Botts
Matt Russell, City of Austin/Austin Energy

1303 San Antonio, Suite 200
Austin, TX 78701
Phone: (512) 637-9477
Fax: (512) 584-8019
www.environmentalinegrity.org



Fax

To: Ms. LaDonna Castañuela	From: Ilan Levin
Fax: 512-239-3311	Pages: 30
Phone:	Date: 5/20/2011

Re: Comments, Request for Public Meeting, and Request for Contested Case Hearing on
Lower Colorado River Authority's Application for an Amendment to Permit No. 51770 & PSD-
TX-486M3 (Fayette Power Plant's "De-Flexing" Application)

TEXAS
COMMISSION
ON ENVIRONMENTAL
QUALITY
2011 MAY 20 PM 4:25
CHIEF CLERKS OFFICE

From: PUBCOMMENT-OPA
To: PUBCOMMENT-OCC2
Date: 5/24/2011 2:11 PM
Subject: Fwd: Public comment on Permit Number.
Place: PUBCOMMENT-OCC2
Attachments: EIP LCRA Deflex Comments.pdf

PM, HR.

>>> PUBCOMMENT-OCC 5/20/2011 2:57 PM >>>

>>> <ilevin@environmentalintegrity.org> 5/20/2011 2:57 PM >>>

REGULATED ENTY NAME

RN NUMBER:

PERMIT NUMBER:

DOCKET NUMBER:

COUNTY: Texas

PRINCIPAL NAME:

CN NUMBER:

FROM

NAME: Ilan Levin

E-MAIL: ilevin@environmentalintegrity.org

COMPANY: Environmental Integrity Project

ADDRESS: 1303 SAN ANTONIO ST Ste 200

AUSTIN TX 78701-1636

PHONE: 5126379477

FAX:

COMMENTS: Please see the attached comments regarding LCRA Sam Seymour Fayette Power Project Permit No. 51770.

NSR
76973

Mac



1303 San Antonio Street, Suite 200
Austin TX, 78701
p: 512-637-9477 f: 512-584-8019
www.environmentalintegrity.org

May 20, 2011

Ms. LaDonna Castañuela
Office of the Chief Clerk, MC-105
TCEQ
P.O. Box 13087
Austin, TX 78711-3087

Re: Comments, Request for Public Meeting, and Request for Contested Case Hearing on Lower Colorado River Authority's Application for an Amendment to Permit No. 51770 & PSD-TX-486M3 (Fayette Power Plant's "De-Flexing" Application)

Dear Ms. Castañuela:

On behalf of the Sierra Club, we are submitting these comments, a request for a public meeting, and request for contested case hearing in response to the Notice of Receipt of Application and Intent to Obtain Air Permit, dated April 15, 2011, and published on April 22, 2011.

The Lower Colorado River Authority's (LCRA) has filed an Application to convert its existing illegal Flexible Air Permit for the Fayette (a.k.a. Sam Seymour) power plant to a federal Clean Air Act-compliant air permit. As discussed below, this Application contains errors and omissions and fails to comply with federal Clean Air Act standards. The Application fails to demonstrate how the proposed emission limits meet the *best available control technology* ("BACT") standard. The Application fails to demonstrate that the emissions will not cause or contribute to violations of health-based ambient air quality standards. The LCRA Fayette plant is currently operating in violation of the federal Clean Air Act because the plant is a major stationary source that is currently operating without the required federal Clean Air Act *prevention of significant deterioration* ("PSD") permit.

LCRA touts its long-delayed scrubber installations, which will thankfully reduce sulfur dioxide emissions, yet LCRA has steadfastly refused to reduce dangerous particulate matter ("PM") emissions to the maximum achievable levels.

Unless corrected as described below, the Application should not be granted.

I. Request for Contested Case Hearing

We request a contested case hearing. The requestor is the Sierra Club. The Sierra Club is one of the oldest and largest grassroots environmental organizations in the country. Sierra Club is a nonprofit corporation with offices, programs and members in Texas. Sierra Club's Austin, Texas offices are at 1202 San Antonio Street, Austin, Texas 78701, (512) 477-1729

(phone), (512) 477-8526 (fax). Among the goals of the Sierra Club are preserving and enhancing the natural environment and protecting public health. The Sierra Club has the specific goal of improving outdoor air quality. The Sierra Club and its members have a significant interest in ensuring that the LCRA Fayette plant complies with the Clean Air Act and reduces air emissions that endanger public health and property. Sierra Club has an interest in ensuring that the LCRA's Fayette power plant air pollution permit, at issue here, complies with the federal and Texas Clean Air Act and is protective of public health and the environment.

Sierra Club members own property, reside, and/or recreate nearby and downwind of the power plant. One such Sierra Club member is Ms. Carol Daniels. Ms. Daniels resides at 3701 FM 609, La Grange, Texas, 78945. This is approximately 10 miles, as the crow flies, from the power plant. Ms. Daniels is a retired nurse. Ms. Daniels is concerned about air quality and wants the Fayette power plant to comply with anti-pollution laws and have an air pollution permit that protects public health and the environment. Ms. Daniels has standing to request a hearing in her own right.

Please direct all communications or questions regarding this request to Ilan Levin, Senior Attorney, Environmental Integrity Project, at (512) 637-9479, or ilevin@environmentalintegrity.org

II. Request for a Public Meeting

We request a public meeting.

III. Comments

A. General Comments

TCEQ's Flexible Permit program has never been approved as part of the Texas State Implementation Plan, and thus it has never been a legal mechanism to change or void pre-existing construction permits.¹ This means that LCRA's Fayette power plant is currently operating in violation of the federal Clean Air Act and the Texas State Implementation Plan ("SIP"), because the power plant is required to have a federal Clean Air Act prevention of significant deterioration ("PSD") permit, but does not have one. To remedy this serious violation, TCEQ should require LCRA to demonstrate that the plant meets current best available control technology, and that maximum allowable emissions will not cause an exceedance of any national ambient air quality standard.

¹ See, Letter from David Neleigh, US EPA Region 6, to Steve Hagle, TCEQ Air Permits Division, regarding EPA's Comments on Texas' SIP Revisions for Flexible Permits, April 11, 2006 ("EPA's long-held position is that these [Title I, or SIP-approved permits] must remain in effect because they are the legal mechanism through which the underlying PSD or NSR requirements become applicable, and remain applicable, to individual sources." "Terms and conditions of construction permits are permanent and remain effective unless changed using title I procedures or a new construction permit is issued." (Attachment A)

Evidence suggests that LCRA violated new source review requirements and has used its Flex Permit to circumvent NSR. For example, recently-obtained documents from U.S. EPA, in response to a Freedom of Information Act request, contain references to a “boiler tube” issue² that was discussed during a meeting between representatives of LCRA, Austin Energy, and U.S. EPA on October 25, 2010.³ TCEQ should conduct a thorough examination of the Fayette plant’s permitting and operational history, from the last SIP-approved permit to the new proposed permit, in order to ensure that LCRA has not circumvented the federal or Texas Clean Air Acts or triggered New Source Review without meeting *best available control technology* (“BACT”).

In the alternative, if TCEQ is unwilling to require the rigorous BACT and ambient impacts analyses required by the federal Clean Air Act for issuance of a new PSD permit to a major source that currently lacks a valid permit, then TCEQ should require emission limits *no less stringent than* those contained in the following tables.

² Boiler tube replacement is a common power plant major modification that triggers the Clean Air Act’s “New Source Review,” which requires the power plant to meet modern emission standards and best available control technology. See, *United States v. Ohio Edison Co.*, 276 F.Supp.2d 829 (S.D. Ohio 2003) (holding that replacement of boiler tubes was not routine maintenance.) See also, Consent Decree (*U.S. v. Illinois Power Company*), which settles EPA’s NSR claim for modifications including boiler tube replacement at Baldwin station; available at: <http://www.epa.gov/compliance/resources/decrees/civil/caa/dmgfinal-cd.pdf>. See also, Consent Decree in *U.S. v. AEP*, settling NSR claim for major modifications including boiler tube replacement at several coal-fired power plants; available at: <http://www.epa.gov/compliance/resources/decrees/civil/caa/americanelectricpower-cd.pdf>.

³ Email from Al Armendariz, EPA Regional Administrator, to Larry Starfield, EPA Region 6, et al, Re: LCRA, October 25, 2010 (“Based on what we heard at the meeting about boiler tubes, call LCRA and give them a frank discussion about the agency’s ongoing national enforcement initiative for NSR and coal-fired EGUs,...”), Attachment B.

Unit 1				
Pollutant	lb/MMBTU (Averaging period)	lb/hr	tons/yr	Compliance Method
CO	0.187 (1-hr)	1,122.0	4,128.6	CEMS
H ₂ SO ₄	0.006 (3-hr)	36.0	132.5	Method 8
NO _x	0.10 (1-hr)	600.0	2,207.8	CEMS
PM _{Total}	0.05 (3-hr)	300.0	1,103.9	Method 5, 201/202*
PM ₁₀ (total)	0.035 (3-hr)	210.0	772.7	Method 5, 201/202*
PM ₁₀ (filter)	0.025 (3-hr)	150.0	552.0	CEMS
SO ₂	95% Removal	315.0	1,159.1	CEMS
VOC	0.00375 (3-hr)	22.5	82.8	Method 25A

Unit 2				
Pollutant	lb/MMBTU (Averaging Period)	lb/hr	tons/yr	Compliance Method
CO	0.187 (1-hr)	1,122.0	4,187.6	CEMS
H ₂ SO ₄	0.006 (3-hr)	36.0	132.5	Method 8
NO _x	0.10 (1-hr)	600.0	2,239.3	CEMS
PM _{Total}	0.05 (3-hr)	300.0	1,119.7	Method 5, 201/202*
PM ₁₀ (total)	0.035 (3-hr)	210.0	783.8	Method 5, 201/202*
PM ₁₀ (filter)	0.025 (3-hr)	150.0	559.8	CEMS
SO ₂	95% Removal	315.0	1,175.7	CEMS
VOC	0.00375 (3-hr)	22.5	84.0	Method 25A

Unit 3				
Pollutant	lb/MMBTU	lb/hr	tons/yr	Compliance Method
CO	0.187 (1-hr)	885.4	3,531.1	CEMS
H ₂ SO ₄	0.006 (3-hr)	28.4	113.3	Method 8
NO _x	0.10 (1-hr)	473.5	1,888.3	CEMS
PM _{Total}	0.03 (3-hr)	142.1	566.5	Method 5, 201/202*
PM ₁₀ (total)	0.02 (3-hr)	94.7	377.7	Method 5, 201/202*
PM ₁₀ (filter)	0.015 (3-hr)	71.0	283.2	CEMS
SO ₂	90% Removal	497.2	1,982.7	CEMS
VOC	0.00375 (3-hr)	17.8	70.8	Method 25A

* Method 5, 201/202, modified as follows:

Year 1: Two stack tests w/in first year. Stack test to include at least five runs, each of at least two hours duration. At least two runs during cold startup. Stack test to measure PM_{Total}, PM₁₀ and PM_{2.5}. Operating conditions during stack test used to set CAM parameters.

Year 2 and beyond: Annual stack test; same as year 1. Condensable PM from stack test is added to filterables measured by PM CEMS to determine hourly concentration.

Mass determined by multiplying mmbtu * concentration.

B. The De-Flex Application is one of three separate, but inextricably connected, permitting actions that should be considered together

LCRA's Application for an Amendment to Permit No. 51770 & PSD-TX-486M3 (Fayette Power Plant's "De-Flexing" Application) is being processed separately from two related permitting actions. These two related actions are: (1) LCRA's application for planned maintenance, startup, and shutdown ("MSS") emissions,⁴ and (2) LCRA's "stand-alone PAL" permit.⁵

Together, these three separate permitting actions will establish the maximum allowable emission limits of air contaminants, and these three permitting actions should be combined into a single application, so that the plant's emissions and ambient impacts can be adequately and fully considered.

⁴ LCRA's Application was submitted on January 4, 2011.

⁵ LCRA's Application was submitted on January 27, 2011; the Permit (PAL2) was issued by Executive Director on April 14, 2011; A motion to overturn the Executive Director's action is currently pending before the commission.

i. LCRA's MSS Application Cannot be Severed from the De-Flex Application

LCRA's MSS Application requests particulate matter startup emissions of *3,002 pounds per hour* each for Units 1 and 2, and *2,739 pounds per hour* for Unit 3, for up to 600 hours per year. If LCRA obtained these limits, the Fayette power plant could emit a maximum combined total of 2,622 tons of particulates during MSS events. The current Flex Permit authorizes up to 5,171 tons annually, which means that under the preceding scenario, LCRA could emit no more than 2,533 tons the rest of the year. The plant is now authorized to emit 1,441 pounds an hour, but if the MSS emissions that LCRA is requesting are accurate, then the plant would be limited to an average of no more than 602 pounds per hour during "normal" operations. LCRA's MSS Application cannot be considered in a vacuum, given that it requests emission limits that would consume more than half of the plant's annual allowable emissions during less than ten percent of operating hours. The scenario gets even more pronounced under the "final" Flex Permit cap, which limits PM emissions to 4,363 tons per year, and no more than 1,060 pounds per hour. If LCRA's MSS emissions approach the levels for which it is seeking a permit (600 hours x the maximum hourly emissions per unit), the plant could average no more than 426 pounds an hour for the remainder of the year, less than half the Flex Permit's final cap.

Therefore, if TCEQ takes the MSS Permit Application into consideration, as law and common sense dictate, then LCRA would receive significantly lower PM limits as part of this amendment. Put another way, TCEQ should establish substantially lower PM emission limits for "normal operations" than the limits LCRA seeks in this permit amendment.

ii. LCRA's recently issued PAL Permit Cannot be Severed from the De-Flex Application

There is absolutely no question that, in 2002, when TCEQ originally issued Permit No. 51770/PSD-TX-486M3 (the "Flex Permit" that contained the PAL), the two concepts were inseparably bound together. At that time, there was no federal PAL rule or a Texas PAL rule. The TCEQ clearly stated, when it issued this permit in 2002, that: "TCEQ implement[ed] the federal PAL concept through the flexible permit program pursuant to Texas air quality regulations."⁶ Even the venerable law firm currently representing LCRA, Baker Botts, admitted that TCEQ's "legally questionable" PAL rule "is a hybrid PAL approach, modeled on TCEQ's existing flexible permit program."⁷

As EPA noted in its December 6, 2010 letter to Thomas Mason, LCRA General Manager, "FPP's flex permit is distinctive in that it incorporates a plantwide applicability limit (PAL) component... The PAL permit, like the flexible permit, is not a SIP-approved permit, and that situation needs to be addressed." Attachment D. Issuing a stand-alone PAL permit – an action

⁶ Permit No 51770 and PSD-TX-486M, Technical Review Document prepared by the TCEQ's permit engineer, 2002.

⁷ Letter from Matthew Paulson, Baker Botts, LLP, to Ms. Joyce Spencer, TCEQ, regarding Comments of the Texas Industry Project on Proposed NSR Reform Rule, October 31, 2005. Attachment C.

that is currently the subject of a pending motion to overturn – simply perpetuates many of the same problems that exist under the Flex Permit. One example is that the PAL, just like the Flex Permit, is based on allowable emissions rather than actual emissions.

TCEQ can remedy these problems by overturning the Executive Director’s April 14, 2010 issuance of Permit No. PAL2, and considering LCRA’s requests for any site wide caps under the federal PAL rules. This analysis should be done as part of this permit amendment process (i.e., it cannot be severed and issued as a stand-alone PAL).

C. LCRA’s De-Flex Application seeks to “incorporate by reference” dozens of permits-by-rule (“PBRs”) and standard permits

LCRA should include the emissions increases associated with each of these authorizations in its application, and include these emissions in ambient impacts analyses.

D. The Application contains no explanation of the chosen BACT limits, or why the chosen emission rates represent BACT

PM limits are particularly troubling and confusing. The Application should justify all proposed limits, contain separate limits for all regulated pollutants, and specify the monitoring method used for compliance with those limits.

E. Certain proposed emission limits are significantly higher than the emission limits contained in LCRA’s prior SIP-approved (“legacy”) permit

Annual and hourly proposed carbon monoxide limits are far in excess of previously authorized SIP-approved permit limits. Annual and hourly proposed lead limits are higher than previously authorized SIP-approved limits. Hourly and annual proposed interim PM limits are higher than previously authorized SIP-approved emission limits.

F. LCRA Must Explain How Capacity for Unit 3 Was Able to Creep Up by 30 Percent

LCRA should explain how its 4,735 mmBtu/hour (maximum rated capacity) Unit 3 boiler was able to grow into a boiler with 30 percent more capacity than originally permitted. LCRA made conflicting representations in its 2002 Flexible Permit applications: on the one hand LCRA requested and received from the State emission caps based on a maximum heat input rate for Unit 3 that is roughly 30 percent greater than the pre-existing federally-enforceable (i.e., SIP-approved permit’s) limit of 4,735 mmBtu/hour; but on the other hand, LCRA represented that the boiler operations and design (including the maximum capacity) was the same as when the unit was first authorized.

TCEQ and LCRA should explain why it is appropriate to base annual and hourly allowables on heat input rates far in excess of the maximum capacity represented in all pre-existing SIP-approved, PSD, or federally-enforceable permits. If LCRA seeks to increase maximum heat input capacity beyond previous maximum representations made in SIP-approved

PSD permits, then the Application should demonstrate that the plant meets BACT and does not violate ambient air quality standards.

G. The Application contains no ambient impacts analyses

TCEQ should require LCRA to submit modeling to demonstrate that its proposed emissions will not cause or contribute to air pollution.

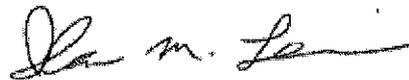
H. Stack tests show LCRA Fayette Plant can meet lower emission levels

The Application incorrectly states that “[f]or SO₂ and PM/PM₁₀/PM_{2.5}, reduced emission limits are being proposed based on stack test data and/or ESP/scrubber data that was unavailable at the time of the original Flexible Permit application submittal.” (Application at 5-1). This statement is simply untrue, because stack test data was available at the time of the original Flex Permit application, showing that the power plant can emit at levels well below those incorporated in its Flex Permit, and that “front-half” (or filterable) PM is approximately half of “total” (filterable plus condensable) PM.⁸

Given LCRA’s inconsistent statements, and considering the available stack test data, TCEQ should impose PM emission limits that meet BACT.

Thank you for your attention to this matter.

Sincerely,



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Austin, Texas 78701
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⁸ Stack test reports from 1979 to September 2002 present actual PM “front-half” emission levels of 0.01 lb/mmBtu (see, e.g., Unit 1, 1979 stack test); 0.02 (Unit 1 “front-half,” September 2002 stack test); 0.04 lb/mmBtu (Unit 1 “total” PM, September 2002 stack test); 0.02 (Unit 2, 1981 stack test); 0.01 lb/mmBtu (Unit 3, Aug. 1988 stack test).

ATTACHMENT A

APR 11 2006

Mr. Steve Hagle
Special Assistant
Air Permits Division (MC-163)
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

RE: U.S. Environmental Protection Agency (EPA) Comments on Texas' State
Implementation Plan (SIP) Revisions for Flexible Permits

Dear Mr. Hagle:

This letter is a follow-up to our meeting in Austin on October 12, 2005, and subsequent discussions concerning revisions to the Texas SIP related to Flexible Permits, Subchapter G of Chapter 116 of Title 30 of the Texas Administrative Code (30 TAC). We have reviewed the rules and identified the items of concern that are described in the Enclosure. We request that you address these concerns and respond to us concerning how these rules meet Federal requirements or identify changes you will make to address our concerns. We will review and take action on these rules prior to taking final action on your New Source Review (NSR) Reform regulations.

If you have any questions, please call Mr. Stanley M. Spruiell of my staff at (214) 665-7212.

Sincerely yours,

Originally Signed
by David Neleigh

David Neleigh
Chief
Air Permits Section

Enclosure

Spruiell/ss:6PD-R:x7212/4/6/06\Comments.Fp.wpd(Spruiell #2 Disk)

Comments on Texas SIP revisions, Subchapter G, Chapter 116, Flexible Permits

1. General Comment

We understand that the Flexible Permit rules apply to major and minor sources and that the rules are designed to provide an exemption from minor NSR requirements if sources do not exceed an allowable emissions cap. In general, the allowable emissions cap assumes Best Available Control Technology (BACT) emission rate plus up to 9% for all units under the permit. Partial Flexible Permits are allowed. We reviewed the Flexible Permit rule as it applies to major sources for consistency with Federal major NSR regulations and 40 CFR 51.160 and 51.161. Texas adopted the Flexible Permit rules prior to finalization of Federal NSR Reform regulations. The final Federal regulations measure emissions increases which result from a modification at existing major sources using the baseline actual-to-projected actual applicability test. The final rules also provide an exemption from the definition of major modification for sources with an actual Plantwide Applicability Limit (PAL). The Court in *New York v. EPA*, 413 F.3d 3, (D.C. Cir. June 24, 2005) struck down provisions of the regulations that provided for exemptions from major NSR applicability that were not based upon actual emissions. The Court held that the NSR modification requirement, which incorporates by reference Clean Air Act (Act) § 111(a)(4), "unambiguously defines 'increases' in terms of actual emissions." Therefore, many of our comments relate to how Flexible Permits are consistent with Federal major NSR requirements.

We have reviewed the Flexible Permit rules as they apply to minor sources and minor modifications for consistency with 40 CFR 51.160 and 51.161.

2. Voiding of Existing SIP-approved Permits

The Texas Commission on Environmental Quality (TCEQ) has stated that all existing permits applicable to the permittee are voided upon issuance of a Flexible Permit. The Flexible Permit becomes the controlling authority for the site, as explained at 10 TexReg 7336:

The applicant for a flexible permit may combine existing permitted facilities, grandfathered facilities, and new facilities into the flexible permit. The flexible permit will then become the controlling authorization for all facilities included in the permit, replacing any existing permits that may have been applicable to all or part of these facilities.

The rules provide for initial issuance of a flexible permit "as an alternative to obtaining a new source review permit" where the source triggers major NSR requirements. We understand that the resulting BACT or Lowest Achievable Emission Rate limits are not enforceable at the new or modified source. Nonattainment NSR (NNSR), prevention of

significant deterioration (PSD) or air quality, minor NSR permits, and permit application representations incorporated by reference into the permits previously issued under the Texas SIP are voided upon issuance of the Flexible Permit. We also understand that these permits are voided without public participation in many cases.

Please explain the legal authority under which TCEQ voids existing federally enforceable NNSR, PSD, and minor NSR permits.

Title I of the Act requires permitting authorities to establish in permits source specific terms and conditions necessary for sources to comply with the requirements of the PSD and NSR programs of parts C and D of the Act. EPA's long-held position is that these permits must remain in effect because they are the legal mechanism through which the underlying PSD or NSR requirements become applicable, and remain applicable, to individual sources.¹ 40 CFR 70.1 requires that each title V source permit assures compliance with all applicable requirements, including any term or condition of any preconstruction permit issued pursuant to programs approved or promulgated under title I of the Act. Amendments to PSD or NSR or minor NSR permits must be made in accordance with the SIP and approved permitting programs. Terms and conditions of construction permits are permanent and remain effective unless changed using title I procedures or a new construction permit is issued. The Federal PAL rule provides a procedure, including public participation, for the elimination of permit limits that were taken to avoid applicability of major NSR applicability and are replaced by a PAL. Federal NSR regulations do not provide for a blanket elimination of emission limits at individual units. Operational flexibility under Federal regulations and policy can be obtained by preapproving future modifications or by setting an actual PAL in order to avoid major NSR netting.

The preamble to the final PAL rule provides:

Can a PAL Eliminate Existing Emission Limitations? An actuals PAL may eliminate enforceable permit limits that a source may have previously taken to avoid the applicability of major NSR to new or modified emissions units. Under the major NSR regulations at §§ 52.21(r)(4), 51.166(r)(2), and 51.165(a)(5)(ii), if you relax these limits, the units become subject to major NSR as if construction had not yet commenced on the source or modification. Should you request a PAL, today's revised regulations allow the PAL to eliminate annual emissions or operational limits that you previously took at your stationary source to avoid major NSR for the PAL pollutant. This means that you may relax or remove these limits without triggering major NSR when the PAL becomes effective. Before removing the limits, your reviewing authority should make sure that you are meeting all other regulatory requirements and that the removal of the limits does not adversely impact the National Ambient Air Quality Standards (NAAQS) or PSD

¹See EPA Memorandum from John Seitz, to Robert Hodanbosi, dated May 20, 1999.

increments. We are not taking a position on whether compliance with requirements contained in a PAL permit could serve to demonstrate compliance with certain pre-existing requirements on individual units. The reviewing authority may assess on a case-by-case basis whether any streamlining would be appropriate in the title V permit consistent with part 70 procedures and our existing policies and guidance on permit streamlining.

See also the Federal PAL rule:

40 CFR 52.21(aa)(1) - Applicability, "(iii) Except as provided under paragraph (aa)(1)(ii)(c) of this section, a major stationary source shall continue to comply with all applicable Federal or State requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL."

The same requirement is found in 40 CFR 51.165(f)(1)(iv) and 51.166(w)(1)(iii).

The EPA has also addressed supersession of existing NSR permit requirements by title V permits. See May 20, 1999, letter to Robert Hodanbosi:

It is the Agency's view that title V permits may not supersede, void, replace, or otherwise eliminate the independent enforceability of terms and conditions in SIP-approved permits. To assure compliance with "applicable requirements" such as SIP-approved permits and conditions, title V permits must record those requirements, but may not eliminate their independent existence and enforceability under title I of the Clean Air Act (i.e., may not supersede them).

See also White Paper for Streamlined Development of part 70 permit Applications, Lydia Wegman, July 1995, (White Paper #1) which recommends an efficient procedure for revising NSR permits during title V review to eliminate obsolete or environmentally insignificant terms in NSR permits. See also, Approval of Wisconsin Construction Permit Permanency SIP Revision 71 FR 9934, April 28, 2006, and Notice of Deficiency for Clean Air Act Operating Program in Wisconsin, 69 FR 10167, March 4, 2004.

Our review of the Flexible Permit rules indicates that the voided NSR permits are federally enforceable terms and conditions which may be revised only through approved SIP procedures.

3. Definition of Modification

Please distinguish between the definition of "major modification" at 30 TAC 116.12(11) in Subchapter A, Nonattainment and Prevention of Significant Deterioration Review

Definitions, and the definition of "modification of an existing facility" at 30 TAC 116.10(11) of Subchapter A, General Definitions. The definition of "modification of existing facility" states:

Any physical change in, or change in the method of operation of, a facility in a manner that increases the amount of any air contaminant emitted by the facility into the atmosphere or that results in the emission of any air contaminant not previously emitted. The term does not include:

a physical change in, or change in the method of operation of, a facility where the change is within the scope of a flexible permit or a multiple plant permit;
or

Under the current Texas SIP, a permit amendment is required in order to vary from any representation or permit condition if the change will cause: (A) a change in the method of control of emissions; (B) a change in the character of the emissions; or (C) an increase in the emission rate of any air contaminant.

Please clarify whether the exemptions from the requirement to obtain a permit amendment in the submitted definition of "modification of an existing facility" apply to significant project emission increases or significant net emission increases at major sources or major modifications. Please explain how exemptions in the definition of "modification of an existing facility" relate to major modifications. We believe these definitions as written are vague and may be interpreted to provide an exemption to major NSR applicability.

4. Consistency with Federal Major NSR Requirements

Because Flexible Permits become the controlling authorization for major sources and authorize the source to make modifications without a permit amendment as required by the current SIP, the rules, as they are applicable to major sources, must be consistent with Federal NSR requirements and the PAL rule. We note that the rules eliminate permitting vehicles necessary to demonstrate netting for major sources. We have identified the following list which discusses some of the inconsistencies between the Flexible Permit rules and Federal regulations. Please provide information to explain how the following requirements are met under the Flexible Permit rules:

- A Please explain how the revisions meet the requirements of 40 CFR 51.160 to provide procedures that enable TCEQ to determine that modifications authorized under these rules will not result in (1) a violation of applicable portions of control strategy; or (2) interference with attainment or maintenance of a national standard in the State in which the proposed source (or modification) is located or in a neighboring State.

- B. The Flexible Permit emission cap is based upon allowable emissions rather than actual emissions. There are no regulatory requirements that the cap be set below actual emissions. The rules do not ensure that the emissions cap will be set at a level that does not trigger major NSR applicability for major sources or major modifications based upon the baseline actual to projected actual calculation in the State's NSR rules. Please explain how the flexible permit rules are inconsistent with the Federal PAL rule at 40 CFR 52.21(aa)(6).
- C. The rule allows an implementation schedule to install required BACT controls which may last for many years. The rule also allows sources to increase the emission cap for sources that "fail to install the additional control equipment as provided by the implementation schedule." How does the rule ensure that the emission cap is set below actual emissions during these periods? Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(6) and (11). Please explain whether a Flexible Permit always assumes current BACT in calculating the emission cap.
- D. The Flexible Permit authorizes modifications that do not exceed the emission cap. NSR compliance is required only upon initial issuance of the permit. Please explain how the rule ensures that modifications subject to major NSR and the public participation requirements of Part 51 are reviewed. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(5) and (11); and 51.161.
- E. For sources without a PAL, major NSR applicability must be determined by monitoring actual emissions on a unit by unit basis (rather than by compliance with the emissions cap) consistent with TCEQ's major NSR rules for baseline actual to projected actual emissions calculations. Please explain how the rule ensures that major sources determine major NSR applicability on a unit by unit basis. Our review indicates that the monitoring requirements from the Flexible Permit rule at §116.715(c)(6) requires "information and data sufficient to demonstrate continuous compliance with the emission caps and individual emission limitations contained in the flexible permit shall be maintained in a file at the plant site and made available at the request of personnel from the commission or any air pollution control program having jurisdiction." Please explain how the rule provides for monitoring, recordkeeping and reporting necessary to determine project emission increases and to enforce major NSR requirements on a unit by unit basis. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(a)(2)(iv)(a) through (d), and (f); 52.21(aa)(12) through (14).
- F. Please explain how the public participation requirements of Part 51 and the PAL rule are met by the Flexible Permit rules. Under Chapter 39 of the TAC,

initial issuance of and amendments to flexible permits are exempt from public notice requirements unless the action involves new construction or a modification that results in emissions increases above Texas' permits by rule limits (250 tons per year (tpy) of carbon monoxide, 250 tpy of nitrogen oxides, 25 tpy of volatile organic compounds, sulfur dioxide, or particulate matter less than 10 micrometers, or any other air contaminant except carbon dioxide, water, nitrogen, methane, ethane, hydrogen and oxygen). These provisions are inconsistent with Federal requirements which require modifications of existing sources to be subject to a 30-day notice and comment period and for the permitting authority to provide public information including the agency's analysis of the effect of the construction or modification on ambient air quality, including the agency's proposed approval or disapproval. These requirements apply to major and minor sources. Please provide a rationale for exemptions from these requirements and the current SIP. Please explain how the Flexible Permit rules are consistent with 40 CFR 51.161 and 52.21(aa)(5) and (11).

- G. The Flexible Permit rules allows sources to exclude units at a facility from the permit. Federal rules do not allow for partial PALs. Note that the Federal PAL rule requires that all units at a facility must be subject to the plantwide limit. See 40 CFR 52.21(aa)(6)(i) through (ii). Emission increases and decreases at all units at the facility must be considered to determine major NSR applicability. How does the Flexible Permit provide that increases and decreases are quantified, determined to be contemporaneous, and made practically enforceable for sources that are not subject to a PAL? Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(a)(2)(iv)(a) through (d) and (f).
- H. There is no requirement in the Flexible Permit rules that startup, shutdown and malfunction emissions must be included in determining compliance with the emission cap. This is inconsistent with the Federal PAL rule. Please explain how the Flexible Permit rules can ensure that non-routine emissions are not masked by the emission cap. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(7)(iv).
- I. There is no requirement in the Flexible Permit rules that compliance with the emission cap is determined on a 12-month rolling average, as required by the Federal PAL rule and EPA policy. We have reviewed Flexible Permits that base compliance on a calendar basis. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(4)(i)(a). Please explain how enforcement of Flexible Permits on a calendar year basis is enforceable as a practical matter.
- J. There is no requirement in the Flexible Permit rules that the owner or operator

must convert monitoring data to monthly and annual emission rates based upon a 12-month rolling average for each month. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(4)(i)(a) and 52.21(aa)(7)(vi).

- K. There is no requirement in the Flexible Permit rules that monitoring to determine compliance with the cap must be based upon continuous emissions monitoring systems, continuous emissions rate monitoring systems, predictive emissions monitoring system, continuous parameter monitoring system, or emission factors, or an equivalent method as approved by the permitting authority, as is required by the Federal PAL rule. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(12)(ii)(a) through (d).
- L. There are no requirements in the Flexible Permit rule for semi-annual reports or deviation reports as required by the Federal PAL rule. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(14)(i) through (ii).
- M. The record retention requirement in the Flexible Permit rules is for two years. This is inconsistent with the Federal PAL rule and title V which require five year recordkeeping. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(13)(ii).
- N. Are short-term limits under the emission cap required by the Flexible Permit rules? Please explain how short-term limits are calculated and how they ensure attainment and maintenance of the NAAQS. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(aa)(1)(iii).
- O. The Flexible Permit emission cap may be increased by 9% of total emissions, called an Insignificant Emissions Factor. The Flexible Permit rule in § 116.718 states, "An increase in emissions from operational or physical changes at an existing facility covered by a flexible permit is insignificant, for the purposes of state new source review under this subchapter, if the increase does not exceed either the emission cap or individual emission limitation. This section does not apply to an increase in emissions from a new facility nor to the emission of an air contaminant not previously emitted by an existing facility." Please explain how this definition is distinguishable from the terms "significant" and "insignificant" used elsewhere in your rules. We believe these terms must be clearly distinguishable to facilitate compliance and enforcement of the rules. Please explain how the Flexible Permit rules are consistent with 40 CFR 52.21(b)(23) and 52.21(aa)(6)(i).

5. Minor Sources

We have reviewed the Flexible Permit rules as they apply to minor sources for

ATTACHMENT B



Carl Edlund/R6/USEPA/US

10/25/2010 07:26 PM

To: Al Armendariz/R6/USEPA/US@EPA

cc: Thomas Diggs/R6/USEPA/US@EPA, Lawrence
Starfield/R6/USEPA/US@EPA

bcc:

Subject: Re: LCRA

I wasn't at the meeting but a couple of thoughts:

- LCRA partnered with EPA and TCEQ to explore options for permit flexibility before federal rules were established.
 - Therefore OAQPS may be very sensitive about correspondence..recommend running it by Harnett.
- Sent by EPA Wireless E-Mail Services
Al Armendariz

----- Original Message -----

From: Al Armendariz

Sent: 10/25/2010 07:42 PM EDT

To: Lawrence Starfield; "Carl Edlund" <edlund.carl@epa.gov>; Thomas Diggs;
Jeffrey Robinson; "John Blevins" <blevins.john@epa.gov>; "Suzanne Murray"
<murray.suzanne@epa.gov>; Suzanne Smith; David Garcia; "Layla Mansuri"
<mansuri.layla@epa.gov>

Cc: "David Gray" <gray.david@epa.gov>

Subject: LCRA

Larry,

I think we should respond to LCRA about today's meeting, with a letter addressed from me to their CEO, with a cc: to Henry and their other attendees.

It sounds like Pam is advising them not to perform an examination of their operational and permitting history since getting a flex permit. Nor to get the commitment to get into the SIP memorialized in their title v permit.

I suppose that isn't surprising, considering that in her role representing BCCA and other folks suing us, Pam is in charge of making arguments that there is nothing wrong with flexible permits.

In the letter to LCRA, we should thank them for the meeting, say that it was a positive step forward, and acknowledge that LCRA presented information that appears to show that emissions reductions are taking place.

At the same time, I think we need to make clear that all companies need to be in an enforceable mechanism to true-up their permits,

We should then state that there are three routes available right now for this to happen: our audit, acceptance of the FHR process, direct negotiations with John under the enforcement side of the house.

Permit holders not on one of these paths, really soon, will be subject to Title V and enforcement tools, perhaps as soon as by the end of the year.

We might want to stress the rather quick nature of the Title V minor revision. Perhaps, if they prefer, we can offer to memorialize the same commitment to true-up in an AO from EPA to LCRA.

Also, we can remind them that those companies that follow the process we have worked out with FHR or follow the federal audit will continue to have TCEQ serve as their permitting authority under both NSR and Title V, and they get protection if we are petitioned to reopen their Title V permit.

For companies not on an enforceable path, they run the risk of EPA having to use its Title V authorities, which could make EPA the Title V permitting authority for the facility.

Also: John-- did they have internal counsel at the meeting? You and Suzanne might want to pull LCRA's materials you collected under the 114s, and spend an hour looking them over. Based on what we heard at the meeting about boiler tubes, call LCRA and give them a frank discussion about the agency's ongoing national enforcement initiative for NSR and coal-fired EGUs, and perhaps suggest that there are huge NSR benefits to coming in under the audit. With a stroke of a pen, all that tube nonsense can go away.

Thanks to all.

Al

Al Armendariz
Regional Administrator
U.S. EPA
Region 6
armendariz.al@epa.gov
office: 214-665-2100

ATTACHMENT C

BAKER BOTTS LLP

005580.0135

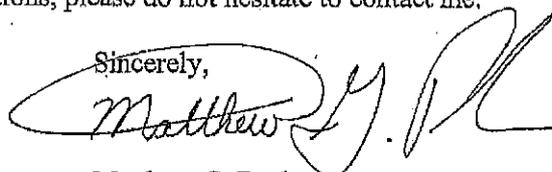
October 31, 2005

Ms. Joyce Spencer, MC 205
Texas Register Team,
Office of Legal Services,
Texas Commission on Environmental Quality
P.O. Box 13087
Air Permits Program
Austin, Texas 78711-3087

Re: Comments of the Texas Industry Project
Proposed NSR Reform Rule
Rule Project Number 2005-010-116-PR

Enclosed please find the comments of the Texas Industry Project ("TIP") on the above proposal. Attachment A is a list of TIP-member companies. We have also included more detailed comments in Attachments B and C. TIP appreciates the opportunity to comment on the proposed rule. If you have any questions, please do not hesitate to contact me.

Sincerely,



Matthew G. Paulson
For the Texas Industry Project

Enclosure

cc: Susan Moore
Steve Hansen
Matt Kuryla

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October 31, 2005

**TEXAS INDUSTRY PROJECT
COMMENTS ON TCEQ PROPOSED FEDERAL NSR REFORM RULE**

Rule Project Number 2005-010-116-PR

The Texas Industry Project ("TIP")¹ appreciates the opportunity to submit these comments on the Texas Commission on Environmental Quality's ("TCEQ's") proposed rules implementing the federal New Source Review Reform ("Federal NSR Reform") rule promulgated by the U.S. Environmental Protection Agency ("EPA"). 67 Fed. Reg. 80,186 (December 31, 2002). TIP strongly supports the goals of Federal NSR Reform, and urges TCEQ to integrate all features of the EPA rule, including the federal approach to the Plantwide Applicability Limit ("PAL") flexibility option. TIP's detailed comments are set forth below, and in the attached redline markup of TCEQ's proposed rule language (Attachment B).

I. General Comments

A. TCEQ Has Historically Followed EPA Rules and Guidance in Applying Federal NSR, and Should Continue this Approach in Implementing Federal NSR Reform

1. Federal NSR is an EPA permitting process imposed on new air emitting sources and modifications that exceed EPA's major source thresholds. EPA's Federal NSR Reform streamlined the way that plant modifications are evaluated against EPA's thresholds. Nothing in EPA's Federal NSR Reform package would alter the comprehensive and protective Texas NSR program administered by TCEQ under the Texas Clean Air Act ("TCAA").
2. All projects, both those that trigger Federal NSR and those that do not, are subject to the TCAA air quality permitting rules, which independently apply the TCAA requirements of Best Available Control Technology ("BACT") and protection of human health and the environment, and which contain a well-developed system of incentives for better operation and emissions control.
3. Federal NSR applicability has traditionally been kept separate from the TCAA review process. TCEQ rules, guidance and interpretations regarding Federal NSR have remained consistent with federal rules, guidance and interpretations on the separate issue of which projects trigger Federal NSR.

¹TIP is composed of 53 companies in the chemical, refining, oil and gas, electronic, forest products, terminal, electric utility and transportation industries with operations in Texas. A list of TIP member companies is attached (Attachment A).

4. TCEQ can and should continue to address Federal NSR in a manner consistent with EPA's approach.

B. Substantive Departures from EPA's Federal NSR Rules Introduce Confusion and Inconsistency in Applying EPA Guidance

1. Many companies with operations in Texas also have operations in other states. Substantive changes from Federal NSR Reform will create confusion in applying a large body of EPA guidance, and inconsistencies for companies with multi-state operations.
2. There is no basis for rejecting EPA's reforms, developed with comment in over 50 stakeholder meetings across the country. Introducing different, less flexible triggers for Federal NSR generates an inherent competitive disadvantage for companies with multi-state operations who choose to operate in Texas.

C. The D.C. Circuit's Approval of EPA's Federal NSR Reforms is Strong Support for Implementation of the Reforms in Texas Without Substantive Changes

1. In *State of New York, et al. v. EPA*, No. 02-1387, June 24, 2005, the U.S. Court of Appeals for the D.C. Circuit upheld EPA's actual to Actual-to-Projected Actual test and Plantwide Applicability Limit ("PAL") reforms, among others. The court rejected EPA's Pollution Control Project and Clean Unit tests, and these rejected reforms have properly been omitted from the TCEQ proposal.
2. The D.C. Circuit's independent judicial validation of EPA's remaining reforms creates strong support for implementation of Federal NSR Reform in Texas without substantive changes.

II. Specific Comments

A. TIP Supports the Decision to Include the Actual-to-Projected Actual Test in the Proposed Rule

1. The TCEQ rule package includes an Actual-to-Projected-Actual test for triggering federal NSR at all sites. Previously, this test was restricted to electric generating facilities under TCEQ's informal application of EPA's 1992 "WEPCO" rule. TIP strongly supports TCEQ's decision to include the Actual-to-Projected-Actual test in the proposal.
2. Implementing the Actual-to-Projected-Actual test will help focus federal NSR on truly significant emission increases, and eliminate many of the anomalies with addressing "paper increases" via the existing Actual-to-Potential test.

B. TCEQ Should Adopt the Federal Plantwide Applicability Limit Option Without Substantive Revision

1. The Federal PAL option provides operational flexibility and regulatory certainty while encouraging emissions reductions and pollution prevention.
 - a. A PAL is a plantwide cap (thus, "*Plantwide*" Applicability Limit) that allows sites to replace the case-by-case NSR applicability analysis of physical or operational changes in favor of a simple plantwide emissions cap that functions as a trigger level for Federal NSR.
 - b. As part of the public process establishing Federal NSR Reform, EPA reviewed the environmental benefits associated with Federal PAL through several pilot permitting projects. *See 67 Fed. Reg.* 80,186; 80,207 (Dec. 31, 2002).
 - i. EPA concluded that significant environmental benefits occurred for each of the permits reviewed. *Id.*
 - ii. According to EPA, growth in emissions will tend to shift to cleaner units under the Federal PAL. *Id.*
 - c. Adding the Federal PAL will encourage innovations by simplifying authorizations. Sites with a Federal PAL will still obtain TCAA authorization for any changes, or apply qualified facility flexibility, a flexible permit or another TCAA mechanism.
 - d. The United States Court of Appeals for the D.C. Circuit specifically upheld the Federal PAL in *State of New York, et al. v. EPA*, No. 02-1387, noting that the petitioners failed to refute EPA's assessment of the environmental benefits of the federal PAL.
2. Implementing the Federal PAL is consistent with, and would not conflict with, other aspects of the state NSR permit program.
 - a. The federal PAL only addresses the narrow issue of triggering Federal NSR in connection with a project. All Texas air quality permitting requirements would remain unchanged.
 - b. Existing MAERT limits in permits would continue in effect and attainment requirements would continue to apply, including federal rules, area-specific Mass Emissions Cap and Trade ("MECT") caps, HRVOC caps, Chapter 117 requirements, and all other targeted control programs.
3. The proposed BACT criterion for a PAL defeats the purpose of a simple Federal PAL, requires split procedures for assessing Federal NSR, and is legally questionable.

- a. TCEQ's proposal is a hybrid PAL approach, modeled on TCEQ's existing flexible permit program. Under the proposal, sites would be required to apply BACT controls to any facilities entering a PAL cap.
 - b. *Plantwide* applicability limits are intended to operate site-wide. Few Texas sites have been able to secure full plant-wide BACT determinations. Many flexible permits exist, but few flexible permits cover an entire plant-site, in large part due to the practical difficulty of applying BACT across an entire plant-site. This concern is especially true in the case of larger, more complex plant-sites with a wide array of source types.
 - c. EPA has raised concerns on recent proposed permits regarding the approval of PALs covering less than a complete plant-site.
 - d. As a consequence of the proposed hybrid approach, the proposed rule contains a provision (Section 116.12(16)) subjecting to a traditional Federal NSR applicability review those portions of a project outside of the PAL coverage, while portions of the project within the PAL would be evaluated under the separate PAL provisions. There is no legal authority, and no practical guidance, for applying the netting, actual-to-actual, or other Federal NSR applicability tools to a portion of a plant-site or project.
 - e. The hybrid approach introduces a significant practical uncertainty into the process, and is legally questionable in light of the D.C. Circuit's recent affirmance of EPA's structure and the ambiguous status of split sites and projects. Under the federal rule, PALs operate plantwide. TCEQ should not turn the federal PAL into a complex and uncertain program that splits sites and projects for purposes of Federal NSR.
4. The proposal allows PAL applicants who are current flexible permit holders to use up to 10-year BACT. New PAL applicants, however, are required to use current BACT. This distinction introduces a strong inequity. If the PAL-wide BACT concept included in the proposed rule were retained, 10-year BACT, not current BACT, would be the proper standard for *all* applicants. 10-year BACT represents the well-controlled facility test established by the Texas Legislature for Qualified Facility Flexibility, a similar permit streamlining mechanism. Tex. S.B. 1126, 74th Leg., R.S. (1995). Moreover, the December 31, 2006 deadline for current flexible permit holders to apply for a PAL based on their earlier BACT review may not be sufficient, depending on the timing of rule adoption.

ATTACHMENT D



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

December 6, 2010

Thomas G. Mason
General Manager and Chief Executive Officer
LCRA
P.O. Box 220
Austin, Texas 78767

Dear Mr. Mason:

My staff and I appreciated the opportunity to speak with LCRA and Austin Energy representatives on October 25, 2010, regarding LCRA's flexible and PAL air permit for the Fayette Power Plant (FPP). Thank you also for your letter to me dated November 18, 2010. We agree that the dialogue at the meeting was productive and believe that it was a positive step forward. We also appreciate the information presented by LCRA as it appears to show that emissions reductions are taking place.

In the Environmental Protection Agency's (EPA's) September 20, 2010 Opportunity to Confer letter, we outlined three acceptable options moving forward: EPA's Audit Program; direct negotiations with EPA on a streamlined enforcement path; and a flexible permit transition process consistent with the general elements of the four-step process that we jointly discussed with the Texas Commission on Environmental Quality (TCEQ) and stakeholders on September 16, 2010, or the Flint Hills Resources four-step process dated October 21, 2010. Each of these paths involves an enforceable commitment as well as an appropriate "look back" in order to arrive at federally enforceable unit-specific emission limits. As you are aware, completion of the Audit Program or a streamlined enforcement process also offers flexible permit holders a potentially significant release of liability. And as my staff discussed with Patti Hershey via telephone the week of October 25, given LCRA's potential New Source Review (NSR) exposure under the national enforcement initiative for NSR and coal-fired utilities, we encourage LCRA to reconsider moving forward with either the audit or a negotiated enforcement settlement.

In your November 18 letter, LCRA stated its intention to use a State Implementation Plan (SIP)-approved permit amendment process to convert FPP's flexible permit to a federally-approved permit (under 30 TAC Chapter 116, Subchapter B). The first step in your conversion process appears to be the submission of a permit amendment to TCEQ, pursuant to the recently adopted revisions to the TCEQ's public notice rules. While we appreciate your commitment to transition out of a flexible permit

through an amendment process with public notice, we have some concerns regarding elements of your proposed process.

First, we re-emphasize the importance of using a federally enforceable mechanism to memorialize your commitment and schedule for transitioning your flexible permit to a SIP-approved permit. We reiterate that there are several available mechanisms, such as a minor Clean Air Act (CAA) Title V permit modification (step one of the four-step transition process); a statement in the company's annual CAA Title V certification of compliance; or an Administrative Order on consent. We are open to discussing other enforceable mechanisms as well. Companies that do not make an enforceable commitment to obtain SIP-approved permits run the risk that, during the 6-12 month delay while the new Subchapter B permit application is being developed, EPA will decide (or be petitioned) to use its CAA Title V authorities to object to or reopen their permits on the basis that a facility is operating under a non-SIP-compliant flexible permit.

Second, you state in your November 18, 2010 letter that LCRA's permit amendment process will be relatively straightforward, and may not require the rigor of analysis described in Step 2 of the four-step transition process. We are willing to discuss streamlining steps that are appropriate to your circumstances. For instance, EPA understands that establishing unit-specific limits for decommissioned units is not necessary, and that recently constructed equipment already with unit-specific limits may not have a long or involved permitting or operational history, and thus the limits can be identified more quickly. However, it is EPA's position that an essential component of the permit application is a thorough examination of the facility's permitting and operational history from the last SIP-approved permit to the new proposed permit revision. This is critical in order to ensure that future permits contain all SIP and federally applicable requirements, and that pre-flexible permit, SIP-approved permit conditions are either brought forward or their omission is justified. We are open to discussing an appropriate Step 2 analysis with you.

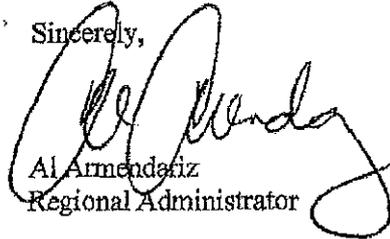
Third, we note that FPP's flexible permit is distinctive in that it incorporates a plantwide applicability limit (PAL) component. While the Opportunity to Confer letter did not specifically discuss the PAL, this is an issue of concern. You correctly note that EPA lent support in 2002 to the idea of piloting a PAL; however, the Agency has since issued federal PAL rules, and those rules have not yet been adopted by the State and included in the SIP. The PAL permit, like the flexible permit, is not a SIP-approved permit, and that situation needs to be addressed. Of course, you may wish to maintain the PAL as a State-only requirement in addition to SIP-approved unit-specific emissions limits required by federal law and, as we discussed on October 25, you may wish to consider including in your CAA Title V permit some alternative operating scenarios, which can provide LCRA with additional operational flexibility.

Finally, we would like to clarify that Region 6, through its September 20, 2010 letter, has, in fact, provided LCRA with notice of specific violations – they are set out in the attachment to that letter. The Agency believes that LCRA can return to compliance by following any of the three paths described in this letter. The opportunity to confer

with EPA regarding those violations will remain open until December 22, 2010. Please do not hesitate to contact Patricia Welton if you would like to schedule another meeting.

Again, thank you for meeting with Region 6 and your willingness to obtain a SIP-approved authorization for the FPP. I am confident we can work together to resolve the flexible permit concerns as they relate to the Fayette Power Plant.

Sincerely,



Al Armendariz
Regional Administrator

cc: Joe Bentley, LCRA
Henry Eby, LCRA
Patti Hershey, LCRA
Pam Giblin, Baker Botts
Derek McDonald, Baker Botts
Matt Russell, City of Austin/Austin Energy



1303 San Antonio Street, Suite 200
Austin TX, 78701
p: 512-637-9477 f: 512-584-8019
www.environmentalintegrity.org

January 13, 2011

MSP
File 973

La Donna Castañuela
Office of the Chief Clerk, MC-105
Texas Commission on Environmental Quality
12100 Park 35 Circle
Austin, TX 78753

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OPA

JAN 18 2011

BY *ll*

via facsimile

CHIEF CLERK'S OFFICE

7:51 JAN 14 PM 2:59

TEXAS
COMMISSION
ON ENVIRONMENTAL
QUALITY

Re: January 5, 2011 Application of the Lower Colorado River Authority for an Amendment to Flexible Permit Number 51770 and PSD-TX-486M3, Fayette Power Project (Sam Seymour power plant), La Grange, Texas

Dear Ms. Castañuela:

The Environmental Integrity Project ("EIP") and Texas Campaign for the Environment ("TCE") **request to be placed on the permanent mailing list** for the above-referenced permit.

In addition, **we request a contested case hearing** for LCRA's application seeking to authorize planned maintenance, startup, and shutdown emissions at the Fayette Power Project. Our preliminary concerns regarding this application are detailed below.

Requestors

The Environmental Integrity Project (EIP) (<http://www.environmentalintegrity.org/>) is a nonprofit organization dedicated to the enforcement of anti-pollution laws, including the Clean Air Act. EIP has offices at 1303 San Antonio Street, Suite 200, Austin, Texas, 78701, 512-637-9479, ilevin@environmentalintegrity.org. Members of EIP's staff live, work, and recreate downwind of the Fayette Power Project and are affected by air emissions from this coal-fired power plant.

Texas Campaign for the Environment (TCE) (<http://www.texasenvironment.org/>) is a nonprofit membership organization dedicated to informing and mobilizing Texans to protect their health, their communities and the environment. TCE has offices located at 3303 Lee Parkway #402, Dallas, TX 75219; 611 S. Congress #200-B, Austin, TX 78704; and 3100 Richmond #290, Houston, TX 77098. TCE members and staff live, work, and recreate in the vicinity and downwind of FPP.

Please address all correspondence regarding this letter to Ilan Levin, Senior Attorney, Environmental Integrity Project, 1303 San Antonio Street, Suite 200, Austin, Texas, 78701.

ll

Initial Concerns

LCRA's application requests increases in hourly allowable emission rates for particulate matter and lead. Particulate matter is a mixture of small particles, including organic materials, metals, and ash, which can cause health and environmental problems. According to the U.S. EPA, once inhaled, PM can affect the lungs and pulmonary and respiratory systems, causing serious health effects such as "disease, cancer, and premature mortality." 52 Fed. Reg. 24,634, 24,663 (July 1, 1987). Numerous studies have linked PM exposure to increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; decreased lung function; aggravated asthma; development of chronic bronchitis; irregular heartbeat; heart attacks; and premature death in people with heart or lung disease. Additionally, PM can be carried long distances to settle over land or water, which may result in acidic lakes and streams, nutrient imbalances in aquatic systems, and damage to forests and farmlands.

According to the U.S. EPA,¹ lead is persistent in the environment and accumulates in soils and sediments through deposition from air sources. Ecosystems near point sources of lead demonstrate a wide range of adverse effects including losses in biodiversity, changes in community composition, decreased growth and reproductive rates in plants and animals, and neurological effects in vertebrates. Lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems and the cardiovascular system. Lead exposure also affects the oxygen carrying capacity of the blood.

The application does not contain any demonstration that the FPP will meet best available control technology for control of PM and lead emissions. The application states, "LCRA is proposing to minimize the duration of planned boiler startup and shutdown as described in section IX.C.1." Section IX.C.1. is not a BACT analysis. Among the basic preliminary questions that need to be answered as part of a BACT analysis are the following:

- Please explain why the Unit 3 scrubber cannot be brought online before startup.
- Please explain why the ESPs are unable to be brought online until after coal and fuel-oil are fired in the boilers.
- Please explain why natural gas is not BACT for a startup fuel. Natural gas lines are abundant in the La Grange area.
- Please explain the 30% PM control efficiency for Units 1 and 2 used in the calculation on startup for Units 1 and 2. AP-42 Table 1.1-5 states that 30% control of condensable PM emissions is a reasonable assumption for a PC boiler with FGD. Does a wet scrubber remove any filterable particulate matter during startup?

The application also fails to demonstrate that the requested increase in hourly emissions will not cause or contribute to an exceedance of any applicable ambient air standard, including NAAQS for PM and lead.

¹ <http://epa.gov/air/lead/health.html>

In addition, the application seeks to increase authorized emissions of hazardous air pollutants ("HAP"), and is subject to the federal Clean Air Act Section 112(g) requirement for maximum achievable control technology ("MACT").

Lastly, we request public notice, and the opportunities to file public comments and have a contested case hearing on LCRA's application.

Thank you for your attention to this matter.

Sincerely,



Ilan Levin
Environmental Integrity Project
1303 San Antonio Street, Suite 200
Austin, TX 78701
(512) 637-9479
ilevin@environmentalintegrity.org ✓



AUSTIN TX 787

U.S. MAIL PERMIT NO. 101

Ilan Levin
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Austin, Texas, 78701

TEXAS
COMMISSION
ON ENVIRONMENTAL
QUALITY

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2011 JAN 14 PM 2:58

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JAN 14 2011

TCEQ MAIL CENTER
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12100 Park 35 Circle
Austin, TX 78753

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*NSR
76973*

January 13, 2011

La Donna Castañuela
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Texas Commission on Environmental Quality
12100 Park 35 Circle
Austin, TX 78753

IP+
HR OPA

via facsimile

BY *DL*

2011 JAN 13 PM 4:36
CHIEF CLERKS OFFICE

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COMMISSION
ON ENVIRONMENTAL
QUALITY

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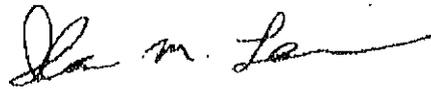
¹ <http://epa.gov/air/lead/health.html>

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Thank you for your attention to this matter.

Sincerely,



Ilan Levin
Environmental Integrity Project
1303 San Antonio Street, Suite 200
Austin, TX 78701
(512) 637-9479
ilevin@environmentalintegrity.org

JOHN W. MIKUS, ATTORNEY AT LAW

9301 SOUTHWEST FREEWAY SUITE 250
HOUSTON, TEXAS 77074
OFFICE: (713) 780-7311
TELECOPIER: (713) 776-9030

VIA FAX AND VIA PRIORITY MAIL, DELIVERY CONFIRMATION REQUESTED

Date: June 14, 2012

To: TCEQ Office of the Chief Clerk, MC 105
P.O. Box 13087
Austin, Texas 78711-3087

Via Fax at 512-239-3311

NSR
76973

REVIEWED

JUN 18 2012

By *AR*

H

From: John W. Mikus

Subject: Request for Contested Case Hearing and Comments re Fayette County Power Plant Project and Permits

Permit Number: 51770 and PSDTX486M3

Number of Pages (including this page): -2-

Dear Sirs:

I own farm land in Fayette County, Texas and presently reside in Houston, Texas. I am protesting the above permit because it will needlessly and wrongfully extend the life of the coal stacks that fire the boilers that produce electricity at the Fayette County Power Project near Fayetteville, Texas. The LCRA and the TCEQ needs to join the City of Austin and electric coops that seek to stop the use of coal fired electricity by the year 2016 because:

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
2012 JUN 19 AM 10:45
CHIEF CLERKS OFFICE

1. The external benefits of other forms of energy especially wind, solar, geothermal, and natural gas power energy far exceed the internal benefits of coal fired electricity.
2. The external costs of coal far exceed any internal benefit of coal.
3. The money proposed to be spent on the Fayette County Power Project if this permit is approval would be far better spent retraining LCRA employees to be the alternatives energy producers of the future and converting the Fayette County Power Project to one fueled with natural gas produced in Texas.
4. Texas agriculture and growing Texas populations need water. Coal wastes water.
5. The duration and intensity of the Texas drought was primarily caused by the more than 21 coal fired power projects in Texas.

John W. Mikus

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Date: June 14, 2012

To: TCEQ Office of the Chief Clerk, MC 105

P.O. Box 13087

Austin, Texas 78711-3087

Via Fax at 281-345-9457/Your Phone: 281-973-4300

From: John W. Mikus

Subject: Request for Contested Case Hearing and Comments re Fayette County Power Plant Project and Permits

Permit Number: 51770 and PSDTX486M3

Page 2

6. Texas needs to stop sending \$2 billion to out of state coal companies each year and start spending that \$2 billion in Texas on clean energy alternatives that will create hundreds of thousands of lasting good paying jobs, make Texas and the nation more energy independent and therefore more secure, help correct the balance of payments to make our nation more competitive, make our air and water cleaner, and increase state tax revenue so seriously needed to educate our growing and grossly undereducated young populations of Texans.

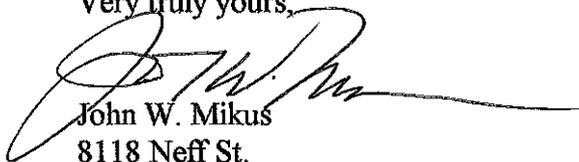
7. The present electricity producing operating paradigm dependent on coal needs to be changed now so that no coal or lignite is used in Texas to produce electricity by the year 2016. The economic multiplier effect alone of making this change will far offset any alleged increased electricity cost to the consumer. Long term, even the internal cost of wind energy is equal to or less than coal. Wind energy creates Texas jobs. Coal cannot hold a candle to the external benefits and external costs savings of wind energy.

8. The health care costs savings alone justify this long overdue change in the production of electricity in Texas. This permit will do little to reduce the emission of "ultrafines" especially that of mercury. This permit will increase the likelihood of these "ultrafines" making they way directly into our circulatory and respiratory systems and our brains. Studies indicated that mercury emissions may accelerates the progression of Alzheimer's Disease in our elderly populations.

I urge you to do what is right for Texas and Texans and stop the use of coal now!

Request is hereby made for a Contested Case Hearing so that the above concerns and comments may be given a fair and transparent public hearing and adjudication for the sake of our fellow citizens especially the elderly and our children.

Very truly yours,



John W. Mikus

8118 Neff St.

Houston, Texas 77036

832-212-1600

TEXAS
COMMISSION
ON ENVIRONMENTAL
QUALITY

John W. Mikas
8118 Neff St.
Houston TX 77036

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JOHN W. MIKUS, ATTORNEY AT LAW

9301 SOUTHWEST FREEWAY SUITE 250
HOUSTON, TEXAS 77074
OFFICE: (713) 780-7311
TELECOPIER: (713) 776-9030

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TEXAS
COMMISSION
ON ENVIRONMENTAL
QUALITY

2012 JUN 15 AM 8:13
CHIEF CLERKS OFFICE

*NSR
76973*

REVIEWED

JUN 15 2012

By *bp*

H

nmw

VIA FAX AND VIA PRIORITY MAIL, DELIVERY CONFIRMATION REQUESTED

Date: June 14, 2012

To: TCEQ Office of the Chief Clerk, MC 105

P.O. Box 13087

Austin, Texas 78711-3087

Via Fax at 281-345-9457/Your Phone: 281-973-4300

From: John W. Mikus

Subject: Request for Contested Case Hearing and Comments re Fayette County Power Plant Project and Permits

Permit Number: 51770 and PSDTX486M3

Page 2

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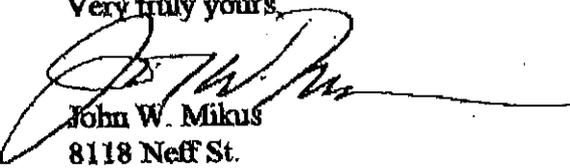
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John W. Mikus

8118 Neff St.

Houston, Texas 77036

832-212-1600

JOHN W. MIKUS, ATTORNEY AT LAW

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HOUSTON, TEXAS 77074
OFFICE: (713) 780-7311
TELECOPIER: (713) 776-9030

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P.O. Box 13087
Austin, Texas 78711-3087

Via Fax at 512-239-3311

NSR
76973

2012 JUN 14 PM 4:15
CHIEF CLERKS OFFICE
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

From: John W. Mikus

Subject: Request for Contested Case Hearing and Comments re Fayette County Power Plant Project and Permits

Permit Number: 51770 and PSDTX486M3

Number of Pages (including this page): -2-

REVIEWED

JUN 15 2012

By *EP*

H

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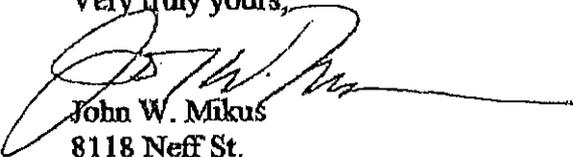
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Very truly yours,


John W. Mikus

8118 Neff St.

Houston, Texas 77036

832-212-1600

Have formal oral comment ⑦

TCEQ Public Meeting Form
June 14, 2012

IP# 167771

Lower Colorado River Authority
Air Quality Permit
Permit Number 51770 and PSDTX466M3

PLEASE PRINT

Name: JOHN W. MIKUS

Mailing Address: 8118 Neff

Physical Address (if different): _____

City/State: Houston Texas Zip: 77036

This information is subject to public disclosure under the Texas Public Information Act

Email: MIKUSLAW@YAHOO.COM ✓

Phone Number: 832 2121600 ✓

- Are you here today representing a municipality, legislator, agency, or group? Yes No

If yes, which one? _____

Please add me to the mailing list. ✓

I wish to provide formal *ORAL COMMENTS* at tonight's public meeting.

I wish to provide formal *WRITTEN COMMENTS* at tonight's public meeting.

(Written comments may be submitted at any time during the meeting)

Please give this form to the person at the information table. Thank you.

mc

Marisa Weber

From: PUBCOMMENT
Sent: Friday, June 15, 2012 8:05 AM
To: PUBCOMMENT-OCC2
Subject: FW: Public comment on Permit Number 51770

*USE
76973*

H

From: PUBCOMMENT-OCC
Sent: Friday, June 15, 2012 7:16 AM
To: PUBCOMMENT
Subject: FW: Public comment on Permit Number 51770

From: sepantell@gmail.com [<mailto:sepantell@gmail.com>]
Sent: Thursday, June 14, 2012 4:42 PM
To: donotReply@tceq.state.tx.us
Subject: Public comment on Permit Number 51770

REGULATED ENTY NAME LCRA SAM SEYMOUR FAYETTE POWER PROJECT

RN NUMBER: RN100226844

PERMIT NUMBER: 51770

DOCKET NUMBER:

COUNTY: FAYETTE

PRINCIPAL NAME: LOWER COLORADO RIVER AUTHORITY

CN NUMBER: CN600253637

FROM

NAME: MS Susan Pantell

E-MAIL: sepantell@gmail.com

COMPANY:

ADDRESS: 403 W ODELL ST
AUSTIN TX 78752-2407

PHONE: 5123949245

FAX:

MW

COMMENTS: I request a contested case hearing for LCRA's application for the Fayette power plant because of concerns about the request for increases in the emission levels of particulate matter, hazardous air pollutants and lead.

Marisa Weber

From: PUBCOMMENT
Sent: Friday, June 15, 2012 8:04 AM
To: PUBCOMMENT-OCC2
Subject: FW: Public comment on Permit Number PSDTX486M3

*NSR
76973*

H

From: PUBCOMMENT-OCC
Sent: Friday, June 15, 2012 7:16 AM
To: PUBCOMMENT
Subject: FW: Public comment on Permit Number PSDTX486M3

From: darelleelizabeth@sbcglobal.net [<mailto:darelleelizabeth@sbcglobal.net>]
Sent: Thursday, June 14, 2012 4:34 PM
To: donotReply@tceq.state.tx.us
Subject: Public comment on Permit Number PSDTX486M3

REGULATED ENTY NAME LCRA SAM SEYMOUR FAYETTE POWER PROJECT

RN NUMBER: RN100226844

PERMIT NUMBER: PSDTX486M3

DOCKET NUMBER:

COUNTY: FAYETTE

PRINCIPAL NAME: LOWER COLORADO RIVER AUTHORITY

CN NUMBER: CN600253637

FROM

NAME: MS Darelle E Robbins

E-MAIL: darelleelizabeth@sbcglobal.net

COMPANY:

ADDRESS: 1912 MCDUFFIE ST
HOUSTON TX 77019-6132

PHONE: 7135224192

FAX:

MS

COMMENTS: I add my name to the many Texans who are requesting a Contested Case Hearing regarding this permit. The local community and state public health needs must be considered carefully.

Have formal comment

6

TCEQ Public Meeting Form
June 14, 2012

IP#154989

Lower Colorado River Authority
Air Quality Permit
Permit Number 51770 and PSDTX466M3

PLEASE PRINT

Name: Allison Sliva

Mailing Address: 42 Valhalla Bay City TX 77414

Physical Address (if different): _____

City/State: Bay City, TX Zip: 77414

This information is subject to public disclosure under the Texas Public Information Act

Email: sliva a@sbcglobal.net ✓

Phone Number: 979-245-0808 ✓

- Are you here today representing a municipality, legislator, agency, or group? Yes No

If yes, which one? _____

Please add me to the mailing list. ✓

I wish to provide formal *ORAL COMMENTS* at tonight's public meeting.

I wish to provide formal *WRITTEN COMMENTS* at tonight's public meeting.

(Written comments may be submitted at any time during the meeting)

Please give this form to the person at the information table. Thank you.

ms

I request a contested case (H)
hearing on this permit.

I live downstream of LaGrange
on the Colorado River & am concerned
about mercury contamination. I
also am concerned about air
pollution, as the air does not respect
County lines.

Allison Aliva

RECEIVED

JUN 14 2012

AT PUBLIC MEETING

mw

Marisa Weber

From: PUBCOMMENT
Sent: Friday, June 15, 2012 8:08 AM
To: PUBCOMMENT-OCC2
Subject: FW: Public comment on Permit Number 51770

MWR
76973

H

From: PUBCOMMENT-OCC
Sent: Friday, June 15, 2012 7:15 AM
To: PUBCOMMENT
Subject: FW: Public comment on Permit Number 51770

From: thatval@pipeline.com [<mailto:thatval@pipeline.com>]
Sent: Thursday, June 14, 2012 3:38 PM
To: donotReply@tceq.state.tx.us
Subject: Public comment on Permit Number 51770

REGULATED ENTY NAME LCRA SAM SEYMOUR FAYETTE POWER PROJECT

RN NUMBER: RN100226844

PERMIT NUMBER: 51770

DOCKET NUMBER:

COUNTY: FAYETTE

PRINCIPAL NAME: LOWER COLORADO RIVER AUTHORITY

CN NUMBER: CN600253637

FROM

NAME: Valerie Thatcher

E-MAIL: thatval@pipeline.com

COMPANY:

ADDRESS: 1193 CURVE ST
AUSTIN TX 78702-1955

PHONE: 5124570273

FAX:

MWR

COMMENTS: I am submitting a request for a contested case hearing regarding the Fayette coal plant within the issue of revising the flexible permit. The permit numbers are 51770 and PSDTX486M3. Dirty coal plants just pass along the so-called energy cost savings onto citizens in the form of higher expenses for health, the cost of food (particularly pecans near Fayette!), and degradation in quality of life, so please do not balk at the expense of modifying this plant to adhere to the EPA's latest standards for emissions.

CCH

BCB

IP# 159759

XX

TCEQ Public Meeting Form
June 14, 2012

Lower Colorado River Authority
Air Quality Permit
Permit Number 51770 and PSDTX466M3

PLEASE PRINT

Name: JANICE VAN DYKE WALDEN

Mailing Address: 220 West 34th, Houston, 77018

Physical Address (if different): _____

City/State: _____ Zip: _____

****This information is subject to public disclosure under the Texas Public Information Act****

Email: _____

Phone Number: _____

- Are you here today representing a municipality, legislator, agency, or group? Yes No

If yes, which one? _____

Please add me to the mailing list. ✓

I wish to provide formal *ORAL COMMENTS* at tonight's public meeting.

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(Written comments may be submitted at any time during the meeting)

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I REQUEST A CONTESTED CASE
HEARING.

Quinn Walker
6/14/12

AED

JUN 14 2012

AT PUBLIC MEETING

RECEIVED

JUN 14 2012

AT PUBLIC MEETING

mw