



**Feather River Air Quality Management District
Program Review**

Report of Findings and Recommendations

**Prepared by the
California Air Resources Board
Stationary Source Division
October 2007**

ACKNOWLEDGMENT

The findings and recommendations contained in this report were developed based on a review of office programs and field inspections. In conducting the program evaluation, Feather River Air Quality Management District (District) staff assisted the Air Resources Board (ARB) staff through interviews and file reviews in addition to performing their normal duties. We acknowledge the professionalism and cooperation of the District staff and management.

We also express thanks to the management and staff of the facilities we inspected as part of the program evaluation. Staff of all facilities were patient and accommodating during our field inspections.

This report covers many program areas and was made possible by the assistance and support of ARB staff from the Enforcement Division, the Planning and Technical Support Division, and the Monitoring and Laboratory Division.

Feather River Air Quality Management District Program Review

REPORT OF FINDINGS AND RECOMMENDATIONS

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Feather River Air Quality Management District Program Review

REPORT OF FINDINGS AND RECOMMENDATIONS

Introduction

Air pollution control district (district) program reviews are conducted as part of the Air Resources Board's (ARB) oversight role with respect to districts in California and in accordance with section 41500 of the Health and Safety Code (HSC). The purpose of district program reviews is to provide constructive feedback to the districts to assist districts in carrying out their air quality programs. Findings and recommendations specific to each program area reviewed are included in the report.

From May through August 2005, ARB staff conducted a review of the Feather River Air Quality Management District's (District) air quality program. This is the only comprehensive review ever done by ARB staff of the District. A program review was conducted in 2001 for only a few of the District's compliance programs. As part of this review, ARB staff evaluated the District's compliance, permitting, rule development, portable equipment registration, AB 2588 "Hot Spots," and emissions inventory programs. Staff from four ARB divisions participated in this effort.

The review activity commenced with an entrance conference held in Chico on May 4, 2005. ARB staff presented an outline of proposed review activities that covered the scope, method and content of the program evaluation, general logistics, and time lines related to this effort. Following the entrance conference, staff initiated a review of the program areas identified above in May 2005, with the major field inspection activity finishing by August 2005. Staff examined files and records, interviewed District staff and management, and conducted inspections of permitted sources. Findings and recommendations presented in this report are based on the information gathered from this effort.

District Information

The District is a bi-county district that was formed in 1991. The District's jurisdiction is coincident with the area contained in Sutter and Yuba Counties, encompassing approximately 1,234 square miles. Sutter County and Yuba County are located in the Sacramento Valley Air Basin. The population within the District's boundaries has grown from approximately 123,400 in 1990 to an estimated 156,007 in 2005. In 1990, approximately 2.75 million vehicle-miles were traveled each day within District boundaries. In 2005, an estimated 3.84 million vehicle-miles were driven daily.¹

¹ The California Almanac of Emissions and Air Quality, 2006 Edition.

The District maintains its office in Marysville. As of May 2005, the District had nine staff including an air pollution control officer (APCO), two administrative assistants, a compliance coordinator, two air quality specialists (inspectors), an air quality planner and two permit engineers. As of May 2005, the District had 418 permitted facilities.

Attainment Status

Ozone

The District has multiple classifications and designations with respect to federal and State ozone attainment status. Table I summarizes this information and gives the number of exceedance days for 2006. The southern portion of Sutter County lying south of a line connecting the northern border of Yolo County to the southwestern tip of Yuba County continuing along the southern Yuba County border to Placer County is defined as the Sacramento Federal Non-Attainment Area for Ozone (SFNA) [Title 40 of the Code of Federal Regulations (CFR) Part 81.305 and District Rule 10.1, New Source Review]. The other portion of the District (Yuba County and northern portion of Sutter County) is defined by Rule 10.1 as the North FRAQMD (North Feather River Air Quality Management District).

Table I
Ozone Classification/Designation and Exceedance Days

	8-Hour Federal²		State³		
	Classification/ Designation	2006 Exceedance Days	Classification/ Designation	2006 Exceedance Days	
				1-hour	8-hour
Yuba & Northern Sutter County except Buttes > 2000'	Unclassified/ Attainment	0	Moderate/ Nonattainment (North FRAQMD)	1 (Yuba City)	13 (Yuba City)
Sutter Buttes ⁴ over 2000' elevation	Basic/ Nonattainment	7			
Southern Sutter County (SFNA)	Serious/ Nonattainment	NA	Serious/ Nonattainment (SFNA)	NA	NA

Under the federal 8-hour ozone standard, the attainment deadline for southern Sutter County is 2013. The Sutter Buttes have a 2009-2014 attainment deadline.

² In June 2004, the United States Environmental Protection Agency's (U.S. EPA) more health-protective 8-hour ozone standard went into effect. The federal 1-hour ozone standard was revoked one year later on June 15, 2005.

³ ARB approved a new State 8-hour ozone standard in April 2005, with special consideration for children's health. The State 1-hour ozone standard is retained.

⁴ Sutter Buttes data are not used for State attainment designation purposes.

Particulate Matter

Particulate matter consists of a mixture of fine airborne solid particles and liquid droplets (aerosols). The size of particulate matter can vary from coarse wind blown dust particles to fine particles directly emitted or formed from chemical reactions occurring in the atmosphere. Federal and State particulate matter standards focus on PM10 and PM2.5. PM10 comprises particles with an aerodynamic diameter less than or equal to 10 microns, while PM2.5 are particles less than or equal to 2.5 microns in aerodynamic diameter.

The federal 1990 Clean Air Act Amendments established air quality standards for PM10 that consist of a 24-hour standard and an annual standard. In 2004, U.S. EPA published final designations for the federal PM2.5 standards. Sutter and Yuba counties are designated as a federal nonclassified/attainment area for both PM10 and PM2.5. However, Sutter and Yuba counties are designated as a nonattainment area for the State PM10 standard and unclassified for the State PM2.5 standard. The State air quality standards for particulate matter are more health protective than the federal standards.

Overall Findings

This section summarizes the overall findings of the program review. With respect to its source inspection program, District compliance staff is able to conduct comprehensive annual inspections of nearly all permitted stationary sources. However, the District should replace the term “warning” in its inspection reports and enforcement database with the term “on site correction.” The District should also develop a policy document to guide NTC and NOV issuance with special emphasis on situations which can be allowed to have an on site correction. In the area of the District’s mutual settlement compliance program, the District has achieved several noteworthy settlements in recent years. However, we recommend the District to review and amend its mutual settlement program policy as discussed in Section A.2 (Legal Action).

The District adheres to the ARB-CAPCOA Complaint Resolution Protocol of October 2002. The District responds to complaints promptly, informs complainants about the outcome of complaint investigations, and conducts on-site complaint investigations. However, the District should examine the feasibility of receiving and responding to complaints received after office hours. The District should develop compliance policies and procedures for its air quality complaint and equipment breakdown programs.

The District enforces applicable rules, regulations, policies, and permit conditions pertaining to continuous emission monitors. The District includes source testing requirements in facility permits and enforces these requirements. The District fully meets the U.S. EPA’s requirements of the Full Compliance Evaluation Program and the High Priority Violation Program.

When a violation occurs and the source cannot come into compliance immediately, then it must comply with the District's variance program. The District administers the variance program in accordance with State law and places special emphasis on verification of final compliance dates. However, hearing board orders should contain an estimate of excess emissions that could be released during the variance period.

Most of the agricultural burning conducted in the District (by acreage) is from rice stubble (especially in Sutter County) followed by orchard prunings (mostly walnuts and prunes). However, about half of the burning in Yuba County is forest management burning. The District has a comprehensive set of rules for agricultural and open (nonagricultural) burning, except for a permit exemption that is inconsistent with section 41852 of the HSC. According to the District's Regulation II – Open Burning, section H.2, the burning of pesticide sacks does not require a permit. The District should amend its rule to be consistent with the HSC.

The District's permit files were organized and easily accessible. The files were organized using facility identification numbers that also identify the source category and the sequence of each permitting project for each facility. The first one or two digits of the facility identification number indicate the category of the source (for example, 2xxx is for all natural gas production facilities and 14xxx is for all retail gasoline stations). The District also adds a letter designation to the facility identification number for each successive authority to construct. The District had a backlog of 99 authorities to construct at the time of the review. The higher than expected backlog suggests the need for additional resources in this area. ARB staff was informed that the two permit engineers also handle the rule development workload. This multitasking is necessary in smaller districts, but it can delay the timely processing of permit applications. The District should hire a rule development staff person, so the permitting staff can focus entirely on reducing the permit backlog.

ARB staff found that for BACT projects, the District did not always include enforceable conditions in its permits to ensure that allowable project emissions are not exceeded in actual practice. These permits did not contain emission limits or specify the control technology selected as BACT. The District should also include conditions for source testing, when applicable, to verify that BACT emission limits assumed in the evaluation can be met by the equipment.

In the area of prohibitory rules, the District has an established rule review process that includes workshops to discuss proposed or revised rules and an opportunity to receive public comments by interested parties. However, the District is behind schedule in adopting new rule categories as committed to in the Sacramento Valley Basinwide Air Pollution Control Council endorsed Air Quality Attainment Plan. The District should also amend its breakdown rule (Rule 9.6) to

include the requirements specified in ARB's model breakdown rule. As mentioned previously, hiring a staff person for the rule development program would also assist the District in meeting its rule adoption schedule and its Attainment Plan commitments.

The District staff is in transition with its "Hot Spots" program and intends to improve the quality of toxics data. This includes having a process to calculate toxics inventories, providing ARB a list of all facilities and their status in the "Hot Spots" program annually, and compiling more of their inventory information in an electronic format. ARB staff will help prioritize tasks to be completed.

For its emission inventory program, the audit revealed that there are opportunities for improving the overall quality of the emissions inventory and management system, such as the institution of quality assurance/quality control procedures, tracking and reporting of facility status, and documentation of area source methodologies. The District should provide criteria and toxic data updates to ARB as a merged submittal. The District could improve point source data by reporting changes in new and closed point sources annually.

Findings and Recommendations by Program Area

As with any air pollution control program, there is room for improvement in individual program areas. The report provides findings and recommendations by program area. The recommendations contained in this report are designed to assist the District with its clean air efforts. In the case of Feather River Air Quality Management District, additional resources would be required to accomplish many of the improvements discussed in this report. However, the report also contains recommendations which are not resource intensive and can be implemented by instituting new procedures or by changing existing policy.

The rest of this report provides detailed findings and recommendations for program improvement by program area.

A. Compliance Program

This section covers the evaluation of the District's Compliance Program. The evaluation consisted of an office review of relevant records and a joint field inspection effort. Findings and recommendations are presented for each of the following areas:

- [Source Inspection Program](#)
- [Legal Action Program](#)
- [Complaint Program](#)
- [Breakdown Program](#)
- [Continuous Emission Monitor Program](#)
- [Source Testing Program](#)
- [Air Facility System Program](#)
- [Variance Program](#)
- [Open and Agricultural Burning Program](#)

A.1 Source Inspection Program

The source inspection program serves as the compliance verification component of District operations. Inspections provide feedback on the actual compliance status of permitted facilities. When a source is found to be in noncompliance, the District documents its observations and conclusions in the form of an inspection report. The District then issues a corresponding notice to the source. The District's inspection program was evaluated with respect to its policies and procedures, inspection frequency, and inspection documentation. In addition to this records review, ARB staff conducted joint inspections of several District permitted facilities. The results are tabulated and discussed in the later part of this section.

A.1.1 Inspection Staff Resources

As of July 2005, the District had three inspectors, including the Compliance Coordinator. The Compliance Coordinator conducts inspections, handles mutual settlement, and supervises the other two inspectors. The District has approximately 418 permitted stationary sources, including about 74 retail gasoline dispensing facilities (GDFs), and 47 gas wells.

Recommendation: None

A.1.2 Inspection Frequency

The District has a verbal policy to inspect all permitted facilities on an annual basis. The District inspected most permitted sources in 2003 and nearly all permitted sources in 2004. However, facilities operating under an authority to construct (ATC) were not subject to annual compliance inspections prior to 2005,

even if a facility had existing equipment operating under a permit to operate. According to the compliance coordinator, in July 2005, the District instituted annual compliance inspections for facilities with existing equipment operating under an ATC.

Recommendation: The District should continue to inspect all permitted sources annually, including facilities with existing equipment operating under an ATC.

A.1.3 Inspection Policies and Procedures

The District has a checklist used by inspectors for conducting inspections and writing inspection reports. However, the District does not have a written policy to guide documentation of non-compliant situations observed during the course of an inspection. These situations should be addressed through issuance of a notice of violation (NOV) or a notice to comply (NTC). NOVs are traditionally issued for emissions related violations. NTCs are issued for minor violations as allowed by District Rule 9.9 (Notice to Comply). Pursuant to District Rule 9.9(D)(4), minor violations corrected during the course of an inspection cannot be issued a written NTC. Such issues can be documented in the inspection report as a “on site correction.”

In practice, the District informs the source verbally regarding non-compliance issues in addition to issuing NTCs and NOVs. A warning is documented as a District action on the inspection report form, which includes a check box for “Warning” in addition to check boxes for “In Compliance,” “NOV,” and “NTC.” We recommend the District to use the term “on site correction” instead of “warning” in their inspection reports and database. The term “warning” does not appear in the District’s rules.

Table II shows the number of NTCs, NOVs, and warnings issued in 2003 and 2004 according to database reports provided by the District.

Table II
Inspection, Notice Issuance, and Verbal Warning Summary for
CYs 2003-2004

Calendar Year	Annual Type Inspections	NOVs	NTCs	Verbal Warnings
2003	337	37	28	78
2004	393	34	14	90

The District informed ARB staff that most of the verbal warnings noted in inspection reports are in fact related to potential minor violations that were corrected during the course of the inspection. The District agreed with our suggestion that the term “warning” be replaced with the term “on site correction” on inspection reports. The term “warning” inadvertently implies that a violation

has occurred which will not generate an enforcement response by the District if it is corrected by the source in the near future.

We sampled 72 annual inspection reports from 2003 and 2004 for the review of the District's source inspection program. We found 13 instances of documented verbal warnings in the 72 samples. Of these 13 warnings, 6 were issued for recordkeeping violations (several of these in conjunction with other issues). For example, one warning was given to a facility with an above ground storage tank for failure to keep any records (the permit requires a weekly inspection and maintenance log) and for wedging the pressure vacuum valve open with a piece of wood. Recordkeeping violations are typically difficult to correct during the course of an inspection. Many districts routinely issue an NTC for inadvertent recordkeeping omissions, and an NOV for major recordkeeping violations where compliance cannot be otherwise determined. In another example, the District issued a warning for a dust violation that would likely result in an NOV in many districts. In this case, the District documented the warning with photographs and a warning letter to the source requesting a mitigation plan. The warning letter described the issue as an "alleged violation of Rule 3.16c."

In summary, based on our sample of 72 reports with 13 warnings, approximately half of the situations receiving warnings could have qualified for a written NTC. At least one case receiving a warning could have qualified for a NOV. Also, some of the 13 warnings in the sample files were given for issues similar to those where the District issued an NTC in other instances (recordkeeping violations, unpermitted equipment, and failure to post the permit).

In order to avoid confusion and consistently respond to enforcement situations, the District should develop a written policy to guide NTC and NOV issuance. The District could refer to the enforcement policies that other districts have developed for guidance on NTC issuance.

Recommendations: The District should replace the term "warning" in its inspection reports and enforcement database with the term "on site correction." Enforcement responses should be in the form of a NOV, NTC, or an on site correction within the meaning of the District's minor violation rule.

The District should develop a policy document to guide NTC and NOV issuance with special emphasis on situations which can be allowed to have an on site correction.

A.1.4 Inspection Documentation

ARB staff reviewed inspection reports, NOVs, and NTCs for adequate documentation of observations and enforcement actions taken. ARB staff found the inspection files to have the documentation necessary for going through a

penalty settlement process or other enforcement action. Photographic documentation is clearly labeled.

The District uses a database to store and track all compliance activities. NTCs and NOVs are tracked to ensure compliance is achieved. The database also allows the District to generate a wide variety of inspection reports.

Recommendation: None

A.1.5 Compliance Results of ARB and District Staff Inspections

Joint inspections were conducted at 17 facilities to obtain field data and compliance information. In order to obtain an adequate understanding of the compliance of sources located in the District, ARB staff selected sources that varied in size and type.

During the joint inspections, ARB staff observed that the District inspectors were knowledgeable about the facilities they regulate and their major compliance issues. District inspectors generally conducted thorough stationary source inspections in accordance with District policy. For example, the District used customized inspection forms and checked the compliance status of all permitted equipment during the inspections of Title V sources. In addition, District inspectors carefully reviewed records.

During the inspections of the three dry cleaners, the District did not verify the dry cleaning air toxic control measure (ATCM) cool-down temperature requirement limiting the refrigerated condenser to 45 degrees Fahrenheit or less. Due to staff resource constraints, the District did not take the time to verify this requirement. Also, during the GDF inspections of phase II vapor recovery systems, the District did not verify compliance with the Title 17 requirement of no more than 100 ml of liquid in the vapor path of the hoses. District staff indicated they lacked the training and equipment for verifying this requirement. The District was also concerned about sampling and chain of custody issues.

The District issued six NOVs and three NTCs as a result of the joint inspections. Table III summarizes the joint inspection results.

Table III
Summary of Joint Inspection Results

Facility Name	Equipment Description	Compliance Status and Inspection Observations	District Action
<i>Major Sources</i>			
Norcal Waste Systems Ostrom	Diesel ICE, candlestick flare, landfill gas migration system	Failure to conduct required monthly visible emission observations	NOV issued
Yuba City Co-Gen	GE LM 5000 natural gas fired turbine	In compliance	
Calpine Greenleaf I (13003)	GE LM 6000 Natural gas fired turbine; Wood drying system	In compliance	
<i>GDFs</i>			
L & R Gas & Food	Phase I Phil-Tite Phase II Gilbarco Balance	Premium vapor adapter not properly torqued to vapor riser.	NOV issued, phase I tagged out
Triangle Chevron	Phase I OPW Phase II Balance	Torn hoses and various other violations	NOV, NTC issued, 5 nozzles tagged out
Sutter Market	Phase I Phil-Tite Phase II Balance	In compliance	
<i>Wood processing</i>			
Eagle Moulding	Wood processing equipment	In compliance	
SMC Cabinets	Wood processing equipment, cyclones, spray paint booth	Throughput report not submitted for 2004	NTC issued
<i>Rice Dryers</i>			
Sutter Rice Company	Rice Dryer	In compliance	
Hi and Dry Warehouse	Rice Dryer	Exceeded annual 2004 permit limits for "green rice"; natural gas use > permitted amount	NOV issued
<i>Dry Cleaners</i>			
Town Cleaners	Dry Cleaner (1 machine)	In compliance	
Zelie's Cleaners	Dry Cleaner (1 machine)	In compliance	
Butler Cleaners	Dry Cleaner (2 machines; 1 boiler)	In compliance	
<i>Other Minor Sources</i>			
Marysville Post Office	1.4 MMBTU/hr boiler	New boiler installed without ATC	NOV issued
Amerigas	Surface coating spray booth; abrasive blasting with dust collector	In compliance	
PG&E Materials Distribution Center	Diesel ICE; 1 Natural Gas ICE; Phase I, Phase II	In compliance	
Prestigious Paint and Auto Body	Spray booth	Throughput report not submitted for 2004	NTC issued
Custom Chrome & Bumper	Decorative chrome plating	Ampere-hour meter not continuous and records not dated, incomplete surface tension records	NOV issued
Dry Mix Products	Cement Silo with Baghouse; 4 Propane Heaters	In compliance	

Recommendation: The District should participate in ARB's Vapor Recovery training courses and acquire the equipment needed to verify the Title 17 requirement of no more than 100 ml of liquid in the vapor path of the hoses.

A.2 Legal Action Program

The legal action program encompasses enforcement actions taken by the District after a facility is documented to be in violation of applicable rules and regulations. In particular, the program covers the mutual settlement of NOVs issued to non-compliant sources and any civil actions that may follow as a result of an unsuccessful mutual settlement process. The goal of the legal action program is to ensure that a facility returns to compliance before settlement and that NOVs are settled for penalties that are commensurate with the magnitude of the violation.

The District's mutual settlement policy document provides for the day-to-day administration of its mutual settlement program, including a provision for transfer of cases to the District Attorney or County Counsel, if necessary. The District has a civil penalty matrix and a separate penalty schedule for residential open burning. The District uses a baseline figure from the appropriate penalty schedule and then applies aggravating and mitigating factors to calculate the penalty amount (documented by a worksheet). This approach utilizes the "relevant circumstances" the District must consider as cited in HSC section 42403. These factors relate to: the extent of harm caused by the violation; the nature and persistence of the violation; the length of time over which the violation occurs; the frequency of past violations; the record of maintenance; the unproven or innovative nature of the control equipment; any action taken by the defendant to mitigate the violation, and; the financial burden to the defendant.

The District's Mutual Settlement Program Policy (Policy) was last amended in 1999 and would benefit from further review. ARB staff found three areas which should be amended by the District.

- 1) B.16 of the Policy defines Warning as a written notification to the source that a violation was documented, that further recurrences could result in enforcement action being taken, but that no further enforcement action will result directly from this violation. Violations are defined in this Policy as a breach of permit conditions, rules, or a statute enforced by the District. This definition implies that the District is free to pursue a course of no action even if a violation has been documented. This definition should be changed because it is not supported by District rules.
- 2) Section E.1 of the Policy relates to the review of issued NOVs and requires the District to determine if there is a sufficient basis to reasonably conclude that a violation has occurred. Once the District has established the technical merit of the NOV then E.1(a) of the Policy allows the District to issue a warning to the source without any

enforcement action taken as a result of the NOV. The District can also choose the other options of processing the case through the Mutual Settlement Program (b) or referral to Counsel (c) or other government agency (d). We do not agree with the option allowed by E.1(a) and recommend that it be deleted from the Policy.

- 3) Section E.2(a) of the Policy states that a source can receive a warning if the acts constituting the violation are immaterial and insignificant. It is our opinion that such acts are covered by the District's minor violation Rule 9.9. It would be better to refer to the existing rule on this subject and use the terminology therein. Rule 9.9 requires the District to use a written NTC for such acts unless they are corrected in the presence of the inspector. In that case, the correction can be noted in the inspection report. However, the term "warning" is not used in the District rules.

ARB's file review indicates that the District follows its mutual settlement policy and penalty schedules. The District maintains a log that tracks all NOVs from issuance to settlement. Compliance is verified before settlement. ARB staff found that case files are well organized and documented for further legal action, if necessary. The District sends a mutual settlement letter that stipulates a penalty amount and provides an opportunity for an office conference.

For NOVs settled in 2003 and 2004, the median penalty amount was \$450 and the average was \$764, not including a single penalty of \$204,000 (aggregate source). The District is justifiably proud of this large penalty settlement, a noteworthy accomplishment that is intended to deter future noncompliance. These figures include the NOVs that were dropped or resulted in zero penalty amount.⁵ The average and median penalty amounts compare favorably to other districts recently reviewed in the Sacramento Valley Air Basin. ARB staff found several examples of penalty settlements obtained from NOVs arising as a result of complaints.

The District successfully settles most violations, as indicated in Table IV. Approximately nine percent of NOVs issued for categories other than open residential burning violations were dropped or resulted in zero penalty in 2003 and 2004. This is indicative of a robust mutual settlement program. As indicated in Table IV, staff found that the District is successfully able to settle all violations related to agricultural burning. The District has not been able to get similar results for violations issued for residential open burning cases, where 67 percent of NOVs were not pursued or settled for zero penalty.⁶ It is typically difficult for

⁵ A dropped NOV means a NOV that is not pursued for mutual settlement purposes. NOVs that settle for zero include dropped NOVs or NOVs where the penalty is not collected.

⁶ At the time of the review, the District's reports did not separate open burning Violations into agricultural and residential open burning categories. However, subsequent to the review, the District provided this information. In addition, after the review, the District provided information that distinguished NOVs issued to GDFs by the County Agriculture Departments.

districts to settle these types of violations for a monetary amount. ARB staff noticed that all four NOVs issued to gasoline dispensing facilities (GDF) by the County Agriculture Department could not be pursued because they lacked technical merit. The District may have to arrange additional training for the County inspectors.

At the time of the office review, the District's database reports generally did not indicate NOVs that were linked together for settlement. In addition, non-monetary penalty settlements (e.g., paving for dust mitigation) were not included in database reports. Subsequent to the review, the District supplied additional information that enabled ARB staff to distinguish the NOVs that were linked together for settlement purposes and to identify all the NOVs that resulted in a mitigated (non-monetary) penalty settlement. Table IV reflects this new information.

The District averaged 116 days from NOV issuance to settlement for calendar years 2003 and 2004. This figure is within the range of average mutual settlement times for districts recently reviewed in the Sacramento Valley Air Basin. We did not discover process issues during our review of the District's legal action program.

Table IV summarizes NOV settlement information by rule category. Figures are based on a report provided by the District of NOVs settled in 2003 and 2004.

Table IV
Penalty Settlement Information for 2003 and 2004 by Rule Category*

Category	# of NOV's	Recorded Penalty Amounts*	# NOV's Dropped or Settled for Zero Penalty**	Penalty Range (from actual case settlements)	
				Low (non-zero)	High
GDF – Issued by District Rule 4.5	59 (includes 3 NOV's linked to other settlements)	\$40,220	4	\$250.00	\$6,000
GDF – Issued by County Agriculture Department Rule 4.5	4	\$0	4	NA	NA
Open Agricultural Burn Rules: 2.1, 2.2, 2.3, 2.5, 2.6, 2.7, 2.8, 2.9	30 (includes 1 NOV linked to other settlements)	\$34,570	0	\$100.00	\$3,870.00
Open Residential Burn Rules: 2.1, 2.3, 2.6, 2.7, 2.9, 2.13	15	\$2,930	10	\$150.00	\$1,680.00
Dust Rule: 3.16	10	\$18,700	0	\$500.00	\$6,400.00
Automotive and General Coating Rule: 3.19	7	\$1,150	2	\$250.00	\$400.00
Permit Conditions Rule: 4.5	15	\$9,340	1	\$250.00	\$3,700.00
Operating without Permit or ATC Rule:4.0	7	\$5,350	2	\$250.00	\$2,500.00
Total Excluding Aggregate Source	147	\$112,260	23		
Aggregate Source	4	\$204,000	0	NA	NA
Total	151	\$316,260	23 (15%) 13 (9%)- Excluding Residential Burning		

*Penalties include sums from NOV's issued prior to 2003, but settled in 2003 or 2004.

**Three settlement cases that settled for a non-monetary penalty settlement are not included in the zero penalty figures.

Recommendations: *The District should review and amend its Mutual Settlement Program Policy.*

The District should add a field in its database to indicate which NOVs are linked together for settlement purposes. The District should also add a field for indicating mitigated settlements (non-monetary).

The District should strive to reduce the number of NOVs that settle for zero penalty amounts in the residential open burning category.

A.3 Complaint Program

The District's complaint handling program governs the investigations of complaints received from the general public. Air pollution complaints received by the District are an essential source of information. Timely and attentive response to air pollution complaints is critical to ensure protection of public health and to maintain public trust. The District's complaint program was evaluated with respect to the framework of best management practices to respond to complaints as described in the ARB/CAPCOA Complaint Resolution Protocol of October 2002. These include the receipt, evaluation, response, and resolution of air quality complaints and feedback to the complainant.

The District has no written complaint program policy or guidelines in place to receive, process, or investigate complaints. However, the District abides by the ARB-CAPCOA Complaint Resolution Protocol. District staff is aware of the ARB language line service.

Complainants mainly submit their complaints by phone. This number is found in local telephone books, the District's website, pamphlets, handouts and letters. Complaints have also been received by email. The District also responds to anonymous complainants. All complaints are prioritized based on the impact on sensitive receptors. Complaints that are in progress have priority over those from the past.

When complaints are initially received they are reviewed and entered into a complaint form database. District staff interviews the complainant and the complaint is typically assigned to a District inspector. The inspector completes a complaint form and conducts an on site investigation if necessary. Inspectors are authorized to issue NOVs and NTCs at the site of the complaint. If a warning is needed, a warning letter is mailed to the source.

The District received approximately 179 complaints in calendar year 2003 and 110 complaints in calendar year 2004. ARB staff randomly selected and conducted a detailed review of 159 out of 289 complaints or approximately 55 percent of the total complaints received in 2003 and 2004.

Of these complaints, individual contributions include 43 percent from open burning (i.e. illegal burning, agricultural burning, smoke), 40 percent from dust (i.e. land development, agricultural, small construction), 13 percent from odor or fumes, and 4 percent from commercial facilities (i.e. sandblasting, auto-body shop, gasoline dispensing facilities).

ARB staff found that the District responds to complaints promptly, informs complainants about the outcome of complaint investigations, and conducts on-site complaint investigations. Based on analysis of our sample, 91 percent of complaints are given a District response within 24 hours from the time the District receives the complaint. Approximately 98 percent of complainants were informed of complaint outcome. Ninety-one percent of the complaints required on site field investigations and District staff conducted on site field investigations on 84 percent of these complaints.

Approximately 24 percent of complaints requiring a follow-up did not have any reference of a follow-up investigation on the complaint. The District should ensure that complaint follow-up investigations be actively tracked and referenced in the initial complaint investigation report.

Complaints should be reviewed for adequacy, thoroughness, and completeness. Seventy-eight percent of the District complaints were reviewed by a District supervisor. Complaint reports should be reviewed for better tracking and accountability of the complaint program.

All complaints reported to the District were logged during normal business hours. The District does not have any staff on-call for after-hours complaints. After-hour or weekend complaints (estimated to be 19 percent of complaints reviewed) must be investigated during normal business hours.

Recommendations: The District should develop written complaint program policies and procedures. The District should consider referring to the complaint guidelines on the website maintained by the Bay Area AQMD (http://www.baaqmd.gov/enf/policies_and_procedures/index.htm).

The District should ensure that complaint follow-up investigations shall be actively tracked and referenced in the initial complaint investigation report.

The District should examine the feasibility of responding to after-hours complaints.

A.4 [Equipment Breakdown Program](#)

If a source reports a legitimate equipment breakdown condition, the District's breakdown regulation, Rule 9.6, protects that source from enforcement action. Pollutants can be emitted during a breakdown episode at higher concentrations

than during controlled operation. Therefore, it is important that breakdowns are minimized and are corrected quickly. The District's Equipment Breakdown Program was evaluated with respect to receipt, investigation, and resolution of equipment breakdowns. ARB's evaluation included a review of the 30 breakdown notifications received by the District from stationary sources during calendar years 2003 and 2004.

The District's breakdown rule is less stringent than that adopted by other districts of similar air quality status and ARB's model breakdown rule. The District's regulation lacks guidance and information on critical issues such as definition of "equipment breakdown", breakdown procedures for District staff and facility operators, disposition of short term breakdown conditions, emergency variance procedures, burden of proof, and failure to comply with reporting requirements. The District should amend its breakdown regulation.

ARB staff found no District procedures or guidelines for equipment breakdowns. The District should institute written guidelines and procedures for receiving and processing reported breakdowns. These breakdown procedures should address investigation, logging, processing, and filing procedures. The District policies should also address recurrent breakdowns (i.e. the number of breakdowns that would constitute a recurrent breakdown), and after-hour breakdowns. See [Appendix A](#) for details.

The District enters information on breakdown incidents gathered from phone interviews, stationary source breakdown reports, and District investigations into its electronic log. Breakdowns reported after hours or on weekends are logged by the District on the next day of business. The District should examine developing a means to handle breakdowns reported after-hours. The usefulness of the breakdown log could be enhanced by including more information such as the breakdown number, the date and time of occurrence, the time of correction, and the person assigned to the case.

ARB reviewed several of the stationary sources breakdown reports from calendar years 2003 and 2004. ARB staff found that the breakdown reports had most of the necessary information, and were submitted to the District within a week as required by ARB's model rule. In six equipment breakdown notifications with excess emissions, the District was notified more than an hour after the breakdown was discovered; however, the District incorporates excess emissions from breakdowns in its emission inventory. The stationary source reports could be improved by including the date the breakdown was corrected, proof of compliance, and a photo of the equipment or controls involved.

Even though District staff is familiar with the equipment and processes involved, sole reliance should not be placed on phone interviews or review of breakdown reports as a means of analyzing reported breakdowns. According to District staff, the District conducted only one on-site investigation for the thirty reported

breakdown incidents during calendar years 2003 and 2004. On-site investigations should be the preferred method of investigating breakdown reports. Based on the single report reviewed, the District should improve their report format by including the time of the on-site investigation, the time and date the breakdown was detected, and indicate whether breakdown relief was granted.

Recommendations: The District needs to create written procedures and guidelines for receiving and analyzing breakdowns. The District's equipment breakdown rule (Rule 9.6) should be amended. The District should improve their breakdown log and have sources improve their breakdown reports. The number of on-site investigations should increase and the District should improve the report format for on-site investigations. See [Appendix A](#) for details.

A.5 Continuous Emission Monitor (CEM) Program

A comprehensive and efficient CEM program is an effective tool for compliance verification and a significant component of a district's compliance program. CEM reports allow district staff to verify a source's compliance status on a continuous basis.

The District has effectively administered its CEM program. The District enforces applicable rules, regulations, policies, and permit conditions pertaining to continuous emission monitors. Our findings in this area are based upon a review of District files, database reports, and interviews with staff persons responsible for this program. The District has five facilities (seven units) equipped with twelve CEMs. See Table V. Two of these facilities are Title V sources. Permit conditions for these facilities specify calibration frequency, maintenance, quarterly challenge audits, annual relative accuracy test audits (RATA), and other reporting requirements.

Table V
Facilities with Continuous Emission Monitors

Facility	Unit	CEMs
Yuba City Cogeneration (Title V)	Natural Gas Turbine	NOx, CO
Green Leaf Unit #1 (Title V)	Natural Gas Turbine	NOx, CO
Gilroy Energy Center	Natural Gas Turbine	NOx, CO
Green Leaf Unit #2	(2) Natural Gas Turbines	(2) NOx, (2) CO
Sutter Energy Center	(2) Natural Gas Turbines	NOx, CO

CEMs are tested annually. Facilities submit quarterly excess emissions and downtime reports and these reports are reviewed by the District. Sutter Energy Center reported one incident of excess CO emissions in 2004 and the District issued a NOV for the violation.

Excess emissions recorded by CEMs are reported to the Districts within 96 hours and the District reports these excess emissions to ARB within five working days as required by HSC section 42706.

Recommendation: None

A.6 Source Testing Program

Source testing of specific points in a process or its control devices is often the only way to determine whether actual emissions are in compliance with a unit's allowed emission limits. Source testing is also used to verify the accuracy of continuous emission monitors. Source testing requirements are placed on facility permits as specific conditions and define the type and frequency of test activity. Sources are required to provide test protocols, provide the District an opportunity to witness testing, and provide a detailed report after the conclusion of the test. Source testing confirms that equipment can operate in compliance with its permitted emission limits.

The District's facility permits include source testing requirements and the District enforces these requirements. The District requires periodic source testing of its major and some minor sources. Yuba City Cogeneration and Greenleaf Unit #1 are Title V sources. Gilroy Energy Center is a minor source. Table VI shows the frequency of source testing at these facilities. ARB determined that in 2003 and 2004, these facilities were source tested according to this frequency.

Table VI
Facilities with Periodic Source Testing Requirements

Facility	Unit	Source Testing Frequency
Yuba City Cogeneration	Natural Gas Turbine	Biennially
Greenleaf Unit #1	Natural Gas Turbine	Annually
Gilroy Energy Center	Natural Gas Turbine	Biennially
Greenleaf Unit #2	(2) Natural Gas Turbines	Biennially
Sutter Energy Center	(2) Natural Gas Turbines	Annually

Permit conditions require facilities to notify the District prior to source testing and facilities submit source testing protocols prior to testing. The District has a database which tracks source tests. Due to resource constraints, the District does not witness all of the tests.

All of the units source tested in 2003 and 2004 complied with their emission limits.

Recommendation: None

A.7 Air Facility System Program

USEPA's compliance and permit database for Stationary Sources is called the Air Facility System (AFS). The requirements for AFS are governed by the Clean Air Act Stationary Source Compliance Monitoring Strategy (CMS) policy, dated April 2001. This policy requires the District to submit a CMS plan which states the District will comply with the CMS policy and will submit the appropriate data on mega, major, and synthetic minor facilities to AFS. The data must include reporting of components of a Full Compliance Evaluation (FCE) quarterly and High Priority Violations (HPV) monthly. A FCE is comprised of site inspection(s), source test(s), and an annual Title V certification review. Each of these components must be entered into AFS before an FCE code can be entered. A HPV is a district's notice of violation, which meets the standards of a HPV. The standards are spelled out in Table A-5 of the U.S. EPA's workbook titled "The timely and Appropriate (T&A) Enforcement Response to High Priority Violations (HPVs)" dated June 23, 1999. A more detailed description of the reporting requirements are found in two documents, The Information Collection Request dated October 5, 2001 and The AFS Business Rules dated June 23, 2003. The AFS Business Rules contain a description of the minimum data reporting requirements.

Based on our review, it is our finding that the District meets or exceeds the requirements of the Full Compliance Evaluation Program and the High Priority Violation Program.

ARB would support a District request to U.S. EPA for funds to improve the District Database's stationary source tracking capabilities to include the AFS required reporting elements. This improvement would help the District more effectively meet the required reporting timeframe and reduce the resource drain on the District.

Recommendation: None

A.8 Variance Program

The District's variance program was evaluated in order to determine its consistency with HSC requirements. The District's variance program was reviewed for the study period of calendar years 2003 and 2004. In addition, an interview with District staff was conducted in order to make a determination of compliance with HSC and ARB requirements pertaining to the District's variance and hearing board processes.

The oral interview consisted of a series of questions pertaining to the District's specific process, from petitioner's request through District verification of final compliance. All questions from ARB's criteria were answered completely and

satisfactorily. At the time of the interview, there were only four appointed hearing board members with one vacant public member position.

ARB staff requested and received from the District copies of pertinent information (i.e. blank petitions, case log print outs, current list of hearing board members, etc.). The District staff also provided documents that District and board members use throughout the variance process and copies of District variance and hearing rules. ARB staff noted that the petition application used for hearing files 04-01 and 01-04 did not contain the small business assistance statement (HSC section 42350.5), which has been a mandated statute since 1992. A newer blank petition includes the required statement; therefore, there is no need to request a revision.

ARB staff requested copies of two hearing tapes of variance hearings that had taken place during the study period, 1-regular 04-01 and 1-extension 01-04. District staff had provided the board with packets that included the petitioners' application, detailed staff reports, source permits, and an evidence worksheet for use during the hearing to aid members in making all the required findings. All HSC requirements were met during the hearings.

ARB staff found that Board orders do not contain type and total, or an estimate, of all excess emissions during the variance period. The District does an excellent job with all other aspects of their variance program, especially their recordkeeping and follow-up for verification of final compliance dates.

Recommendation: Board orders should contain type and total, or an estimate, of all excess emissions during the variance period.

[A.9 Open and Agricultural Burning Program](#)

Open burning can be a significant source of criteria pollutant emissions, whether from legally sanctioned open burning, agricultural burning, or wild land burning for fire prevention and forest management. The District's open/agricultural burning program was evaluated for consistency with HSC requirements, the Smoke Management Guidelines in Title 17 of the California Code of Regulations (CCR), and with the ARB program evaluation criteria document. Documents reviewed for this evaluation included District rules, public information press releases, handouts and brochures, burn permits and forms, policy procedures, maps and computer summary reports.

Most of the agricultural burning conducted in Sutter County (by acreage) is rice stubble, followed by orchard prunings. District records show that 11,692 acres of rice stubble were burned in 2003, and 12,192 acres in 2004. The orchard prunings burned are mostly walnuts (2,502 acres in 2003 and 2,317 acres in 2004) and prunes (1,393 acres in 2003 and 1,150 in 2004).

Yuba County agricultural burning also includes rice acreage (1,387 acres were burned in 2003 and 3,208 acres in 2004), and the major orchard crop burning is for walnuts (220 acres were burned in 2003 and 399 acres in 2004). The chief type of burning, however, is forest management burning (2,800 acres reported burned in 2003 and 2,954 acres in 2004). Portions of the Plumas and the Tahoe National Forests are in the eastern part of the county, as well as considerable CDF (California Department of Forestry and Fire Protection) territory.

District burn permits are good for one year. Non-agricultural burn permits cost \$34. The District rice straw burn permit costs \$42, plus \$0.85 per acre registered to burn. Orchard, weed and other field crop burn permits cost \$42, and \$0.42 an acre over 20 acres. Prescribed burn permits are also \$42, and \$0.42 an acre over 20 acres. The permit to burn on a no-burn day has not been issued in years. The permits are printed with comprehensive conditions for burning taken from the District rules.

Each rice grower is required to meet with District staff during the annual registration period in August, to go over any rule or procedure changes, and to register fields planted. September, October, and November are the major rice straw burning months, although many rice acres are burned in the spring, in March and April.⁷

The District has six burn zones, and burns are scheduled spatially and temporally to minimize smoke impacts on roads and populated areas. Growers call in when the field is cut, and that field is placed on the Ready to Burn list. Daily allocations are not given out until 10:30 or 11 am. The daily burn locations are faxed to the Sutter County sheriff each day, and the deputies watch for smoke plumes. The three District inspectors also take the daily burn list out with them into the field. Staff is not on call in the evenings, but the burn coordinator comes into the office on weekends during the fall rice burn season.

The District has good working relationships with the fire agencies and the Sheriffs' departments. District staff provides disposable cameras to the fire departments to document violations, and in turn are provided with the incident reports and photos for legal actions.

Burn day information is available online daily on the District website, and also on a phone message.

The District has a comprehensive set of rules for agricultural burning and for other open [nonagricultural] burning. The rules are consistent with the Smoke Management Guidelines in Title 17, and with the nonagricultural and agricultural burning rules in the Health & Safety Code (HSC), except for a permit exemption that is inconsistent with section 41852 of the HSC.

⁷ Depending on atmospheric conditions and rice straw dryness, fields may burn in January and February also.

Regulation II - Open Burning, section H.2 (a), under Exemptions to Permit Requirements, exempts the burner of agricultural pesticide sacks from having a permit to burn. The HSC section 41852 states that "no one shall set or permit agricultural burning unless he has a valid permit..."

Pesticide sacks qualify as materials that may be burned as agricultural waste, and are listed as examples in section 80101 (r) (2) (B) of the Smoke Management Guidelines for Agricultural and Prescribed Burning in Title 17 of the California Code of Regulations. The definition of "Open burning in agricultural operations in the growing of crops or raising of fowl or animals" includes "The burning of materials not produced wholly from such operations, but which are intimately related...and which are used in the field."

Recommendation: The District should amend its rule to require that no one may burn pesticide sacks without obtaining a valid agricultural burn permit.

B. Permit Program

The districts adopt permitting regulations to govern the construction of new sources and modifications to existing sources that emit air contaminants within their jurisdiction. The primary objective of the review was to determine whether the District has been issuing permits in accordance with their regulations and with State law and to assist the District in identifying specific areas for improvement.

ARB staff reviewed permit files, reviewed guidelines and policy documents, and interviewed District staff and management. The review of permit files focused on the quality of the engineering evaluations and the resulting operating permits issued to the facilities. Guidelines and policy documents were reviewed to ensure that they were consistent with the intent of District rules and provided clear and adequate guidance for permit processing. Interviews covered areas such as general administration, permit processing, filing, computer support, staff resources, and emission calculation procedures.

The ARB staff reviewed approximately 36 of the 446 applications received for new units and modifications to existing units issued by the District issued from January 2002 to mid-2005 timeframe. A conscious effort was made to cover a broad spectrum of the District's permitting actions by reviewing files for different source types and sizes.

The following discussion covers:

- [Permit Administration – General](#)
- [Permitting Policies](#)
- [Best Available Control Technology \(BACT\) Determinations](#)
- [Adequacy of Permit Conditions](#)
- [Organization and Adequacy of Permit Evaluations](#)
- [Offsets and Emission Reduction Credits \(ERCs\)](#)

B.1 Permit Administration - General

The number of applications received by the District has varied from a high of 184 in 2003 to a low of 119 in 2004. At the time of the audit, the District had received 138 applications for 2005 and had 418 permitted facilities in their system. The District has six facilities subject to Title V and had issued three Title V permits. The facilities subject to Title V include five electrical generation facilities and one landfill. The District has 74 gasoline dispensing facilities, 47 natural gas production facilities, 26 auto body facilities, and three dry cleaners.

The District averages 73 days to issue an authority to construct and 160 days to issue a permit to operate. At the time of the program review, the District had a backlog of 99 authorities to construct applications and 36 of these applications

were a result of the ATCM for stationary internal combustion engines adopted by the ARB. The backlogged applications included: 72 applications from 2005, 12 applications from 2004, 19 applications from 2003, 7 applications from 2002 and 1 application from 2001.

Recommendation: The District should dedicate resources to eliminate its backlog of permit applications.

B.1.1 Staff

The District has nine staff including an Air Pollution Control Officer (APCO), two administrative assistants, a compliance coordinator, two AQ specialists (inspectors), an AQ planner and two permit engineers. One engineer had been with the District for over four years while the other engineer had been at the District for only three months. The District's two engineers do the permitting work and the more experienced engineer handles the rule development program. District staff indicated that it is difficult to handle both rule development and the permitting workload, and recommended the District hire a rule development staff person.

Over the last four or five years there has been a large turnover of permitting staff. The number of engineers has varied between one and two engineers.

Recommendation: The District should hire a rule development staff person, so the permitting staff can focus entirely on reducing the permit backlog.

B.1.2 District Permit Application Process

Applications are received at the front counter or through the mail. The applications are logged in by the administrative assistant. The administrative assistant assigns an application number and processes the application filing fee. The applications are then assigned for evaluation to one of the two engineers based on the source category.

The District uses a Microsoft access database to track applications. However, the District indicated they do not actively track applications for their 30-day timeline requirement. The District's database has a field to track their 30-day timeline limit, but ARB staff found that the database was generating an erroneous number for the 30-day time limit. The District indicated they would try to correct the problem.

The assigned engineer conducts an engineering evaluation, calculates emission estimates using spreadsheet programs, and drafts the authority to construct. The District has templates of standardized conditions in its computer database. Once an engineer has drafted an authority to construct, it is also peer-reviewed by the other engineer. All draft authority to constructs are reviewed by the APCO

before issuance. All facilities are inspected prior to being issued a permit to operate. Before the final permit to operate is issued, the draft permit is reviewed by the lead inspector to ensure that the conditions will be enforceable.

District Rule 10.1 requires that the District notify an applicant in writing upon determination that its application is complete. Most applicants receive an authority to construct before the 30-day deadline, but the District does not issue completeness letters to document its timeline requirement.

Recommendations: The District should accurately and consistently track the application status to ensure that it is complying with the 30-day timeline limit.

Per District Rule 10.1, the District should issue completeness letters to applicants for those evaluations that go beyond 30 days.

B.1.3 Permit Filing System

The District's files are well organized and ARB staff had easy access to the files. The District has facility files that are organized by a three to six digit facility identification number. Each file drawer indicates the range of files by facility identification number that are in each drawer. The first one or two digits of the facility identification number indicate the category of the source (for example, 2xxx is for all natural gas production facilities and 14xxx is for all retail gasoline stations). The District also adds a letter designation to the facility identification number for each successive authorities to construct. The first authority to construct to build a natural gas production facility, for example, would be designated as 2xxxA and the next authority to construct for a modification would be designated 2xxxB. This system facilitates the tracking of application documents, evaluations and correspondence for different projects.

The staff can use the computer system to "check out a file" so that the whereabouts of a file is known. Staff stated that this filing system is effective, but mentioned that they can also access most of this information electronically also.

Recommendation: None

B.1.4 Permit Renewals

Permits are renewed at the beginning of the year. District staff mails out renewal notices on December 15th. The District indicated the renewal process is a "big crunch" requiring a large effort to get over 418 permits renewed. Staff stated that it usually takes most of January to get all of them renewed. Each source receives a new permit that is valid for a year once their permit fees are paid.

As part of the renewal process, the District sends all of its sources a survey sheet for their process activity for the year. This information is used by the District to

ensure that the source operated in compliance with its permitted emission limit; however, the information is not received until after the permit has already been renewed. This results in the use of one year old data to determine if the actual emissions are over the permitted limits.

This current renewal system works effectively because of the relatively small number of applications renewed. However, with a growing number of permits issued it may be to the District's advantage to "stagger" its permit renewal cycle and thus avoid the annual "renewal crunch."

Recommendations: The District should send out its process activity survey forms earlier so that data from the current year can be used to verify compliance with annual permitted emission limits prior to renewal issuance.

The District should investigate the feasibility of staggering throughout the year its permit renewal cycles in order to avoid the annual "renewal crunch."

B.2 Permitting Policies

The District has an official permitting policy manual and an engineering reference manual. The APCO indicated that one of the tasks that staff will be working on is to combine these two documents. New employees are required to read the policy manual as part of their training.

Recommendation: The District should complete its own plan to combine its permitting policy manual and engineering reference manual into one comprehensive permit administration policy and procedure document.

B.3 Best Available Control Technology Determinations (BACT)

The District is unique in that its jurisdiction has two different BACT triggers (25 and 10 pounds per day for NO_x and reactive organic compounds) per HSC 40918 and 40919, respectively, and District Rule 10.1. The two areas are designated serious and moderate nonattainment for the State nonattainment area classification for ozone. The southern portion of Sutter County has the more stringent BACT trigger (See the Attainment Status section for details). The District has had relatively few projects that have triggered BACT. Most of the District's projects that require a BACT determination are internal combustion engines projects at gas well facilities.

ARB staff found that the District did not always include enforceable conditions in its authorities to construct and permits to operate to ensure that equipment will operate in compliance with BACT requirements. For example, in application #2001B for Anacapa Oil, which involved the installation of a 195 bhp rich burn natural gas internal combustion engine (ICE), the engineering analysis indicated that BACT was triggered for NO_x with emission of 24.7 lbs/day. The evaluation

also indicated the engine was equipped with a three way catalyst and would operate 24 hours per day. The equipment list of the authority to construct and permit to operate indicated that the engine was required to have a Mine-X three way catalyst. However, the authority to construct and permit did not include an emission limit to ensure compliance with BACT over time.

In Texcal Energy (GP) LLC (authority to construct #2025A) a 160 bhp ICE was replaced with a 75 bhp ICE. The evaluation indicated that the engine would have non-selective catalytic reduction installed, keeping emissions below the BACT trigger level. The evaluation showed that the controlled emissions from the applicant were 0.137 g/bhp-hr or 0.5 lbs/day and the file showed this was based on NOx emission reductions of 98.4 percent. However, the authority to construct and permit did not list a NOx emissions limit and did not include in the equipment description that the engine requires non-selective catalytic reduction. There were no enforceable conditions in the authority to construct or permit to ensure that the engine's NOx emissions will be 0.5 lbs/day.

Sierra Cedar Products applied to install an 800 bhp Waukesha ICE genset (Application #37005E) operating 24 hr/day. The application information included expected NOx emission limits with a three-way catalyst achieving 99.5 percent control which would limit emissions from the engine to 1.84 ppm NOx at 15 % O2 or 0.02 grams/bhp-hr. Current BACT for an 800 bhp natural gas fired ICE is 0.15 grams/bhp-hr or 9 ppm NOx. The engineering analysis stated that with these controls the proposed engine would not trigger BACT. However, the authority to construct was issued without an emission limit. There were no enforceable conditions to ensure the emissions would be 1.84 ppm NOx.

District staff stated that they do not have a source testing program, so they do not usually include any source testing conditions in an authority to construct. However, for its larger engine projects that required BACT, the District should have required source testing to verify applicable emission limits. The source should be made responsible for finding certified source testers and the District should be provided with protocols for review prior to testing.

Calpine Greenleaf, Inc. applied for an authority to construct (#13004G) for the installation of an 810 bhp natural gas fired compressor to operate 24 hr/day. The engineering evaluation showed that the potential to emit (557.1 lbs/day NOx) triggered BACT. The application and the engineering analysis both state that the engine will be equipped with a 3-way catalyst to meet a 9 ppm NOx BACT limit with a reference to the Bay Area Air Quality Management District BACT guideline. However, the authority to construct listed only the catalyst, did not include the 9 ppm emission limit for BACT, and did not include initial or ongoing source test requirements to verify that the engine could meet the emission limit.

ARB staff found an instance where an application to move equipment from one site to another was submitted to the District without requiring the modification to

go through new source review. On April 9, 2002, Venoco Inc. applied to the District to install a 230 bhp Ajax engine. The District subsequently added the engine to the permit without an emission limit and without conducting an evaluation, BACT analysis, or issuing an authority to construct.

Recommendations: The District should include enforceable conditions in its authorities to construct and permits to operate to ensure that equipment will operate in compliance with BACT requirements. These enforceable conditions should include emission limits from the evaluation and list applicable control equipment.

When applicable, the District should include source testing requirements in permits to ensure that the installed equipment will meet the limits specified in the application.

B.4 Adequacy of Permit Conditions

District Permits to Operate should have lists of conditions that facility owners or operators are required to meet in order to be in compliance with applicable rules and regulations. Permit conditions also provide a means for District inspectors to verify a source's compliance status. Permit conditions must be specific enough to inform and notify a facility owner or operator of all the conditions needed to operate in compliance. Permits should qualify as "stand alone" documents meaning the facility owner or operator should not have to refer to District or State regulations to determine how to comply with any conditions.

The District's permits have a cover sheet that lists the permitted equipment, the main operating conditions, and record keeping conditions. General permit conditions follow the cover sheet on succeeding pages. This format is good for source operators since the monitoring, recordkeeping, and reporting requirements necessary to operate the equipment in compliance of air pollution regulations are listed on the first page of the permit.

Some of the District's record keeping conditions could be improved by including the units of measurement required for records. For example, the permit for De Silva Gate Construction #3018 has record keeping conditions for the annual asphalt production, aggregate production, and fuel used, but the units (i.e. tons/day produced, gallons/day of fuel) of the records are not indicated. Including the units of measurement for the records may improve the enforceability of permits.

HSC section 42301 (e) requires upon annual renewal that each permit be reviewed to determine that the permit conditions are adequate to ensure the enforceability of applicable District rules and regulations. The District indicated that its compliance section is responsible for reviewing permit conditions during renewal, but all the District staff assists with the renewal process. It is the

responsibility of each individual staff person to review the conditions. Upon permit renewals, the engineers are the only staff that makes changes to the permit. Any permit that has been changed is reviewed by the enforcement lead as well as the APCO.

Recommendation: In its permits, the District should indicate the units of measurement required for recordkeeping conditions.

B.5 Organization and Adequacy of Permit Evaluations

The District has established a complete format for its engineering evaluations using Microsoft Excel that includes a listing of emissions and emission factors, a process description, an equipment and control equipment listing, a listing of applicable rules, a public notice section, a BACT section, an offsets section, and a recommendation section. However, ARB staff found the District had done some handwritten evaluations that did not have all the parts of the complete engineering evaluation. The District indicated that they intend to do all future engineering evaluations using the available computer-based format.

ARB staff found an instance where an engine was replaced with a larger engine without conducting any review. For example, Venoco, Inc. applied to replace a 60 BHP IC engine with a 115 BHP IC engine. The District did not draft an engineering analysis for this replacement which would have triggered BACT. Subsequently, the District issued an authority to construct/permit (#2040B) which included the engine yet did not require the engine to meet any emission limit, did not require any emission controls, or source testing requirements.

In most of its engineering evaluations, the District verifies whether each project is compliant with HSC section 42301.6, which requires that each applicant verify whether the proposed source or modification is within 1,000 feet of the outer boundary of a school site. In the rule evaluation subsection of the evaluations, the District has a listing for HSC section 42301.6 compliance that includes a statement indicating if there are any schools within 1,000 feet of the source.

Recommendation: The District should do a complete evaluation for each project using their Excel format.

B.6 Offsets and Emission Reduction Credits (ERCs)

The serious and moderate nonattainment areas in the District's jurisdiction discussed in the BACT section (above) also have two different offset triggers of 10 and 25 tons per year respectively for NOx and reactive organic compounds. The southern portion of Sutter County has the more stringent offset trigger. The District's offset trigger levels are found in District Rule 10.1 E.2.

The District had only one recent project (January 2004) trigger offsets which involved the installation of an 810 hp internal combustion engine at Calpine, Greenleaf Unit II power plant. Offsets were required since the potential to emit for the facility, which included the emissions from two gas turbines, exceeded 25 tons per year.

The District has a community bank though the amounts in it are not very large. The community Bank is funded by taking five percent from ERCs. The District had two recent projects that generated ERCs, including Western Aggregates (January 2004) and Specialty Foods (August 2004). Western Aggregates generated ERCs by installing water sprays, fogging and misting equipment to control PM10. Specialty Foods generated ERCs by a facility shutdown. The review of these files indicated that the District showed that the emission reduction credits generated were real, quantifiable, enforceable, and surplus.

The District maintains a spreadsheet of credits in the ERC bank as well as the community bank. Table VII gives the balance as of July 29, 2005.

Table VII – Emission Reduction Credits Held

	ROC (Tons/Year)	NOx (Tons/Year)	PM10 (Tons/Year)	SOx (Tons/Year)	CO (Tons/Year)
ERCs Held	378.16	286.32	381.64	66.43	4056.32
Community Bank	13.51	14.64	17.83	3.15	140.2

Recommendation: None

C. Rule Development Program

The Sacramento Valley Basinwide Air Pollution Control Council (BCC) is a regional coordinating body composed of one member from each of the seven County Air Districts. The Council is required by law to adopt an annual Agricultural Burn Plan for the Air Basin. The Council also reviews and endorses proposed control measures in the Attainment Plan prior to consideration of adoption by the Air Pollution Control Boards. The Council meets on a bimonthly schedule at locations throughout the air basin.

A Technical Advisory Committee (TAC) made up of air pollution control officers from districts in the air basin meet monthly to review and coordinate the development of uniform rules before submitting them to the BCC for their consideration. Once a rule has been through the BCC review process, it is then “ready” to go through the public participation and adoption process by each district’s governing Board. This rule development and coordination process has allowed the basin to have uniform air quality regulations. This rule coordination effort also fosters communication of ideas among air quality professionals and encourages a sharing of limited resources.

The Valley is designated nonattainment of the State ambient air quality standards for ozone and PM10. So a uniform set of rules works well for the entire basin. However, the southern portion of Sutter County has to contend with additional or more stringent requirements due to its nonattainment designation of the former federal one hour ozone standard and its current “serious” designation of the 8 hour ozone standard. In many cases, the District has addressed this disparity in air quality designations by incorporating separate, more stringent, standards for those sources in the southern portion of Sutter County.

The District’s rule development program was reviewed with respect to the quality of existing rules and the mechanism and procedures for adopting proposed or revised rules. The primary driving force behind the Valley’s rule development program appears to be measures contained in the BCC’s Air Quality Attainment Plan. The District actively participates in the BCC coordinating rule development effort at the staff level by participating in a basinwide rule development group. This sharing of resources with other districts with the Valley is critical to the District’s rule development program due to its limited resources available. There is currently no staff entirely dedicated to administer the rule development program. District management currently believes that it does not have the necessary staff resources for the administration of its rule development program to adequately address State and federal Clean Air Act requirements.

Once a rule has gone through the BCC rule development process, it must still go through a public review and participation process by each district. The District has an established rule review process that includes workshops to discuss proposed or revised rules and an opportunity to receive public comments by

interested parties. Rule development meetings and workshops designed to discuss and receive public comments on rule amendments are conducted in the afternoon hours. In order to ensure full public participation, the District provides translators (for Spanish, Punjabi and Hmong languages) on an as-needed basis.

ARB and CAPCOA have a mutually agreed protocol designed to facilitate the rule review and coordination process among ARB staff and District staff. The protocol essentially establishes deadlines by when a draft, proposed, and adopted rule needs to be sent to ARB for its review. It also specifies the time ARB has for its rule review period and the method by which comments are communicated back to the Districts. The District is aware of the schedule set in the rule review protocol and makes every effort to follow it.

ARB staff also conducted a limited review of the District's adopted rules. Appendix B contains a summary of rule improvement, clarity, and inconsistency issues found in the District's new source review rule. The District's new source review Rule 10.1 could be improved by implementing the rule improvement issues highlighted in Appendix B. ARB staff recommends that it dedicate resources to address these issues.

With respect to its prohibitory rules, the District is behind schedule in adopting new rule categories as it has committed to in its BCC endorsed Air Quality Attainment Plan. Some of the rule categories up for adoption consist of industrial boilers, adhesives and sealants, graphic arts, wood products coating operations, and metal parts and products coatings operations. Of these rule categories, "industrial boilers" was adopted by the District's Board in June, 2006.

The District also lacks a rule that regulates volatile organic compound (VOC) emissions from gas recovery (well) operations. This source category is common in the District and it may be advantageous to regulate these activities. Visible Emissions Rule 3.0 has a permitted opacity level of Ringelmann 2 for the entire District. The District should consider lowering this level to Ringelmann 1.

The District needs to improve its current Rule 3.16 (Fugitive Dust Emissions). The rule needs specific language for administrative requirements for dust control (i.e., fugitive dust control plan, track-out, active/inactive areas and storage pile management, recordkeeping). The rule should incorporate best management practice on dust control for small and large operations that is clear and enforceable.

Recommendations: The District should revisit its new source review Rule 10.1 and incorporate the rule improvement issues summarized in [Appendix B](#).

As mentioned in section B.1.1, the District should consider hiring a staff person for the rule development program in order to better meet its rule adoption schedule and its Attainment Plan commitments. In addition to the rules already

committed to in the schedule, the District should consider adopting a rule to regulate VOC emissions from gas recovery operations. It should also consider lowering its permitted visible emissions level from Ringelmann 2 to 1, especially for those sources located in the federal designated nonattainment area of Sutter County. The District should make improvements to its current rule (3.16) on fugitive dust emissions.

D. “Hot Spots” Program

The District staff is in transition with their “Hot Spots” program and intends to improve the quality of their toxics data in the next year with help from ARB staff. ARB staff will help prioritize tasks to be completed, given limited District resources. District staff was enthusiastic and discussed issues openly and honestly. The District surveys facilities every year and gets throughput and other emissions-related data.

The District has completed the evaluation of all Phase I (greater than 25 tons/yr) and Phase II (greater than 10 tons/yr) facilities. The District has identified many additional facilities subject to “Hot Spots” that emit less than 10 tons of any criteria pollutants (Phase III facilities) and has included some of these facilities in their inventory. The District collects annual survey data which could be used to calculate toxics emissions from the remaining facilities. The District intends to include toxics data in future emission inventory submittals, but has not done so in many years. The District should evaluate all facilities subject to “Hot Spots.” If the facility does not submit toxics data, and the District volunteers to calculate those emissions, the District should have a process in place so that the toxics inventory is calculated on a more regular basis.

The District has identified gasoline dispensing facilities, dry cleaners, and autobody shops as industrywide categories. Toxics inventory information for industrywide categories is not well documented, and is not regularly submitted to ARB. The District has committed to providing toxics inventories for all of their gasoline stations within the next year, and perchloroethylene estimates for all of their dry cleaners in the same timeframe. There are 25 gasoline stations and 3 dry cleaners currently operating in the District.

The District has submitted initial emissions data for most of their major facilities, but needs to complete and submit toxics inventories for several more facility classes. The District has not submitted gasoline station, dry cleaner, or autobody shop toxics data to ARB. The District should submit toxics data for several key categories in the next few months. The District should establish a regular schedule for reviewing toxics inventories and submitting available toxics data to ARB whenever possible.

There is no central location for listing prioritization scores for each facility in the District. It was unclear how and when facilities are prioritized. When previous staff left the District, no clear procedures were in place for meeting “Hot Spots” requirements and program tasks were not completed. It is very important that the District put in place a procedure for prioritizing facilities during the permitting process, or on a regular basis that coincides with regular facility evaluations.

The District has not required a health risk assessment in the past 8 years. There were at least two facilities in 2002 that have still not been prioritized in 2005 and

are included in the Fee Regulation. The District must prioritize these facilities so that the facilities either are no longer subject to annual State fees, or they must conduct a health risk assessment. The District has committed to putting in place a procedure to evaluate “Hot Spots” facilities on a more regular basis.

The District collects annual facility information like throughput for gasoline dispensing facilities, and amount of perchloroethylene used for dry cleaners, but does not calculate toxics emission inventories for those sources on a regular basis. The annual information reports appear to be sufficient to provide updated inventories for facilities subject to “Hot Spots.” The District should strive to compile and submit the most important inventory data to ARB whenever possible and on a regular schedule. Communication with ARB staff will help District staff prioritize their efforts at meeting ARB data requests.

It is not clear if in the past the District provided inventory updates for facilities that were reprioritized. The District has provided limited inventory updates, but it is unclear if this has been done in a systematic way for all pollutants and all facilities. Because there are very few major facilities, this may not be a critical issue. The facilities that were intermediate risk (risk between 1 and 10 per million) in 2002 are no longer paying annual State fees in the “Hot Spots” Fee Regulation in 2005. There is no documentation supporting this change, and inventory data has likely not been updated. The District should send updated inventory data to ARB when the status of a facility changes. Facilities that have reduced their emissions and risk should have their inventories updated to reflect these changes, especially for the highest risk facilities.

The District strives to track each facility with annual survey data. At least two large facilities have gone out of business in the past, and this information has not been submitted to ARB. The District should indicate which facilities went out of business or are new facilities each year as part of their annual inventory submittal. District staff should provide a list of facilities and their status in the program to ARB staff, including changes to facility name or identification number. This will allow ARB and the public to track how emissions and risk have changed for each facility in the inventory.

The District does not have any major high risk facilities. However, their toxics data for new facilities does not appear to have been sent to ARB in the past few years. In 1999 to 2001, there were 130 industrywide facilities in the CEIDARS inventory. In 2002, there were only 72 industrywide facilities in CEIDARS. The District has not tracked their CEIDARS data in recent years, or there is insufficient documentation to explain the loss of facilities in the inventory. The new District staff understands the importance of their inventory and are committed to making improvements in the next year. Regular communication with ARB will help make this possible.

The District's hardcopy files appeared to contain the essential inventory components necessary to calculate a facility prioritization score for facilities for which the District collects emission data. The District calculates the criteria inventory for their facilities each year. In order to calculate the toxics inventory, the District will have to devote additional resources to completing the toxics inventories. If the District determines that the change in process level data is consistent each year, and that an estimation of the toxics data is accurate with only summary throughput data, the District should occasionally check to make sure this is an appropriate action by spot-checking data from each facility on a semi-regular basis. The District should continue to collect inventory data for facilities and ensure that their calculations are appropriate if they continue to calculate the inventory for their facilities. The District should consider focusing on receptor distance to ensure that encroachment of new receptors adjacent to existing polluters does not cause future conflicts.

The District has evaluated all of the Industrywide facilities using the CAPCOA Guidelines for Industrywide Facilities (gasoline stations, dry cleaners, and autobody paint shops). District staff believes their survey questionnaires are adequate to estimate emissions from industrywide facilities. The District should continue to evaluate facilities using health-conservative assessments. The District should consider posting their methodologies for evaluating "Hot Spots" facilities on their webpage. This is particularly important if the District is calculating toxics emissions for their facilities. The District has also committed to submitting stationary diesel engine emission data to ARB in the next year and making their calculation methodology available to the public.

The District does not have an emission inventory database, and paper copies are difficult to compile and summarize. The District maintains a list of facilities subject to "Hot Spots", but it is not electronically linked to their paper files. Updates to the list are done by hand. The District appears to be able to meet the needs of their program without maintaining a database of emissions and facility information. However, there may be opportunities to streamline inventory activities using spreadsheets or other tools, and the District should strive to automate their evaluations to the greatest extent practicable. This may also allow the District to charge facilities State fees rather than the District paying those fees directly, or exempting those facilities more quickly so that the fees are no longer necessary.

The District sends letters notifying facilities of the schedule for providing summary throughput information. The District integrates "Hot Spots" into their regular permitting process and calculates the inventory for the facility. The District appears to be doing a good job notifying facilities of their requirements. It may become necessary in the future to reexamine this process if more complex toxic emission inventories are required to be submitted to ARB for facilities subject to "Hot Spots." The District should be commended for completing requirements on behalf of their facilities, but in the future, toxics data must be processed more quickly.

The District adequately assesses warnings and penalties (Notice to Comply and/or Notice of Violation) when facilities do not meet the requirements of their District rules, including “Hot Spots.” The District’s regular system of permits and data surveys appears to be adequate to meet the needs of the “Hot Spots” program, as long as facilities continue to be low risk. Much more data must be generated if a potentially high risk facility is identified.

The District has an existing annual inventory reporting requirement that allows the District to track facilities in the “Hot Spots” program. There are more than 200 facilities that provide annual data to the District. District staff conducts a cursory emissions calculation on new and modified permitted facilities as part of their District review process. One facility has a limit on methyl bromide as part of their permit not to exceed an acute health index threshold of 1. There does not seem to be sufficient risk evaluation of facilities at the time of permitting. The District should require all new and modified facilities to meet the requirements of the “Hot Spots” program, including those facilities that meet the requirements in HSC 44344.5 section (b). This includes calculating a prioritization score for all facilities, and risk assessments for facilities locating near sensitive receptors at the time of permitting.

The District does not publish an Annual Report. District staff was open to the idea of providing information to the public about their toxics inventory and “Hot Spots” program, but it is unclear what is possible given resource limitations. ARB recommends posting information about the District’s “Hot Spots” program on their web page for the public to review. The information should provide a list of all medium and high priority facilities subject to “Hot Spots”, and the status of each of the facilities in the program (a description of the status of a facility might include: HRA has been approved, HRA in progress, newly exempted facility including the reason for exemption). ARB staff finds these reports very helpful when trying to understand what is being accomplished in each district.

Recommendations: The District must put in place a procedure for prioritizing facilities as part of their permit process.

The District should take their annual throughput data and calculate toxics inventories on a more regular basis, and submit this information to ARB.

The District should provide to ARB a list of all of the facilities and their status in the “Hot Spots” program each year.

The District should consider compiling more of their inventory information in an electronic format so that risk assessment scores and dates for completing “Hot Spots” requirements are centralized, and the status of facilities is easily tracked.

E. Emission Inventory Program

The ARB 2003 CEIDARS database contains 70 criteria facilities and 159 toxics facilities that are located in the District. For the emission inventory component of the audit, ARB staff conducted a site visit, interviewed District staff, and reviewed permit files. The audit revealed that the District has worked to maintain and update the criteria pollutant emission inventory and has provided updated inventory data to the ARB. With respect to the toxic inventory data, the last submittal to the ARB was in 1996. The District has committed to improving the quality of the toxics data in future submittals with more recent updates (See discussion under “Hot Spots”). In addition, the audit revealed that there are opportunities for improving the overall quality of the emissions inventory and management system, such as the institution of quality assurance/quality control procedures, tracking and reporting of facility status, and documentation of area source methodologies.

E.1 Criteria Pollutant Inventory

For the 2002 inventory, the District submitted electronic updates to the ARB's California Emission Inventory Development and Reporting System (CEIDARS2.5) for criteria pollutants only. As part of this 2002 submittal, District staff submitted annual process rate information for facilities and estimates of facility emissions. In 2003, two new facilities were added to the 2003 database; however, emissions data for other facilities were not updated. The District recently surveyed facilities and obtained criteria emissions data for 2004.

E.1.1 Point Sources:

The audit revealed that the reporting and maintenance of point source data could be improved. The District has not reported changes for new and closed point sources on an annual basis to the ARB. In addition, in some cases, Facility IDs assigned to new facilities were the same as the ID used for other facilities. As part of the annual emission inventory update submittal to the ARB, the District should provide a list of all facilities with their operating status (e.g. closed, permit revoked, closed since 2000, etc). This will ensure that the CEIDARS database reflects the most current information regarding active facilities in the District. The District should also ensure that the facility ID assigned to a facility is unique.

The District provided a comprehensive facility update for 2002 in the correct CEIDARS2.5 transaction format. However, some important facility information (e.g., locations, stack parameters) was not provided for all facilities. The missing information was provided to ARB upon request following a quality assurance check by ARB staff. The District should provide point source updates at the device and process level including spatial, stack, and temporal data for all facilities each time they provide an inventory update.

E.1.2 Area Sources

The most recent area source submittal to ARB was for 2002. The District updated six area source categories out of 89 total categories that local air districts have responsibilities for providing emission estimates. The previous area source update was submitted in 1991. Over the last 15 years, the only updates provided to ARB were for 1991 and 2002. The District should continue updating area source categories and provide the information to ARB on a more regular basis as part of the annual CEIDARS submittals. ARB recommends the District update the most important area source categories on a three year schedule (i.e., one third of the categories each year).

With respect to area source methodologies, the District has provided ARB with two area source methodologies for which the District has responsibility - agricultural burning (i.e., pruning, field crops, range improvement, weed abatement) and jet aircraft. There are 89 area source categories for which the District is responsible for developing emission estimates and methodologies. The District should provide methodologies for all the area source categories for which the District is responsible.

The District does not have a procedure to reconcile area source emissions with point sources. The combination of old and missing area source data makes reconciliation with more current point source data problematic. The District should develop a procedure for reconciling point and area source emissions.

E.2 Toxics

The toxics inventory from the District has not been updated for the past ten years. Toxics data are an important part of the overall inventory of air pollutants in California and the expectation is that districts will submit updated toxics information. It is in the interest of the District that toxics data be updated on a routine basis. The District has indicated that they intend to improve the frequency of submittals and quality of their toxics data.

E.3 General Inventory Management

Growth and Control Factors: Default growth data are routinely developed internally by ARB, or via contracts, although for those area source categories that are under direct District control, the District has authority to provide and overwrite the ARB's default growth factors. The ARB relies on districts to provide control factors for some source categories. If control factors are not provided, ARB assumes no controls, resulting in inaccurate emissions forecasts. It is in the interest of the District to ensure that the benefits of their rules are reflected in ARB's forecasts. The District has provided control factors and growth data for the agricultural burning categories. The District should provide control factors

information on new adopted rules and work with ARB staff on use of the appropriate growth factors.

SIC Codes: The District has not provided ARB with updated Source Classification Codes (SCC). Based on quality assurance (QA) reports run on the 2002 CEIDARS database for the District, there were 32 invalid SIC/SCC combinations that were improperly assigned to facilities and processes. The District should notify ARB staff of any new SCC/SIC combinations assigned to a facility and process in the updated inventory. This will prevent emissions from a source category being assigned incorrectly or aggregated into a miscellaneous category.

Data Management System: The District has both an electronic and paper filing system. The District maintains its criteria inventory in HARP (Hot Spots Analysis and Reporting Program). However, the toxic inventory is in a paper filing system. The District should add toxics data to their existing electronic criteria emission inventory database. We also recommend the District merge criteria and toxic emission inventories and provide ARB with merged emission inventory data. The most recent District emission inventory submittal was provided in an appropriate electronic CEIDARS2.5 format. The District should continue to submit data in a CEIDARS2.5 transaction format.

Data QA/QC: The District staff stated that they do not have a quality assurance (QA) program in place to check the data before they submit it to ARB, nor does the District have a written QA/QC protocol. The District should develop a QA/QC protocol to ensure the accuracy and precision of their emission estimates.

Recommendations:

The District should provide criteria and toxic data updates to ARB as a merged submittal.

The District should update their toxics emission inventory every four years.

The District should continue updating area source categories and provide the information to ARB on a more regular basis or as part of the annual CEIDARS submittals. The District should document all of their area source methodologies and make them available to ARB and the public.

The District should provide point source updates at the device and process level including spatial, stack, and temporal data for all facilities with each inventory submittal. As part of the annual emission inventory update submittal to the ARB, the District should provide a list of all facilities with their operating status (e.g. closed, permit revoked, closed since 2000, etc.).

The District should ensure that the facility ID assigned to a facility is unique.

The District should develop a written QA/QC protocol to ensure the accuracy and precision of their emission estimates.

The District should develop a procedure for reconciling point and area source emissions.

The District should notify ARB staff of any new SCC/SIC combinations assigned to a facility and process in the updated inventory.

Appendix A:
Breakdown Program Recommendation Details
(Refers to **Section A.4**)

Breakdown Program Recommendation Details (Refers to Section [A.4](#))

1. The District should create a set of written procedures and guidelines for staff to ensure that the breakdown procedures are handled uniformly to final resolution. These breakdown procedures should address the following areas:
 - a. Breakdown report relay procedures,
 - b. Breakdown investigation procedures,
 - c. Breakdown logging procedures,
 - d. Breakdown processing and filing procedures. The breakdown files should be organized such that breakdown reports can be retrieved quickly,
 - e. Recurrent breakdown criteria (specify maximum number of breakdowns per year and/or quarter that would constitute a recurrent breakdown),
 - f. After-hour breakdowns,
 - g. Assigned priority of breakdowns, and
 - h. Breakdown conditions lasting longer than maximum allowable time under District rules (variance procedures).
2. As breakdown notifications reported to the District should be recorded with essential information for immediate review in the breakdown log. ARB staff recommends the District include the following essential information in the breakdown log:
 - a. Time and date of breakdown detection,
 - b. Time and date breakdown investigated by district,
 - c. Confirmation that breakdown is allowable under rules,
 - d. Source's proposed action,
 - e. Time and date breakdown was corrected,
 - f. Breakdown number, and
 - g. Date breakdown correction report was filed by source.

3. To improve the District breakdown investigation part of the program, ARB recommends the District conduct on-site investigations on at least 90 percent of the breakdowns and include the following additional information when documenting an investigation:
 - a. Time of the on site breakdown investigation,
 - b. Time and date of breakdown detection,
 - c. Confirmation that breakdown is allowable under rules.
4. To improve future stationary source breakdown reports, ARB recommends the additional information be submitted with the reports:
 - a. An estimate of the emissions caused by the occurrence,
 - b. Picture of the equipment or controls which failed,
 - c. A statement that the occurrence has been corrected, together with the date of correction and proof of compliance.

Appendix B:
Review of Feather River AQMD NSR Rule
(Refers to Section C)

Review of Feather River Air Quality Management District's New Source Review Rule for 2005 Audit

(Refers to [Section C](#). Rule Development Program)

How this review was done:

Air Resources Board (ARB) staff looked at Feather River Air Quality Management District's New Source Review rule listed in Table 1 below, keeping in mind applicable requirements based on the District's attainment status with regard to State and federal ambient air quality standards.

<p style="text-align: center;"><u>Table 1</u> <u>Air Quality Status of Districts for State and Federal Ambient Air Quality Standards for Ozone</u></p>		
District – NSR Rule Number	State O₃ attainment status	Federal 8 hr O₃ attainment status
Feather River - Rule 10.1	Moderate	Attain except South Sutter portion, which is serious (and top of Sutter Buttes, which is basic)

Our comments on the rule are categorized according to topic area. Table 2 lists our comments on BACT. Table 3 lists comments on offsets. Table 4 lists comments on definitions, and Table 5 lists other, miscellaneous comments.

The nature of each comment is indicated by a notation printed in bold at the end of the comment. For example, such notations include ones that indicate if the comment reflects an inconsistency found between the district rule and State or federal requirements. Other notations indicate if a comment reflects an inconsistency found between the district rule and that of other comparable districts, or if improvements are recommended for increased clarity or completeness. Also, one notation highlights areas that will likely be impacted by federal requirements that have implementation dates in the near future and may require rule changes.

[Table 2 – Comments on BACT](#)

Feather River Rule 10.1	<ul style="list-style-type: none">• The table of BACT thresholds in section E.1 is unclear. It appears that BACT is required for more pollutants in the northern part of the district than in the southern part. (CL)
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*Abbreviations used to characterize nature of comments: **(IS)** = Inconsistent with State law, **(ID)** = Inconsistent with rules of other comparable districts, **(IF)** = Inconsistent with federal requirements, **(CL)** = Improvement to clarity and/or completeness, **(UP)** = Upcoming - federal requirements taking effect in near future

Table 3 – Comments on Offsets

Feather River Rule 10.1	<ul style="list-style-type: none">• The section that covers general offset requirements would be clearer if “offsets” were well defined in the rule. (CL)• The calculation procedure for “actual remission reductions” is unclear because it does not mention the subtraction of emissions that are not surplus. Even though “actual emission reductions” is defined in the different districts’ rules, the equations in the calculation procedures are not completely consistent with that definition. One way to remedy this is to include in the calculation procedure a reference to the definition for “actual emission reductions” (or to “surplus,” where it is defined). (CL)• Section E.2 needs to include offset provisions for major sources and modifications – such sources generally need to offset the full emission increase rather than just the amount over the State offset threshold. (IF)• Section E.2.c.1., Offset Ratios, neglects to specify offset ratios for non-major sources and modifications. (CL)• Section F.3, Determining Potential to Emit for a Stationary Source – the rule would be clearer if it was specified here that this section applies to offset calculations only. (CL)
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*Abbreviations used to characterize nature of comments: **(IS)** = Inconsistent with State law, **(ID)** = Inconsistent with rules of other comparable districts, **(IF)** = Inconsistent with federal requirements, **(CL)** = Improvement to clarity and/or completeness, **(UP)** = Upcoming - federal requirements taking effect in near future

Table 4 – Comments on Definitions

Feather River Rule 10.1	<ul style="list-style-type: none"> • The definition of non-reactive halogenated hydrocarbons should be updated using the attached “ARB’s Definitions of TOG and ROG (as of November 2004)” (CL) • The definition for “Best Available Control Technology” contains an unclear phrase in section D.5.b. regarding any other emission control device...that “provides an equivalent level of control.” This phrase is unclear because the definition states that BACT is <u>the more stringent</u> of subsection a. or b. By requiring subsection b. to be equivalent to subsection a., it appears to negate the “more stringent” test. (CL) • The definition for “emissions unit” should be made less broad by changing “An identifiable operation or process.....” to “An identifiable operation or piece of process equipment” (ID) • The method listed in the “major modification” definition for determining the magnitude of an emission increase (a “potential to potential” calculation) deviates from the “actual to potential” method specified by U.S. EPA in the past and used by other California districts that do not attain federal ambient air quality standards. (ID) • There is no definition for “major modification” for some pollutants for which there is a definition of “major source” (i.e. PM₁₀, CO), making the definition incomplete. (CL) • It is unclear how the definition of “Potential to Emit,” which is specific to emission units, applies to stationary sources as used in the definitions for “major stationary source” and “major modification.” Also, U.S. EPA requires fugitive emission to be included in the potential to emit for some types of stationary sources. (CL), (IF) • In the definition of “Reactive Organic Compounds,” “ethane” should be “methane” (CL)
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Table 5 – Other Comments

Feather River Rule 10.1	<ul style="list-style-type: none">• The State exemption of agricultural operations from NSR and other permit requirements was removed from Health and Safety Code Section 42310 and replaced by permit requirements for agricultural sources in Health and Safety Code Section 42301.16, effective January 1, 2004. This change does not appear to be reflected in the district rules. (IS)• U.S. EPA guidelines for implementing NSR for areas that are non-attainment for the 8-hour ozone ambient air quality standard were issued November 29, 2005. Portions of Feather River are classified as “serious” and “basic” with regard to non-attainment of that standard. (UP)• Changes to the federal NSR program published in the Federal Register on December 31, 2002 require conforming district rule changes to be submitted to U.S. EPA by January 2, 2006 for approval into the SIP. CAPCOA, ARB, and U.S. EPA have agreed on a simple approach to address this requirement that still conforms to State law (Health and Safety Code Sections 42500 – 42507). (UP)
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*Abbreviations used to characterize nature of comments: **(IS)** = Inconsistent with State law, **(ID)** = Inconsistent with rules of other comparable districts, **(IF)** = Inconsistent with federal requirements, **(CL)** = Improvement to clarity and/or completeness, **(UP)** = Upcoming - federal requirements taking effect in near future