

4APT-APB

Robert R. Fulp, Director
Forsyth County Environmental
Affairs Department
537 North Spruce Street
Winston Salem, North Carolina 27101

Dear Mr. Fulp:

This correspondence is being sent to provide you with an official final copy of the Environmental Protection Agency (EPA) Region 4 report, which was completed as a result of the EPA Title V and New Source Review (NSR) program evaluation conducted on September 14-15, 2005 (see Enclosure). The purpose of this program review was to evaluate the status and the ability of the Forsyth County Environmental Affairs Department (FCEAD) to carry out the duties and responsibilities required to effectively run the title V and NSR programs, as well as find out how EPA can best assist the FCEAD in meeting these commitments.

I would like to thank you and your staff for your cooperation throughout the evaluation. Your staff responded to the questionnaires and provided all requested material in a timely and professional manner. In addition, I commend you on the effective implementation of both the title V and NSR programs. Both programs are operating at a very high level of proficiency. These programs are important tools to implement measures protecting air quality for the citizens of Forsyth County. We appreciate your efforts to ensure that Forsyth County has effective air programs and look forward to continuing to work closely with FCEAD to maintain high quality title V and NSR programs.

If you or your staff have any questions regarding the report, please do not hesitate to contact Randy Terry of the EPA Region 4 staff at (404) 562-9032.

Sincerely,

R. Douglas Neeley
Acting Director
Air, Pesticides and Toxics
Management Division

Enclosure

Forsyth County Environmental Affairs Department (FCEAD) Title V and New Source Review Program Review

The U.S. Environmental Protection Agency (EPA) Region 4 committed to conduct detailed title V and New Source Review (NSR) program reviews for all state and local programs that have at least ten title V major sources within their jurisdiction. These evaluations also include a review of the title V fees collected and billed annually. This commitment results from an agreement between the EPA Office of Air and Radiation and the EPA Office of Inspector General, which required EPA to conduct title V program evaluations of all state and local programs. EPA Region 4 decided to use this opportunity to evaluate the NSR programs in addition to the title V programs at each of the state and local programs. The program reviews are to be completed by the end of Fiscal Year 2006. The Forsyth County Environmental Affairs Department (FCEAD) program review was conducted on the dates of September 14 - 15, 2005 in Winston Salem, North Carolina. Prior to arrival, EPA emailed a list of five title V sources to FCEAD that EPA planned to review as part of the overall program review. Upon EPA's arrival at FCEAD, EPA spent the day reviewing the title V files, and discussing the title V and NSR questionnaires with FCEAD staff. The following parties attended the program evaluation: Randy Terry (EPA Region 4), Katy Forney (EPA Region 4), Scott Miller (EPA Region 4), James Purvis (EPA Region 4), and Peter Lloyd (FCEAD)

Forsyth County Title V Program Review

1. Program Review

FCEAD's organizational structure for air permitting resides at the office in Winston Salem, North Carolina. All title V permits for the FCEAD area are processed in the Winston Salem office. FCEAD's title V permitting jurisdiction covers all of Forsyth County. Separate program evaluation reports will be written covering the North Carolina, and Mecklenburg county title V programs. No report will be written for the Western North Carolina title V program because they have fewer than 10 title V sources within their jurisdiction.

The headings in the title V portion of this report duplicate the headings in the title V program review questionnaire administered during the visit.

EPA appreciates FCEAD's efforts to aid the evaluation process by providing an answered copy of the program review questionnaire prior to the meeting. For many questionnaire items, the answers provided by FCEAD are more detailed than indicated in the summary discussion below. The answered questionnaire from FCEAD will be on file at EPA Region 4 for reference.

A. Title V Permit Preparation and Content

FCEAD has processed 100 percent of their initial title V applications. All of the applications submitted by the sources during the initial round of title V permit issuance contained enough information for the permit to be created without requesting additional information, which allowed FCEAD to focus on processing the applications within the federal timeframes.

In instances where a significant amount of time has passed between application submittal and drafting a permit, FCEAD requires that the application be updated but does not require a new compliance certification. Instead, to ensure that a source is in compliance prior to permit issuance, FCEAD reviews the most recent inspection report and any other reports available on the facility. The compliance status of the facility is contained with the statement of basis (SOB). In cases where that facility is out of compliance, FCEAD delays permit issuance until the source attains compliance.

FCEAD has provided additional training for their staff in an effort to improve the quality of permit writing. Additionally, they have developed a reading log of pertinent information that is kept readily available to assist permit writers as they draft permits. In order to ensure a quality product, once permits are drafted by the permit writers, they are reviewed by the permit coordinator and the program manager prior to finalization.

FCEAD has made specific efforts to streamline their permit issuance by incorporating test methods and other federal requirements into the title V permit by referencing the permit number, federal register citation, or rule.

FCEAD prepares a SOB for each title V permit processed, incorporating the requirements of 40 CFR part 70.7(a)(5). FCEAD's SOB contains all the justifications for the permit conditions.

In order to ensure consistency in developing the SOB, FCEAD has provided on the job training to all permit writers detailing the necessary content of the engineering evaluation. FCEAD works to ensure that each SOB explains, at a minimum, the rationale for monitoring as well as applicability decisions and any exemptions.

In discussing the overall strengths and weakness of the format of title V permits, FCEAD believes that one strength is the format of their title V permits gives a clear presentation of the permittee's Clean Air Act obligations and provides a defensible basis for certifying compliance. Additionally, the format has proven to be flexible and allows grouping sources in a logical manner which helps to reduce redundancy and allows for clear and concise permit conditions. FCEAD believes that one weakness of the title V program is the length of some permits, but acknowledges that the length of the permits is a result of the complexity of the regulatory landscape for air quality and does not think that shorter or simpler permits could be developed without simplifying the underlying requirements.

B. General Permits

Although their title V regulations allow for them, FCEAD does not issue general permits.

C. Monitoring

FCEAD ensures that compliance with all applicable requirements for all permitted emission units is specifically addressed in the SOB. Monitoring requirements are added to the permit to ensure a basis for determining compliance. The level or rigor of monitoring is determined on a case-by-case basis considering the compliance margin and level of emissions control necessary to achieve compliance. Monitoring determinations are included within the SOB. Additionally, FCEAD's permit writers attend and participate in training on monitoring to ensure that they are aware of the latest monitoring developments. FCEAD routinely adds monitoring for major sources, where not specifically required, to ensure verification of compliance with imposed limitations, as allowed under sufficient and/or periodic monitoring EPA guidance and has noticed positive benefits of additional monitoring such as better source compliance. FCEAD incorporates compliance assured monitoring (CAM) into its permits.

D. Public Participation and Affected State Review

As a local title V program, FCEAD utilizes the "Winston-Salem Journal" newspaper, which is the newspaper in their area with the largest circulation, to give general public notice of title V permitting actions. The cost of publishing public notices in the newspaper has ranged between \$175.00 and \$200.00 and is paid for by FCEAD. In addition, FCEAD posts the public notices on their website, as well as, utilizes a mailing list to provide notification of upcoming permitting actions. In order to help the public determine when the 60 day citizen petition clock begins, FCEAD has agreed to include language within all title V public notices referring the public to EPA Region 4's website.

FCEAD has not reached out to any specific communities beyond the traditional public notification process. FCEAD has not noticed a significant difference in the response levels to any of the current methods of notification but believes that the most effective avenue for public

notices would be to focus on the people residing in the area around the facility. FCEAD does not provide public notices in any language other than English.

Upon request, copies of any additional information relative to the permit action are sent at a charge of 10 cents per page, with no charge being issued if the total print job is less than 25 pages. Persons requesting to see additional information relative to a permitting action such as the application, deviation reports, compliance certifications, etc. during the public comment period must place a request for the appropriate files and they will be made available, generally within one business day. Due to their ability to quickly meet requests for additional information, FCEAD has not needed to extend the comment period deadline.

FCEAD has never been requested by the public to extend the public comment period nor have they received public comments on any of their title V permitting actions. The only comments FCEAD has received on a permitting action have come from EPA or the facility. FCEAD works with the permittee prior to public notice in an effort to minimize permittee comments during the public notice period. On the occasions that FCEAD receives permittee comments, the comments tend to vary, but have had no impact on FCEAD's ability to issue timely permits.

FCEAD notifies North Carolina, Virginia, and Mecklenburg County as affected permitting authorities of every public notice by email. FCEAD has never received comments from an affected state or county nor have they ever provided comments to a state or tribe as an affected area.

E. Permit Issuance/ Revision/ Renewal

FCEAD has issued 100 percent of their initial title V permits. Although FCEAD has been able to process title V revisions within the time frames allotted by Part 70, they continually look for ways to further streamline the permit issuance process. Additionally, FCEAD has been able to process their significant, minor, and administrative revisions within the part 70 timeframes.

FCEAD has begun to issue their renewal title V permits and had issued six renewal permits at the time of the evaluation. FCEAD has found the renewal process to be easier than the "original" permits. All of the renewal applications have been timely and complete. The renewal applications will be processed as expeditiously as possible, but FCEAD has placed a higher priority on processing the permit modifications. FCEAD believes that they will have all of their renewal permits issued very close to the part 70 allocated timeframe.

F. Compliance

FCEAD requires any deviations identified as excess emissions lasting more than four hours and any other deviations where reporting is not specified in the permit conditions and/or required by applicable regulations to be reported prior to the semi-annual monitoring report. Deviations are not necessarily considered as violations. FCEAD defines deviation as "any action or circumstance not in accordance with the terms and conditions of the title V operating permit including those attributable to equipment malfunction, breakdown, or upset conditions and/or excess emissions events. Each deviation report must contain the probable cause of the deviation, corrective actions taken, and the magnitude and duration of the deviation. Following the receipt

of a deviation report, FCEAD reviews the report and evaluates a course of action on a case-by-case basis. FCEAD reviews 100 percent of all deviation reports, semi-annual monitoring reports, and annual compliance certifications. Upon receipt of a semi-annual monitoring report or an annual compliance certification, FCEAD staff reviews the report for compliance. If a violation is discovered, appropriate enforcement is initiated. Verbal or other reports are noted in the case files and the permittee is advised if a written report is required

G. Resources and Internal Management Support

FCEAD establishes its title V fee based on an application fee for each new title V application or significant modification and an emission fee of \$37.00 per ton. Title V revenue is managed in a program specific account and expenses are assigned a program specific code under the title V account. A portion of the salaries for staff working on title V activities are assigned as title V expenses based upon each employees assigned work. This system allows for financial reports for management oversight and accurately accounts for title V revenue as well as expenditures.

FCEAD has 2.75 permit writer FTEs assigned to title V permitting and compliance activities. Case managers may be assigned both title V and non-title V facilities and must allocate their time to work in both program areas accordingly. The portion of time for staff working in title V is based upon each employee's assigned work. Similarly, case managers are responsible for compliance related activities in addition to permitting activities for their assigned facilities. Approximately 50 percent of the case manager's time used for permitting and 50 percent is used for compliance/enforcement issues. The amount of time allocated to title V versus non-title V activities was tracked using timesheets through County Fiscal Year 2004. After this practice was discontinued beginning in CFY2005, the FCEAD determined the appropriate allocation of resources based on the historical data that had been accumulated and adjusts it when necessary. At the time of the evaluation, FCEAD was fully staffed and has experienced a minimal turnover rate that has not impacted the issuance of permits.

FCEAD has not developed a career ladder for their program managers, but do have the ability to hire employees in at a competitive salary. All permit writers, are afforded opportunities for EPA, State and local training as opportunities arise and resources allow. Training courses include online courses, telecourses, classroom courses and self instructional courses. Training provided includes how to develop periodic and sufficiency monitoring in permits, enforceable permit terms and conditions as a practical matter and writing a SOB.

FCEAD does not have an Environmental Justice (EJ) policy, EJ coordinator, nor do they consider EJ issues during the issuance of a permit. However, FCEAD is open to the possibility of incorporating EJ activities in their daily operation and expressed interest in participating in EPA (and other sources) training to further their knowledge in environmental justice. EPA offered FCEAD assistance with obtaining demographic information for their projects when needed.

H. Title V Benefits

FCEAD believes that they have gained significant benefits as a result of the title V program. Since they began to implement the title V program, the title V staff has gained a better

understanding of the stationary source requirements in the State Implementation Plan and a better understanding of how to write enforceable permit terms. Other benefits of the title V program and the title V fee revenue include a better stationary source emission inventory, improved compliance, and a stable funding source despite fluctuations in other state programs.

Program Highlights

1. FCEAD has issued 100 percent of its initial title V permits and at the time of the program evaluation has processed 6 out of 12 renewal applications received.
2. FCEAD has demonstrated a strong commitment to maintaining a quality staff with a minimum turnover.
3. FCEAD's use of a separate account for title V revenue/expenses makes it easy to identify and track the financial transactions.

Suggested Improvements

1. EPA suggests that FCEAD incorporate into their title V public notice an email address to allow for the submission of electronic comments.
2. EPA recommends that FCEAD consider providing more details in their public notice when processing a significant modification. The portion of the permit being revised and thus reopened for comment should be specifically cited to ensure clarity on what is actually open for comment. This specificity will help to eliminate receipt of comments on a portion of the permit, which is unchanged and has previously undergone public comment.
3. EPA suggested and FCEAD agreed to incorporate into their title V public notice information regarding the citizen petition deadline and direct the public to EPA's proposed permit website (www.epa.gov/region4/air/permits/northcarolina.htm). This will increase the public awareness about EPA's 45-day review deadline as well as the citizen petition deadline.
4. EPA suggests that FCEAD become more aware of EJ issues and begin looking for opportunities for their staff to obtain training.

2. Permit Reviews

Staff reviewed five title V permit files which included final title V permits, title V SOB's, submitted monitoring reports required under title V permit conditions, deviation/upset/malfunction reports, Department-generated monitoring analysis reports, and enforcement actions. In addition, the files contained preconstruction permitting actions that had taken place at each facility. The facility permits were chosen based on the variety of industrial source categories representative of the title V facility universe in Forsyth County.

The permit files consist of loose-leaf notebooks neatly and uniformly labeled per section by content. Staff focused primarily on reviewing final permits with monitoring reports to see the

interaction of title V permit conditions and their associated monitoring conditions to validate compliance with applicable requirements in each facility permit. Without exception, each semiannual monitoring report and annual compliance certification contained adequate emission rate calculations, emission factors (and emission factor substantiation where necessary), permit condition cites, and other data to determine compliance with the underlying applicable requirement. Title V deviation reports are submitted on a semiannual basis along with the semiannual monitoring reports.

A unique feature of the County's file is the Reporting Requirements Summary Sheet in which a Forsyth County staff member produces a one-page summary of the results of the applicable monitoring required, the permit condition that is the basis of that monitoring, and a compliance determination of what the monitoring submitted demonstrates. This Summary is included for each monitoring report submitted (semiannual monitoring report and annual compliance certification). In the event that a monitoring submittal provides information that demonstrates noncompliance or a question arises from monitoring information submitted, the Summary includes the follow-up action taken by the Staff member and results of that action. In instances where monitoring demonstrated noncompliance, it was simple to trace the actions taken by FCEAD staff to return the facility to compliance or to get additional information to verify that the facility was in compliance with the applicable requirement. All observed instances of noncompliance were rectified by FCEAD staff on a timely basis through either enforcement or follow-up with the facility.

One issue noted with respect to reporting requirements was the frequency with which title V deviation reports are submitted. General permit conditions and underlying regulations governing submittal of deviation reports (found at FCEAD Regulation Chapter 3Q.0508(f)(2)) require title V deviation reports to be made by the day following a deviation event. Facilities are submitting deviation reports on a semiannual basis. While the current approach represents a departure from the title V regulatory requirements, staff notes that such an approach has been approved by EPA in the past in other title V programs. Staff notes that the State of North Carolina is developing an amendment to this Regulation that allows quarterly deviation reports to be submitted as a replacement to the next-day deviation report requirements. FCEAD staff indicated that the Department would be adopting this newly-revised Rule once the State DENR adopts it. In the interim, EPA staff recommends that facilities be required to submit next-day deviation reports per the final title V general permit conditions and underlying regulation found at 3Q.0508(f)(2).

Overall, the permit file review validated that FCEAD writes excellent permits, requiring meaningful compliance information submittal from title V facilities and demonstrated follow-up actions where either monitoring information showed indeterminate compliance status or showed noncompliance with an applicable requirement.

Suggested Improvements

1. EPA suggests that facilities be required to submit next-day deviation reports per the final title V general permit conditions and underlying regulation found at 3Q.0508(f)(2) until such time as FCEAD adopt regulations that allow quarterly deviation reports to be submitted as a replacement to the next-day deviation reports.

Forsyth County Environmental Affairs Department New Source Review (NSR) Program Review

On September 14, 2005, the Region 4 Office of the U.S. Environmental Protection Agency (EPA) conducted a review of the Forsyth County Environmental Affairs Department (FCEAD) new source review (NSR) permit program. The NSR program review consisted of administering a questionnaire developed for EPA's national NSR program review project. Region 4 has reviewed all of FCEAD major NSR permits in recent years, therefore; no major NSR permits were evaluated as part of the on-site review.

The primary EPA staff person conducting the review was Katy Forney from Region 4's Air Permits Section. Another EPA representative present during the review was Randy Terry. FCEAD's primary participant was Peter Lloyd from the permitting program.

FCEAD has a SIP-approved NSR program with its own NSR rules. FCEAD therefore has authority to issue both major and minor NSR permits. Forsyth County is currently designated as nonattainment for ozone (8-hour) with a deferred effective date based on their participation in the Early Action Compact (EAC) program. The applicable major NSR permitting regulations are the regulations for prevention of significant deterioration (PSD) and the regulations for nonattainment NSR do not apply because of the EAC. However, FCEAD has not processed any major nonattainment NSR permits under past nonattainment designations. Additionally, it has been approximately two years since FCEAD issued a major source PSD permit. The vast majority of construction permits issued by FCEAD are for minor sources.

FCEAD's organizational structure for air permitting resides in Winston-Salem with all major and minor NSR permits processed there. FCEAD's NSR permitting jurisdiction covers all of Forsyth County, North Carolina.

The headings in the following report duplicate the headings in the NSR program review questionnaire administered during the visit.

As an appreciated aid to EPA, FCEAD provided a copy of the program review questionnaire annotated with FCEAD's answers. For many questionnaire items, the answers provided by FCEAD are more detailed than indicated in the summary discussion below. The answered questionnaire from FCEAD will be on file at EPA Region 4 for reference if needed.

Common Program Requirements (PSD and Nonattainment NSR)

A. Netting

FCEAD follows netting procedures that are generally consistent with EPA policy and guidance. Like the State of North Carolina, Forsyth County has a seven-year contemporaneous time period incorporated into their federally approved regulation. When an application for a modification of an existing major source is received, to assess the creditability of the emission reductions, FCEAD reviews all available information including, the current and previous applications, agency reviews, and the current permit. Credits used to net out of PSD are documented in the agency's review.

B. Routine Maintenance, Repair and Replacement (RMRR)

FCEAD is aware of the RMRR exemption available in the NSR regulations and has made a few RMRR determinations in recent years. FCEAD uses the "purpose," "frequency," and "cost" evaluation factors as outlined in EPA guidance. FCEAD maintains a written record of RMRR determinations in their facility files.

C. Synthetic Minor Limits

FCEAD identifies in their permits which conditions are being used to avoid PSD. The permittee requested limits are reviewed and verified by the Agency before they are included as enforceable conditions in the permit.

FCEAD does not require modeling from minor source applicants and FCEAD has not performed modeling for minor sources in recent years. However, consistent with EPA guidance, the increment modeling performed as part of the Forsyth Energy PSD application included minor source emissions. Although modeling is not required for minor source permitting, EPA ensured that FCEAD was aware that minor sources still consume PSD increment and can cause or contribute to violations of the national ambient air quality standards (NAAQS).

FCEAD maintains a list of synthetic minor sources that is available for the public and EPA review. Compliance with the synthetic minor limits is tracked through the required periodic reporting as well as periodic inspections of the facilities.

D. Pollution Control Projects (PCP) Exclusion

FCEAD is aware of the PCP exclusion available in the NSR regulations and has granted a few PCP exclusions in recent years for fuel conversions. FCEAD has been following EPA guidance when evaluating PCP exclusions. Region 4 discussed the most recent court decision regarding the legality of PCP exclusions with FCEAD and advised the Agency that if they were to grant any future PCP exclusions, they would be doing so at their own and the facility's risk. Until EPA provides further guidance on this topic, FCEAD does not intend to grant any future PCP exclusions. Region 4 will keep FCEAD informed of any further guidance and, in particular, any decisions regarding the future of previously issued construction permits that relied on a PCP exclusion to avoid PSD permitting.

E. Fugitive Emissions

FCEAD's definition corresponds to the federal rule definition of fugitive emissions. Fugitive emissions are considered in NSR applicability assessments for both new sources and modifications of existing sources. FCEAD would not allow reductions in fugitive emissions to be creditable in a netting analysis. FCEAD's permits include conditions consistent with BACT requirements to control fugitive emissions, usually in the form of work practice standards.

F. Modeling

FCEAD follows the modeling procedures in 40 CFR Part 51, Appendix W. To date, FCEAD has not required modeling of minor sources. Modeling of minor sources is discussed in more detail later in this report.

FCEAD requests applicants to submit a modeling protocol for PSD permit applications. This protocol is provided to EPA and the Federal Land Manager (FLM) for review. The most recent five years of Meteorological data is required to be used for modeling. FCEAD and North Carolina provide draft inventories to the applicant, which is used to develop the required emission inventory. FCEAD follows EPA guidance on identifying and eliminating emission sources from the inventory (*i.e.*, the Q/D rule and Significant Impact Levels). EPA reiterated to FCEAD that the complete list of initial sources, any eliminated sources, and the reasons for elimination should be available to EPA and the public for comment during the permitting process. According to FCEAD, all the above information is available upon request by EPA or the public.

FCEAD maintains a database of increment consumption and expansion. FCEAD reviews all modeling demonstrations by verifying model inputs and running the model to obtain independent results. If modeling demonstrates a violation of a NAAQS or a PSD increment, the applicant is required to make additional reductions to resolve any violations, if FCEAD has not identified the violation is being caused by existing sources.

G. Stationary Source Determinations

FCEAD defines stationary source the same as in federal regulations. When determining if emission units are contiguous or adjacent, FCEAD conducts a case-by-case determination using the factors identified in EPA guidance. FCEAD assesses the facilities financial, personnel, and contractual relationship when determining common ownership or control. FCEAD utilizes the first two-digits of the facilities' primary SIC codes when identifying potential separate stationary sources.

H. Debottlenecking and Increased Utilization

For NSR applicability purposes, FCEAD follows EPA policy and guidance on inclusion of debottlenecking and increased utilization emissions. FCEAD trains staff on these concepts as they relate to determining if a modification is major for NSR.

I. Relaxation of Limits Taken to Avoid Major NSR

FCEAD is aware of the “relaxation” provisions in 40 CFR 51.166(r)(2), but has not had any sources subject to these provisions in recent years. FCEAD has agreed to consult with EPA if a source triggers the “relaxation” provisions of 51.166(r)(2).

J. Circumvention/Aggregation Issues

In general, FCEAD follows EPA policy and guidance with respect to identifying attempts at circumvention. FCEAD usually considers projects that are part of the same business plan to be the same project. However, projects that are more than one year apart in time are usually considered as separate projects.

Prevention of Significant Deterioration (PSD)

A. Program Benefits Quantification

FCEAD believes that the PSD program acts as an incentive for sources to reduce emissions below the major source levels, allows them to implement emission-reducing programs more quickly than rulemaking, and improves monitoring, reporting and notice to communities utilizing the PSD program as a mechanism to improving air quality. However, FCEAD does not believe that PSD permits have been used as the authority to implement other priorities such as toxic emission reductions. Overall, FCEAD believes that the PSD program has contributed to sustaining good air quality.

B. Best Available Control Technology (BACT)

FCEAD does mandate use of the top-down BACT evaluation procedure. FCEAD does not use sources beyond the RACT/BACT/LAER Clearinghouse (RBLC). EPA discussed the need to use additional sources of information with FCEAD, including the National Combustion Turbine Database, the California Air Resources Board website, and previous BACT determinations from Region 4 as well as other EPA Regions. FCEAD provides detailed BACT analyses (including cost) as part of their public record. FCEAD considers combination of controls as well as regrouping of emission units during the BACT analysis. The permits contain federally enforceable conditions consistent with the basis and averaging time of the selected BACT options.

Further related to cost calculations, FCEAD places primary reliance on total cost effectiveness in a BACT cost evaluation and uses a comparative approach (as opposed to a “bright line” test). Although FCEAD has not recently done a cost analysis independent of the applicant’s cost analysis, they would perform their own analysis if deemed necessary. For projects involving multiple units emitting a pollutant subject to PSD review, FCEAD would require small units to

undergo BACT review. FCEAD does consider increases or decreases in other emissions (such as ammonia) when evaluating BACT for a given project. FCEAD does enter all BACT determinations into the RBLC.

C. Class I Area Protection for PSD Sources

In general, FCEAD follows EPA policy and guidance with respect to Class I areas. FCEAD invites the FLM of the affected area to participate in the pre-application meeting and provides the FLM copies of the application, preliminary determination, and final determination. If a predicted Class I area increment violation was predicted, which to date has never happened, FCEAD would conduct a case-by-case analysis to correct the problem.

D. Additional Impacts - Soils, Vegetation, Visibility, Growth

FCEAD requires the applicant to submit an additional impact analysis as discussed during the pre-application meeting. FCEAD does not generally allow the argument that protection of the NAAQS will assure protection of vegetation.

E. Pre-construction Monitoring

In general, FCEAD follows EPA policy and guidance with respect to pre-construction monitoring, but have never required pre-construction monitoring. FCEAD does not have any formal procedures in place for requiring pre-construction monitoring. FCEAD has a monitoring network in Forsyth County and provides ambient monitoring data from this network in lieu of requiring applicants to perform pre-construction monitoring.

F. Increment Tracking Procedures

FCEAD has established both major and minor baseline dates for the county. FCEAD tracks increment consumption as part of the review process for all permit modifications (major and minor). Increment consumption data is tracked in an electronic database.

FCEAD does not perform modeling of increment consumption on a scheduled basis. Rather, increment consumption is performed when needed for a new permit application.

G. Endangered Species Act (ESA)

FCEAD has a SIP-approved NSR permitting program. ESA requirements are not applicable.

Nonattainment NSR

Forsyth County is currently in attainment or is an EAC area for all criteria pollutants. Nonattainment NSR permitting was not discussed in detail.

Minor NSR Programs

A. NAAQS/Increment Protection

FCEAD uses modeling to ensure that minor sources and minor modifications do not violate the NAAQS. Additionally, FCEAD models minor sources for PSD increment consumption if the minor source baseline date has been triggered. As mentioned above, FCEAD uses a database to track the increment consumption of minor sources. A list of sources that affect the PSD increment is available to the public upon request.

B. Control Requirements

FCEAD's Local Implementation Plan does not require any level of BACT or similar requirement for minor modifications. However, FCEAD does require monitoring and reporting requirements to be included in any permit and requires minor sources to report compliance with all permit limits established by federally applicable regulations (i.e., MACT, NSPS, or NESHAP.)

C. Tracking Synthetic Minor NSR Permits

FCEAD does have an established procedure for tracking synthetic minor permits. The information is maintained in their database and is updated whenever a facility undergoes a modification that changes their major/minor source status. FCEAD includes "prompt deviation" reporting requirements in their synthetic minor permits.

Public Participation

A. Public Notification

FCEAD provides public notice (30 days) for major NSR permits, synthetic minor source permits, netting permits, and minor source permits where public interest is expected. Notifications are made by newspaper (Winston-Salem Journal) and public notices are posted on their website. Affected permitting authorities (North Carolina, Virginia, and Mecklenburg County, NC) are notified of permitting actions via email.

FCEAD maintains a mailing list of interested parties. The initial public comment period can be extended upon request, but this has never been requested. FCEAD can also extend the public comment period following a public hearing. All public comments received during the public comment period are reviewed. FCEAD follows their Administrative Procedures Act when determining if a second draft permit should be issued with additional opportunity for public comment.

A public hearing will be held on a draft permit if FCEAD receives a specific request to hold one. Notification of a public hearing is published in a newspaper and on a website at least 30 days in advance of the hearing.

B. Environmental Justice (EJ)

Environmental Justice considerations for Forsyth County projects are discussed in the title V program review section elsewhere in this report.

Program Staffing and Training Issues

As of the time of the review, FCEAD has eight case managers who spend a portion of their time working on the NSR program (major and minor sources). This equates to 3.25 full time equivalents (FTE's) who spend their time in the NSR program (permitting activities, compliance, and enforcement). This includes three employees who spend a total of 0.5 FTE on dispersion modeling work for the NSR program. New employees are directed to complete seven EPA training courses during their first two years working there. FCEAD expressed interest in training on PSD applicability, especially with regards to the NSR Reform regulations.

General NSR Program Issues

FCEAD requires the facility to justify use of emission factors (including AP-42 factors.)

During the preceding year, FCEAD issued zero PSD construction permits. During the same period, FCEAD issued 14 non-major permits. FCEAD's most recent PSD construction permit was issued to Forsyth Energy in December 2003.

FCEAD estimates that the average time to issue a PSD permit (from the time an application is deemed complete) is about one to two months. However, FCEAD may process an application for up to 12 months before it is determined to be complete.

FCEAD considers condensable particulate matter (PM_{10}) for NSR applicability assessments and specifies a test method to be used for PM_{10} condensables. However, FCEAD has required case-by-case testing for condensables in the past.

Effective Construction Permits

Based on EPA Region 4's experience in reviewing FCEAD's most recent PSD permit (Forsyth Energy), FCEAD creates effective construction permits with appropriate permit conditions.

Suggested Improvements

1. EPA recommends that FCEAD contact EPA if a request is received to make a determination regarding the RMRR or PCP exemptions allowed by the NSR regulations. Similarly, we recommend FCEAD contact EPA if an existing permit holder triggers NSR relaxation described in 40 CFR 52.21(r)(4).
2. EPA recommends that FCEAD include additional permitting information (i.e., draft permits and preliminarily determinations) on their website, especially information regarding documents out for public comment. Providing information via the internet will increase the public's awareness of the permitting activities in Forsyth County and allow the public quicker and more efficient access to appropriate documents during public comment periods.
3. EPA recommends that FCEAD use additional sources of BACT information beyond that found in the RBLC. Examples of additional sources of information include the National Combustion Turbine Database, the California Air Resources Board website, and previous

BACT determinations from Region 4 as well as other EPA Regions. Examples and the location of such information can be forwarded to FCEAD upon request.

Conclusion

At the conclusion of the onsite portion of the Title V and NSR program reviews, Region 4 personnel met with key FCEAD officials to conduct an exit interview. During this exit interview Region 4 shared the findings of the review and laid out a timeframe for when the final report would be completed. Personnel in attendance from EPA Region 4 were Randy Terry, Katy Forney, Scott Miller and James Purvis. Gregg Worley and Kay Prince of EPA Region 4 participated in the exit interview via telephone. FCEAD officials in attendance included Peter Lloyd and Robert Fulp.

Overall, EPA believes that FCEAD is operating both the title V and NSR programs at a high level of proficiency and looks forward to working with the FCEAD in the future.