



Tehama County Air Pollution Control District Program Review

Report of Findings and Recommendations

**Prepared by the
California Air Resources Board
Stationary Source Division
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ACKNOWLEDGMENT

The findings and recommendations contained in this report were developed based on a review of office programs and field inspections. These activities placed demands on the staff of the Tehama County Air Pollution Control District (District). In conducting the program evaluation, 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 staff from the Enforcement Division, Planning and Technical Support Division, and Monitoring and Laboratory Division of the Air Resources Board.

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REPORT OF FINDINGS AND RECOMMENDATIONS

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Tehama County Air Pollution Control District Program Review

REPORT OF FINDINGS AND RECOMMENDATIONS

Introduction

Air pollution control district (district) program reviews are conducted as part of 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 Tehama County Air Pollution Control District's (District) air quality program. This is the only comprehensive review the ARB staff has ever done of the District. As part of this review, ARB staff evaluated the District's compliance, permitting, rule development, portable equipment registration, AB 2588 "Hot Spots," emissions inventory, and ambient air monitoring programs. Staff from four ARB divisions participated in this effort.

The review activity commenced with an entrance conference 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 the 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's jurisdiction is coincident with the area contained in Tehama County, encompassing approximately 2,951 square miles. Tehama County is located in the Sacramento Valley Air Basin. Tehama County's population has grown from 49,900 in 1990 to approximately 60,300 in 2005. In 1990, approximately 1.3 million vehicle-miles were traveled each day within the District boundaries. In 2005, an estimated 1.4 million vehicle-miles were driven daily.¹

The District maintains its office in Red Bluff. As of May 2005, the District employed four full-time staff including an Assistant Air Pollution Control Officer

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

(APCO), two specialists and one office technician. The APCO is also Tehama County's agricultural commissioner. As of May 2005, the District had 151 permitted facilities. Agricultural burning, mainly orchard prunings and prescribed burning operations, constitute an important emissions source in the District. It is our finding that the District has an extensive workload for its relatively small staff.

Attainment Status

Ozone

Tehama County is designated as unclassified/attainment for the federal 8-hour ozone standard. Ten recorded days exceeded the federal ozone standard at the Tuscan Butte ambient air monitoring site in 2006.² There were no recorded exceedances of the federal ozone standard at the Red Bluff – Oak Street site in 2006.

Tehama County is a moderate nonattainment area for the State ozone standard. State air quality standards are more health protective than the federal standards.³ Four recorded days exceeded the State 1-hour ozone standard at the Tuscan Butte site in 2006. There were no exceedances of the State 1-hour ozone standard at the Red Bluff site in 2006. Preliminary data for 2006 indicate that for the State 8-hour ozone standard there were 48 exceedance days at the Tuscan Butte site and 15 exceedance days at the Red Bluff site.

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. Tehama County is designated as a federal nonclassified/attainment area for both PM10 and PM2.5. However, Tehama County is designated as a nonattainment area for

² There are two ambient air monitoring sites that monitor ozone in Tehama County. ARB operates the Tuscan Butte ambient air monitoring site. The Tuscan Butte site is located in a remote area with low population density. The District operates the Red Bluff – Oak Street ambient air monitoring site, which is located in an urban area.

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.

the State PM10 standards and the State PM2.5 standard. As with ozone, 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. The District has an enforcement policies and procedures manual addressing areas such as inspections, violations, complaints, breakdowns, and variances for the administration of its enforcement program. With respect to its source inspection program, District compliance staff is able to conduct comprehensive annual inspections of all permitted stationary sources. Violations observed during inspections are documented for the majority of cases. However, the District should ensure that formal violation notices are issued in every applicable instance. The District settles most enforcement actions in a timely manner and in accordance with written policy. The reasons for not pursuing an issued violation notice (NOV) through the mutual settlement process should be clearly documented in the case file. Currently, 23 percent of the issued NOVs for the open and agricultural burning category are not pursued or settled for a zero penalty amount. The District should strive to bring this number down to about 10 percent.

The District has an active complaint handling program and is able to investigate over 80 percent of the complaints within 24 hours of receipt and through an on site visit. However, the District does not consistently inform all complainants about the results or status of the complaint investigation referred by them. The District should improve on this aspect and also look into the feasibility of addressing complaints during non business hours.

The District requires periodic source testing of its major sources and witnesses most of the source tests conducted. However, the District does not always issue a NOV whenever a facility fails a source test. The District should establish a mechanism to track source tests.

District breakdown reports should contain information on the District's response to the breakdown incident and clearly state whether breakdown relief was granted. The District fully meets the 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 seek protection under the District's variance program. Although the District did not issue any variances during the review period, it appears that the District has the information and knowledge available to meet all HSC requirements for its variance program.

Most of the agricultural burning conducted in the District (by acreage) is from orchard prunings (primarily walnuts, with some olives), and orchard removal of prunes. The District's rules for agricultural burning and for open [nonagricultural] burning are consistent with the Smoke Management Guidelines in Title 17, and with the nonagricultural and agricultural burning requirements of the Health and Safety Code.

With respect to its permitting program, the District met its timeline requirements, and consequently, did not have any backlogged projects at the time of the review. The District has its permitting-related policies in at least two separate documents. Staff recommends that all of the permitting-related policies be combined into one complete document. The District also lacks written policies specific to permit-tracking, engineering evaluations, and BACT analysis. With respect to the District's engineering evaluations, staff found many items missing, such as the project description, a rule evaluation listing, proposed conditions, BACT determination, and recommendations. A permitting policy document should address these issues.

In the review of the District's BACT analysis, staff found several cases specifying emission control devices, but lacking the corresponding emission limits. For example, the District used the prohibitory rule emission limit for engines as the BACT level. This practice may lead to future emissions, since the control device was not required by a permit condition to meet a BACT emission level for the entire life of the engine.

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 4.17) to include the issues that are specified in ARB's model breakdown rule. The District needs to improve its current Rule 4:24 related to fugitive dust emissions. The District should consider adding an additional staff person for the rule development program in order to better meet its rule adoption schedule and its Attainment Plan commitments. This person can also work on improving the permitting issues that were previously mentioned.

The District has met most of the AB 2588 Air Toxics "Hot Spots" requirements. For its emission inventory program, the District has done well inventorying point sources and submitting all facility data to ARB annually. Emission estimates or area source methodologies have not been provided to ARB since 1991. The District should update area source categories and provide the information to ARB on a regular schedule. The District satisfactorily operates, maintains, and manages the data generated for its gaseous and particulate matter ambient air monitoring sites.

Findings and Recommendations by Program Area

As with any air pollution control program, there is room for improvement in individual program areas. The recommendations contained in the report are designed to assist the District in its clean air efforts. In the case of Tehama County, additional resources would be necessary 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 the report provides detail 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
- 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 and 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 file reviews, ARB staff conducted joint inspections of several District permitted facilities. The results are tabulated and discussed in section A.1.5.

A.1.1 Inspection Staff Resources

The District employs two inspectors, supervised by the Assistant APCO. The inspectors are charged with inspecting approximately 151 permitted stationary sources, including about 39 retail gasoline dispensing facilities (GDFs), 58 gas wells, 16 aggregate type plants, 12 autobody shops, and 2 dry cleaners. The District conducts inspections of phase I and phase II vapor recovery systems at all GDFs.

Recommendations: None

A.1.2 Guidance Policies

The District has policy documents for conducting inspections and for issuing notices of violation (NOVs) and notices to comply (NTCs). These policies provide guidance for the administration of the source inspection program.

Recommendations: None

A.1.3 Inspection Frequency

The District's verbal policy is to inspect all permitted sources annually, about 45 days before permit renewals are issued. GDFs are inspected twice a year. Our review of sample files verified that the District inspected permitted sources on an annual basis (at a minimum) in 2003 and 2004 and, consequently, adhered to its inspection frequency policy.

Recommendations: None

A.1.4 Inspection Documentation and Noncompliance Notice Issuance

ARB staff reviewed 50 inspection reports for 2003 and 2004 and found that the reports are generally complete and establish the compliance status of the facility. The District uses source specific forms (GDFs, cement batch plants, autobody, gas wells, etc.) to document its inspections. The Assistant APCO provides a quality control assurance by reviewing inspection reports, but does not sign or initial the reports. Staff conducts unannounced inspections, when possible. As further documentation of an inspection conducted or a potential violation found, the District records photographs and videos. These photographs and videos are kept in a locked drawer, separate from inspection reports.

The District issued 10 NTCs and 52 NOVs during 2003 and 2004. Table I shows the number of NOVs issued in 2003 and 2004 by rule category. As displayed in Table I, the majority of NOVs were issued for violations of the District's open and agricultural burning rules.

Table I
2003-2004 NOV Totals by Source/Rule Category

Source/Rule Category	# of NOVs Issued
Open/Agricultural Burning Rules 4.6; 3.2; 3.5	32
Permits Required Rule 2.2	9
Permit Conditions (Including 3 dust-related NOVs) Rule 2.10	7
Nuisance (Including 2 dust-related NOVs and 1 odor-related NOV) Rules 4.4; 4.24	3
GDF Rule 6.1	1
Total	52

Our review of the 50 inspection reports showed that the District took enforcement action when violations were documented for the majority of cases. However, ARB staff found two examples from our sample file review where non-compliance was documented in the text of the report, even though the box on the report form was checked “in compliance,” and no NTCs or NOV were issued.

- The 11/9/04 inspection report for Termo Co. (PTO #150) has a box that is checked in compliance, but the report documents noncompliance. The District inspector found leaks and visible discharge from the glycol dehydrator. The inspection report states that the facility is not in compliance in the text of report.
- The 7/26/04 inspection report for Sierra Pacific Windows (PTO #1108) has a box that is checked in compliance, but the report documents an unpermitted paint spray booth that had been recently used. The District inspector found an unpermitted spray booth with filters not working properly and sawdust collection equipment not being operated in violation of its permit condition.

In addition to the above examples, Section A.5 discusses a case where the District did not issue a NOV for a failed NO_x test at Neo California on February 15, 2005.

Recommendation: The District should issue NOVs for all emission-related violations and NTCs for minor procedural violations.

A.1.5 Compliance Results of ARB and District Staff Inspections

Joint inspections were conducted at 16 facilities to obtain field data and actual compliance rates. In order to obtain an understanding of the compliance status of the District’s sources, ARB and District staff selected sources that varied in size and type. During the joint inspections, ARB staff observed that District inspectors conducted thorough inspections. District inspectors took appropriate enforcement action where needed. The District issued three NOVs as a result of the joint inspections. Table II summarizes the joint inspection results.

**Table II
Summary of Joint Inspection Results**

Facility Name	Equipment Description	Compliance Status and Inspection Observations	District Action
Major Sources			
PG & E	Gas Turbines	In Compliance	
Pactiv Corporation	Gas Boiler	In Compliance	
Tehama County/City of Red Bluff Landfill	Ground Flare	In Compliance	
Neo California	(16) Internal Combustion Engine's (ICEs)	ICE #14 failed NOx source test on 2/15/05	District required source testing of all 16 engines
GDFs			
Five Star Gas	Phase I Dual Pt Phase II Balance	Torn face plate; reversed hoses	Problems corrected & reinspected same day
Travel Centers of America	Phase I Dual Pt Phase II Vacuum Assis t	Instruction signs & toll-free numbers not posted; broken drop tube cam lock	Problems corrected & reinspected same day
Wood processing			
Lassen Forest Products	Wood Processing	Changed diesel water pump engine without Authority to Construct	NOV
Sierra Pacific Industries	Wood Processing	Filter House Filter & Cyclone #9 leaking. Breakdowns reported to the District during the inspection	
Sand & Gravel			
North Valley Rock	Gravel Processing	In Compliance	
Western Ready Mix	Gravel Processing	Replaced cement silo without an ATC	NOV
Deer Creek Rock	Gravel Processing	Fugitive Dust – no watering on access road	NOV
7-11 Materials	Gravel Processing	In Compliance	
Dry Cleaner			
Modern Cleaners	Dry Cleaning	In Compliance	
Other Minor Sources			
Fiber Enterprises	Fiberglass	In Compliance	
Inter City Body & Paint	Spray Booth	In Compliance	
Borden Mfg	Picture Frames	Facility being shut-down	

Recommendations: None

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 unsuccessful mutual settlement attempts. The goal of the District's 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 has a policy document for administration of NOV issuance and follow-up enforcement action. The District also has a civil penalty matrix and a separate penalty schedule for GDFs. Baseline penalty amounts are based on severity of violations found, source compliance history, and the size of the business. Compliance must be achieved before settlement is reached. Some mutual settlement letters indicate that the District will not renew the permit until compliance is achieved. The mutual settlement letter stipulates a penalty amount and provides an opportunity for an office conference. The District issues a release letter after payment is received.

The District settled cases quickly during the review period, with an average time of 79 days from NOV issuance to settlement. Settlement times compare favorably with other districts recently reviewed and help reinforce the deterrent effect of the District's mutual settlement program.

Case files are well organized and contain adequate documentation for further legal action, if necessary. However, we found that some case files for NOVs which resulted in zero penalty did not include a reason why the NOV was dropped (not pursued) or settled for zero penalty amount.⁴

The District's database used to administer the mutual settlement program includes most of the necessary information, except a field is needed that provides for a description why a NOV was dropped. The date of final settlement also needs to be added to the database. In some cases, the District's database does not reflect the actual settlement amount collected. The utility of the District's database would be improved by adding this information.

Table III shows approximate closed NOV count, settlement amounts, penalty ranges, and NOVs settled for zero amount. Figures are based on a report provided by the District of NOVs issued to permitted sources in CYs 2003 and 2004 and on file review.

⁴ 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.

Table III
Approximate Closed NOV Count, Settlement Amounts, # of NOVs Dropped or Settled for Zero Amount, and Penalty Ranges by Source/Rule Category for NOVs Issued in 2003-2004

Source/Rule Category	# of Closed NOVs	Recorded Penalty Amounts	# of NOVs Dropped or Settled for Zero Penalty Amount*	Penalty Range (from actual case settlements)	
				Lower	Upper
Open/Agricultural Burning Rules 4.6; 3.2; 3.5	31	\$7,800	7 (23%)	\$50 (Open Burning)	\$ 1,250 (Open burning)
Permits Required Rule 2.2	9	\$7,710	1	\$250 (Unpermitted Equipment)	\$4,000 (Multiple unpermitted equipment units – repeat violation)
Permit Conditions (Including 3 dust-related NOVs) Rule 2.10	7	\$2,220	1	\$240 (Dust)	\$500 (Dust)
Nuisance (Including 2 dust-related NOVs and 1 odor-related NOV) Rules 4.4; 4.24	3	\$8,250	0	\$250 (Dust causing nuisance)	\$8,000 (Odors causing nuisance)
GDF Rule 6.1	1	\$250	0	Not Applicable	Not Applicable
Total	51	\$26,230	9 (18%)		

*Settled for zero figures do not include one NOV where service was substituted for a monetary penalty.

The District successfully settles most violations, as indicated in Table III. Approximately 18 percent of NOVs were dropped or settled for zero in 2003 and 2004, including about 23 percent of NOVs in the open and agricultural burning category. Even though these percentages are similar to other districts recently reviewed in the Sacramento Valley Air Basin, the District should strive for not having more than 10 percent of NOVs settled for zero. This figure is based upon our experience and is accepted by many districts as an acceptable level to have in a mutual settlement program. Although the data is very limited, it appears that for categories other than open and agricultural burning, the percentage of NOVs that settled for zero is about 10 percent.

The average penalty amount for closed NOVs issued in 2003 and 2004 was \$514. The median penalty was \$250. These figures include the NOVs that were dropped or resulted in zero penalty and are typical of other districts recently reviewed in the Sacramento Valley Air Basin.

In order to keep the District Attorney informed, the District sends them a copy of the mutual settlement letter. The District has not had a criminal case in recent years. The District referred one case to County Counsel during the review period, which was pending resolution at the time of the office review.

Recommendations: The District should document the reason for not pursuing an issued NOV for mutual settlement in the case file. The District's database should include additional fields for stating why a NOV was dropped as well as the date of final settlement and the actual amount collected. The District should strive to reduce the number of NOVs that settle for zero in the open and agricultural 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.

District staff receives complaints in writing, by phone, or in person during office hours. Weekend and evening complaints can be left on voice mail, but there is no on-call District staff. Each individual complaint is entered on a complaint form and logged into a computer database. A sequential complaint number is assigned and recorded. The complaint form is then forwarded to the appropriate staff for review. An assigned inspector reviews the complaint to determine the priority of response.

District staff explained that complaint priority is based on the type of complaint (i.e., odor, particulate, smoke, open burning), the time of occurrence, the location within the District, and the availability of staff. Complaints in progress are investigated expeditiously. District staff is aware of the ARB language line service. The District gives high priority to the investigation of received complaints.

The District received 159 complaints in calendar year 2004. Of these complaints, individual contributions include 39 percent from odor (primarily from waste

treatment facilities), 35 percent from open burning (i.e., illegal burning, smoke), 23 percent from dust, and 3 percent from commercial facilities (i.e., asphalt plant, auto body shop). See Table IV below.

Table IV
Complaints by Category

Type of Complaint	Percentage in 2004
Odor	39
Open Burning	35
Dust	23
Stationary Source	3
Percentage Total	100

ARB reviewed 48 percent of the complaints received in calendar year 2004. Based on an analysis of our sample, ARB staff found that the District responded to 83 percent of all complaints received within 24 hours. About 8 percent of complaints had a response after 24 hours of receipt. For the remaining 9 percent of complaint reports, it was unclear how fast the District responded to the complaint. Approximately 40 percent of the total complaints received by the District are during after-hours or on weekends. These complaints are not investigated until the next business day due to resource constraints and concern over staff safety. On site investigations by either District staff or fire agency personnel were conducted on 88 percent of complaints.

The District's complaint program needs improvement in a few areas. Issues such as after hours, anonymous, and chronic complaints are not addressed in the District's complaint policies and procedures. The District's complaint reports lack some information such as the rules violated, meteorological conditions, and the date and times of follow-up actions. Please refer to Appendix A for details.

Only 36 percent of complaints from known complainants were advised of the outcome of the complaint investigation. Approximately 7 percent of complaint reports had no information of informing or responding to the complaint. The District should inform complainants about the status of the complaint and the results of investigations.

Approximately 93 percent of complaints requiring a follow-up did not have any reference of a follow-up investigation. The District should ensure complaint follow-up investigations are actively tracked and referenced in the initial complaint investigation report.

Recommendations: The District should update their complaint policies and procedures for receiving, logging and investigating complaints and improve their complaint report format. Please refer to Appendix A for details.

The District should inform complainants about the status of their complaints and the results of complaint investigations. The District should examine the feasibility of responding to after-hours and weekend complaints.

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

A.4 Equipment Breakdown Program

If a source reports a legitimate breakdown condition, the District's breakdown regulation, Rule 4.17 – Upset or Breakdown Conditions, 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.

The District's breakdown regulation (Rule 4:17) is less stringent than that adopted by other districts and ARB's model breakdown rule. The District's regulation lacks information on issues such as definition of "equipment breakdown," disposition of short-term breakdown conditions, emergency variance procedures, burden of proof, failure to comply with reporting requirements, and false claiming of a breakdown occurrence. We recommend the District amend its equipment breakdown regulation.

The District has a policy and procedure document (number 5) for the administration of its equipment breakdown program. However, several issues including recurrent and after-hours breakdowns and the allowable duration of breakdowns were not addressed in the District's guidelines.

According to a District breakdown list, the District received 10 breakdown notifications in calendar year 2003 and 8 breakdown notifications in calendar year 2004. District staff indicated sources would notify the District about breakdown incidents by fax or telephone. Sources enter their information in a District breakdown form to ensure essential information is given. After-hours breakdown notifications are recorded on a telephone message recorder and entered in the District log the next day of business. Once entered in the log, District staff reviews the breakdown information and starts their investigation. The District could improve its log by including an indication whether breakdown relief was granted for each incident, the source's proposed actions, and the time and date of any on-site investigations conducted (see Appendix B).

ARB reviewed the 18 stationary source breakdown reports received by the District in calendar years 2003 and 2004. Our review found that breakdown reports were not reviewed by the assistant APCO, do not indicate time the breakdown was discovered or the amount of excess emissions, and lacked a

specific statement of the cause of the breakdown. Excess emissions from breakdowns are also not added to the District's emissions inventory.

On-site District investigations are the preferred method of investigating breakdown reports, since the District cannot always rely on phone interviews to investigate reported breakdowns. ARB staff reviewed 17 completed District breakdown investigation reports from calendar years 2003 and 2004 and found several deficiencies. Five reports (i.e., b126, b135, b136, b143, b145) lacked information on the District's response to the breakdown incidents, and lacked an indication whether breakdown relief was granted. Five reports indicated the District conducted an investigation more than 24 hours after the breakdown call was received (i.e., b126, b128, b137, b138, b144).

Recommendation: The District should amend its breakdown rule to include the issues that are specified in ARB's model breakdown rule and update its breakdown policies. Sources should be required to report the time breakdowns were discovered and the associated excess emissions and the District should add the excess emissions to their emissions inventory. In its breakdown log and investigation reports, the District should indicate whether breakdown relief was granted. See Appendix B for details.

A.5 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 sources. Table V 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 V
Facilities With Periodic Source Testing Requirements

Facility	Unit	Source Testing Frequency
PG & E	Natural Gas Turbine	Annually
Pactiv	Natural Gas Boiler	Annually
Tehama County Landfill	Ground Flare	Annually
Neo California	(16) Natural Gas ICEs	(2) ICEs Annually

Permit conditions require facilities to notify the District prior to source testing and facilities submit source testing protocols prior to testing. The District does not have a database which tracks source tests. The District witnesses most of the source tests.

Neo California's ICE #14 failed their NO_x test on 2/15/05 and the District required them to test all 16 of their ICEs. ICE #14 was shut down and no variance was needed. However, no enforcement action was taken for exceeding the NO_x limit.

Recommendations: The District should have a mechanism to track source tests. The District should issue a NOV when a facility fails a source test.

A.6 Air Facility System Program

U.S. EPA'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 (NOV), 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.

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.

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.

Recommendations: None

A.7 Variance Program

The District's variance program was evaluated in order to determine its consistency with HSC requirements. To accomplish this task, ARB staff reviewed District files and interviewed District staff. The District's variance program was reviewed for the study period of calendar years 2003 and 2004. The review process was limited due to the District not having any variance activity; it was stated during the staff interview that the last variance hearing was in 1998. Therefore, no files, staff reports, hearing tapes, etc. could be obtained for review. The District offered two variance applications for review (one was an emergency variance the other was a short/regular variance). The applications showed the content to be precise, easy to understand, and contained all the suggested elements of ARB's criterion #6 (information needed to process a variance, i.e. source name, location, reasons for seeking variance relief, etc.). An interview was conducted with a staff member and all interview questions were answered thoroughly and adequately. The District has a five member hearing board in place.

According to the information obtained, it appears that when a variance is petitioned for, the District has the information and knowledge available to meet all HSC requirements and ARB's criteria for an effective variance program.

Recommendations: None

A.8 Open and Agricultural Burning Program

Open burning can be a significant source of criteria pollutant emissions, whether from approved open burning, agricultural burning, or wildland 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 handouts, permits, maps, and computer summary reports.

Tehama County's principal fire protection agency is the California Department of Forestry and Fire Prevention (CDF). There is national forest land on the west

and the east sides of the county, with a State game refuge and a corner of Lassen National Park also to the east.

The District has an extensive and comprehensive set of rules for agricultural burning and for open [nonagricultural] burning, last updated in 2001, in response to the adoption of the State Smoke Management Guidelines. The rules are consistent with the Smoke Management Guidelines in Title 17, and with the nonagricultural and agricultural burning rules in the HSC. They include procedures for enforcement, and procedures to prioritize burn authorizations.

The District issues all of the burn permits. Burners also receive fire safety permits from the fire districts. Agricultural burn permits are good for a year, and virtually all permittees renew by mail. Burn requests are phoned into the District, and burns are logged into the computer by the secretary. After business hours and weekend requests are recorded by the District's telephone answering recorder.

Additional burn permits issued by the District include: the Structure Burn permit for firefighter training, and the Land Clearing Burn Permit. The District charges \$50 for a land clearing permit, \$30 for a prescribed burn Smoke Management Plan Review plus \$.50 per acre, and \$30 to \$155 for agricultural burn permits depending on the acreage (0-50 acres, \$30; 51-100 acres, \$55; 101-200 acres, \$105; over 200 acres \$155). The District does not issue residential burn permits, but fire safety burn permits are available through the local fire department.

Most of the agricultural burning conducted in the District (by acreage) is orchard prunings (primarily walnuts, with some olives), and orchard removal of prunes. District records show that 6,803 acres were burned in 2003, and 8,655 acres in 2004. The second largest category is prescribed burning: 3,938 acres were burned in 2003 and 2,698 in 2004. About 1800 acres of rice are grown each year, but none of the fields have been burned for ten years.

The District is a member of the Northeast Air Alliance, a seven-county smoke management regional group which has developed an excellent program that coordinates prescribed burning activities within the basin. Burners prepare a comprehensive smoke management plan for each proposed burn on a multi-page form used by all counties in the Alliance. The District-approved plan serves as a conditional permit to burn. District staff is in communication with the State and federal forest agencies and has the respective agency's burn plans readily available.

The District determines the daily burn decisions by consulting with ARB Meteorology and with the Interagency Fire Forecasting Weather Unit in Redding. The information is made available to the public on the District Burn Day Information Recording phone line by 8:30 am each day.

The District long ago developed an information brochure on burning residential waste, printed in both English and Spanish. All the burning complaints received stem from residential burning. District staff report 90 percent of the citizens supported the ARB's Air Toxic Control Measure (ATCM) ban of burn barrels for residential burning.

Recommendation: None

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.

ARB staff reviewed approximately 25 of 176 project applications for new units and modifications to existing units issued by the District, with a focus on those issued from January 2002 to early-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

At the time of the program review, the District had 151 permitted facilities. The District has 58 permitted gas well operations, 39 gasoline stations, 16 sand and gravel operations, and two dry cleaners. The District had no Title V facilities at the time of the program review. However, the District did do a Title V application for a gas turbine power plant, but construction was never completed due to a fire at the facility. From the year 2002 to 2004, the District received 39, 43, and 62 applications, respectively, and had received 32 in 2005 as of the time of the program review.

The District does not have any backlogged projects and seems to do a good job meeting its timelines. All permits are processed in a timely manner according to

their rules. All the staff except for one has over a decade of experience at the District. The District conducts startup inspections at all new or modified sources before they are issued a permit to operate.

ARB staff found several areas where the District could improve its permit administration program. Each staff person at the District carries a large and increasing workload. At the time of the audit, the District did not have enough space for its files. The District's numbering system and the company and facility names for authorities to construct and associated permits to operate seemed to differ, making the tracking of files difficult.

B.1.1 Staffing

At the time of the program review, the District employed four staff including an Assistant APCO, two specialists, and one office technician. The APCO has little involvement in the day-to-day operation of the District. The District was considering hiring an additional specialist. Most of the staff has a lot of experience at the District. The assistant APCO has been at the District since 1979, one specialist has been there since 1990 and the other one since 2002, and the office technician has been there over ten years.

The assistant APCO provides quality control for permitting by reviewing all projects before they leave the office. The two specialists at the District do much of the permitting work, but the technician does the permit tracking for meeting District timelines. The permitting of gasoline dispensing facilities is specifically handled by one specialist, but all the permitting of other categories are shared between the two specialists. The specialist that handles gasoline dispensing facilities also does the modeling with the Hotspots Analysis and Reporting Program (HARP). He has recently taken training classes for HARP.

The District indicated that its workload has been increasing especially due to additional duties required for newer programs such as Carl Moyer and Enhanced Vapor Recovery, but the staffing level has not increased. This has increased the responsibilities of all the staff at the District. The number of applications received by the District has also been increasing mainly due to increased drilling of gas wells.

Recommendation: As funding resources allow, the District should consider evaluating its staff resources to help with the District's increasing workload.

B.1.2 District Permit files

The District had file drawers of facility files and project binders in an occupied office. District staff indicated that they needed more file storage space. The District indicated they were planning to get more space for storage of its permitting files.

Though the District staff is very familiar with their files, ARB staff found that the District filing system was somewhat disorganized, especially for gas well projects. Some files had authority to construct and permit to operate identification numbers and names that did not correspond. This made it difficult to track a project from the District authority to construct log or binder to the permit in the facility files. For example, in the District authority to construct log, authority to construct number 156-015 is listed as “Victor Ranch 4-8”, but in the District’s facility listing the permit is number “262” and the facility name is “Royal Energy.” The District’s gas well projects are more difficult to track because of frequent changes in ownership. District staff indicated they had recently developed a new numbering system and indicated that they will use the newly developed system for all future projects.

Recommendation: *The District should complete its plans to expand its office space.*

The District should update its permitting numbering and facility filing system.

B.1.3 District Application Review

The District’s office technician does the permit tracking for timelines and billing with a program called “Alpha 5.” With the Alpha 5 program, the office technician can generate lists of permits that are due for 30-day completeness, 180-day ATC issuance, renewals, and inspections. The two specialists do not know how to use all the functions of the Alpha 5 program and the specialists indicated they avoid using it so they don’t interfere with the office technician’s work. District staff meet every Monday morning to ensure work is progressing smoothly to meet assignment deadlines.

When an application is received by the District, staff (office technician) enters the applicant information into a database. A copy of the application is sent to the specialist who does the authority to construct and engineering evaluation. These are then reviewed by the Assistant APCO before the authority to construct is issued. After construction is complete, the District will conduct a startup inspection before issuing the final permit to operate.

The District documents the date that an applicant submits its application, but the District does not document other significant permit tracking dates to verify compliance with established due dates. For example, the District does not document the date applications were deemed incomplete or complete, or the date an authority to construct or a permit to operate was issued. However, the ATCs have the date they were issued on the front page. The District generally issues the final permit after conducting a startup inspection.

Recommendation: The District should consider documenting application milestones achieved to ensure all deadlines are being met. District staff should also be trained on accessing the Alpha 5 database.

B.1.4 Permit Renewals

The District renews all its permits annually. Each source receives a new permit that is valid for a year once their permit fees are paid. During renewal, permit conditions are updated to reflect any amended District rules. The District indicated it is up to the specialist to check permit conditions for enforceability as required by Health and Safety Code section 42301 (e).

Recommendation: None

B.2 Permitting Policies and Procedures

The District has a four-page, policy-related document titled “Tehama County Air Pollution Control District AB 884 List/Criteria Information Required for Applications.” The document summarizes the requirements for authority to construct applications (i.e. name, address, facility description, process description), and information required when a source triggers new source review (i.e. air quality impact analysis, types of fuel burning equipment, and consumption). Within the District’s enforcement policies and procedures manual, the District also has policies on applications and the denial of permit applications.

The District should consider combining its permitting-related policy documents, and include more of its in-house procedures and policies for permitting in the document. For example, the District’s procedures for permit tracking with its Alpha 5 program, the structure of its engineering evaluations, interpretations of rules, and BACT should be addressed in the permitting policies. A complete permitting policy document would be beneficial, especially as staff turnover inevitably occurs over time at the District necessitating the training of new staff.

The District should be commended on the fact that it is their policy to permit emission units that other districts may not place on the permit. This includes engines less than 50 bhp, boilers and heater treaters rated at less than 5 mmbtu/hr, and small glycol dehydrators.

Recommendation: The District should develop its policies and procedures for permit tracking, BACT determinations, and engineering evaluations. The District should also create one document that contains all permitting policies and procedures.

B.3 Best Available Control Technology Determinations (BACT)

California Health and Safety Code section 40918 requires a new or modified source to install BACT if the potential to emit of NOx or ROC is 25 pounds per day or greater. ARB staff found most of the District's projects that required BACT were internal combustion engines located at gas well facilities.

ARB staff found that the District was not always interpreting BACT correctly. District staff stated that they use "Northern California BACT" because they don't have the same ambient air quality issues such as Districts in southern California, and therefore, their sources should not have to meet the same BACT requirements. District staff commented that they interpret their rule to allow that BACT can be the installation of an emissions control technology only. This becomes an issue when a BACT determination is made that relies only on the type of control and does not set a corresponding emissions limit thus guaranteeing proper operation of the control device. A BACT determination is an emissions limit and the control technology used to achieve the limit. The District authority to construct/permit to operate should list the emission limit and the control technique used to meet the limit. BACT should be the same throughout the state. BACT emission trigger levels, as provided in HSC section 40918 through 40120, is what differentiates when BACT is applied, not the emission levels achieved by BACT.

For example, Vintage Petroleum Inc., Sage 33-1 applied to install a 195 BHP natural gas fired rich burn IC engine (Permit #554-104). The evaluation lacked analysis for BACT, but the emissions increase calculated (34.91 lb/day) in the evaluation from this installation triggered BACT for NOx. In the evaluation, the District stated that the IC engine was equipped with a non-selective catalytic converter, but there were no emissions limits in the permit except for a requirement to comply with the District's I.C. Engine rule (640 ppm for rich burn engines). BACT for this engine should have included a NOx emissions limitation of approximately 9 ppm.

ARB staff found that practically all of the gas well IC engine authority to construct files reviewed contained only a requirement that the engines meet the emission limits of the District IC engine rule. The above example (Vintage Petroleum) illustrates potential excess emissions could result from the performance degradation of the abatement unit since the District did not include an appropriate NOx emission limit in their permit to operate. However, ARB staff found one application for the installation of sixteen 3870 BHP IC engines (Neo California, LLC, Application #220) that were permitted at 9 ppm NOx utilizing catalytic converters.

A "top down" BACT determination analysis would assist the District in ensuring the thoroughness of the BACT selection process. In brief, the "top down" process requires that all available control technologies are ranked in descending

order of effectiveness. The most stringent – or “top” – alternative is examined first. That alternative is established as BACT unless the applicant can demonstrate, and the permitting authority in its informed judgment agrees, that technical considerations, or energy, environmental, or economic impacts justify a conclusion that the most stringent technology is not “achievable” in that case. If the most stringent technology is eliminated in this fashion, then the next most stringent alternative is considered, and so on.

Recommendations: The District should specify a control technique and an emission limit for its BACT determinations.

The District should include a BACT discussion in its engineering evaluations. This should include a top down analysis with available control technologies, those technologies that were removed from consideration, the reasons for the determination, and references to clearinghouses used.

B.4 Adequacy of Permit Conditions

District permits to operate 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 first fourteen conditions on all of the District’s permits are nearly the same for all permitted sources. The District’s permits could be more useful for source operators if there was a separation and grouping of general conditions versus specific conditions for monitoring, recordkeeping, and reporting requirements.

The District’s permit conditions generally contain recordkeeping requirements to make conditions enforceable and to help verify continuous compliance. However, ARB staff found specific permits with recordkeeping issues. For example, the permit for Tehama Asphalt lacked a recordkeeping requirement to verify the source’s throughput and operating hours limits. For Premdor Wood Products, condition #26c requires the source submit a report with the amount of glue and resins purchased, but the units are not indicated (i.e. gallons or pounds) as part of the condition. A better recordkeeping condition could be the VOCs in pounds from glues and resins.

The District’s permits are usually “stand alone documents” and have a low occurrence of vague and unenforceable conditions. However, permit #188 for Tehama Asphalt processing has a 24th condition that specifies emission limits for

an internal combustion engine from District Rule 4:34. The source would have to research the District rules to comply with this condition.

ARB staff found several permits with vague conditions. For example, the District's aggregate-related permits often have a condition that says the source shall not process "contaminated" material, but contaminated is not defined in the permit (examples include the 22nd condition for Tehama Asphalt permit #187, the 21st condition for the authority to construct for Jensen Precast). The 19th condition for Corning Collision and Color requires that the exhaust filters in a spray booth be changed when the pressure differential across the manometer differs by 0.3 inches of water from the pressure differential at installation. The pressure at installation is not indicated in the permit. An overall maximum pressure differential could be a more enforceable limit.

Recommendations: The District should consider improving the clarity of its permits by grouping different types of conditions together and using simpler and more understandable language to make permits more useable to source operators.

During permit renewal, the District should take the opportunity to correct those permits discussed above to improve the enforceability of the permit conditions.

B.5 Organization and Adequacy of Permit Evaluations

ARB staff found that the District's engineering evaluations were incomplete. The District's evaluations functioned more as calculation sheets for actual emissions based on activity data received from sources. The District's evaluations have the source address, permit number, contact, and operating schedule followed by a table that gives emissions from emission factors and activity data. As part of the renewal, the District gathers activity data from its sources from the previous year and uses the emission factors for amounts of actual emissions. District engineering evaluations do not include a project proposal and description, an evaluation of applicable rules, a list of proposed conditions, a BACT analysis, public notification requirements, and recommendations. The District should refer to the Permit Handbook on the website maintained by the Bay Area Air Quality Management District (AQMD) or the permitting section of the website maintained by South Coast AQMD to obtain an example template for an engineering evaluation. These can easily be adopted for use by Tehama County.

The District's evaluations show the nearest receptor, but the District does not explicitly verify compliance with HSC section 42301.6 which requires that each applicant verify whether the proposed source or modification is within 1000 feet of the outer boundary of a school site. The District should include data such as maps showing no school is within 1000 feet of the proposed source.

Recommendation: The District should do a complete engineering evaluation for each project. More specifically the District should include a project proposal and description, an evaluation of applicable rules, a list of proposed conditions, BACT analysis, public notice requirements, and recommendations. The District should refer to the Permit Handbook on the website maintained by the Bay Area AQMD (http://www.baaqmd.gov/pmt/handbook/rev02/permit_handbook.htm) or the permitting section of the website maintained by South Coast AQMD (<http://www.aqmd.gov/cpp/Std-eval.html>) for guidance in developing a template for its engineering evaluations.

The District should explicitly verify compliance with HSC section 42301.6 in its evaluations.

B.6 Offsets and Emission Reduction Credits (ERCs)

The District's offset trigger levels for NOx and reactive organic compounds (ROC) are 25 tons per year as required by District Rule 2:3A Section E,2 and HSC section 40918.

At the time of the audit, the District had not had any projects (going back 4 years) that required that offsets be supplied. The District has a community bank, though the amounts are not very large. Most of the ERCs belong to Sierra Pacific Industries. The District indicated that it verifies that the emission reduction credits are real, quantifiable, enforceable, and surplus. The District also uses source test data and fuel use data to verify historical emissions to establish ERCs.

The current total of ERCs in the District (as of 2/4/03) is shown in Table VI:

Table VI

	ROC (Tons/Yr)	NOx (Tons/Yr)	PM10 (Tons/Yr)	Sox (Tons/Yr)	CO (Tons/Yr)
ERCs	323.48	258.22	184.77	249.67	602.93
Community Bank	0.64	0.22	0.50	0.43	0

Recommendations: 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 districts in the air basin. 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. Since the Valley is designated nonattainment of the State ambient air quality standards for ozone and PM10, a uniform set of rules works well for the entire basin.

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.

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 the air pollution control officer personally ensures that it is followed.

ARB staff also conducted a limited review of the District's adopted rules. Appendix C contains a summary of rule improvement, clarity, and inconsistency issues found in the Valley's new source review rules. The District's new source review Rule 2:3A could be improved by implementing the rule improvement recommendations highlighted in Appendix C.

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 graphic arts, wood products coating operations, and metal parts and products coatings operations.

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 4:1 has a permitted opacity level of 2 on the Ringelmann Chart. The District should consider lowering this level to Ringelmann 1.

The District needs to improve its current Rule 4:24 (Fugitive, Indirect, or Non-Traditional Sources) related to fugitive dust emissions. This rule was adopted in 1987 and does not include basic definitions, requirements, and exemptions to guide the District staff in enforcing situations resulting from fugitive dust emissions. Since 23 percent of the complaints received by the District are related to dust, we recommend the District revisit this rule. The District can refer to the current rule (on this subject) in place at El Dorado Air Quality Management Districts for additional guidance.

Recommendation: The District should revisit its new source review rule and address the rule improvement issues raised in Appendix C.

The District should consider adding an additional 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 and make improvements to its current rule (4:24) on fugitive dust emissions.

D. “Hot Spots” Program

The District is doing an excellent job with their “Hot Spots” program, in part because they have chosen to use HARP (HotSpots Analysis and Reporting Program software) for inventory reporting, facility prioritization, and conducting risk assessments. In the past two years, the District has annually updated their inventory, has regularly reprioritized facilities, and has submitted complete toxic emissions data.

The District has completed the evaluation of all Phase I (greater than 25 tons/yr), Phase II (greater than 10 tons/yr), and Phase III (less than 10 tons/yr) facilities. The District has identified gasoline dispensing facilities, dry cleaners and autobody paint shops as industrywide categories. The District has evaluated all of the Industrywide facilities using the CAPCOA Guidelines for Industrywide Facilities. The District has submitted initial emissions data for all of their facilities. The District annually prioritizes facilities using the “emissions x potency” procedure in HARP. The District reprioritizes facilities on an annual basis.

The District only has one facility with a risk assessment over 1 per million. The District collects annual facility information like throughput for gasoline dispensing facilities, and amount of perchloroethylene used for dry cleaners, and (re)prioritizes the facility. The District provides annual updated data, which is more often than what is required by law. The District strives to permit all sources of air pollution and tries to track each facility with annual survey data.

The District reprioritizes facilities annually and has not reinstated any facilities because they get data from all facilities every year, whether or not they are in “Hot Spots”, and no facility has been identified as posing a potentially significant risk. The District’s use of HARP for their emission inventory toxics database makes it possible for the District to provide complete data to ARB. The District states that staff analyzes the quality of the facility data to the best extent possible. The District sends letters notifying facilities of the schedule for reporting emissions. The District does not differentiate non-compliance of “Hot Spots” requirements with their regular permit and annual inventory requirements. Their regular system of permits and data surveys appears to be adequate to meet the needs of the “Hot Spots” program.

The District has an existing annual inventory reporting requirement that allows the District to track facilities in the “Hot Spots” program. There are approximately 160 facilities that provide annual data to the District. The District requires 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).

The District has completed all of the HRAs for facilities in the program. However, the District does not publish an Annual Report. ARB recommends that the District 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). This will help the District communicate how effective their program has dealt with air toxics in the recent past, and how the District has met, and often exceeds, the requirements of the "Hot Spots" program.

Recommendations: 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 providing an Annual "Hot Spots" Report which outlines the accomplishments made by the District in their toxics program. This Report should provide the name and status of each facility in the "Hot Spots" program so that the public can track the progress made by the District in reducing toxic emissions in the District.

E. Emission Inventory Program

The District has done an excellent job of inventorying point sources and submitting all facility data to ARB on an annual basis. The District submitted electronic updates to the ARB's California Emission Inventory Development and Reporting System (CEIDARS2.5) 2004 inventory for merged criteria and toxics pollutants.

The District inventories point sources on an annual basis and all of the facility information has been provided to ARB. The District adequately reported changes for new and closed point sources on an annual basis. The ARB CEIDARS database contains 11 criteria and 28 toxics point source facilities in the District for the 1996 inventory year and 119 criteria and 149 toxics facilities for the 2004 emission inventory year. The District provided a complete facility update as a merged submittal for criteria and toxics data in 2004 in the correct CEIDARS2.5 format.

The District has not provided emission estimates for area sources to ARB. The District has not updated area source categories for which the District has responsibility. The District has not provided ARB with area source methodologies. The most recent area source submittal to ARB was for 1991.

The District has not provided control factors or reviewed growth data for those categories for which they are responsible. Default growth data are routinely developed internally by ARB, or via contracts. 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 does not have a procedure to reconcile area source emissions. ARB has not received emission estimates for any of the 89 District responsibility area source categories for which the District has responsibility. The combination of old and missing area source data makes reconciliation with more current point source data problematic.

The District submits inventory updates in an appropriate electronic CEIDARS2.5 format. The District uses HARP software for all inventory needs. The District maintains its criteria and toxic inventories in an electronic HARP system. This system allows the District to correct inventory data, generate reports and process emissions inventory data for internal use.

The District staff stated that they have a quality assurance (QA) program to check the data submitted to ARB. Based on discussions with District staff, all

emissions data, including area and stationary sources, go through QA/QC checks before are sent to the ARB. However, the District does not have a written QA/QC protocol.

Recommendations: *The District should continue to inventory permitted point sources and providing criteria and toxics data on an annual basis in the CEIDARS2.5 transaction format as a merged submittal.*

The District should update area source categories and provide the information to ARB on a regular schedule, emphasizing the most important area source categories.

The District should improve documentation of their existing QA/QC program.

F. Ambient Air Monitoring Program

The Quality Assurance Section (QAS) of ARB conducted an ambient air system audit of the District. The purpose of the audit was to evaluate the District's compliance with the requirements of the United States Environmental Protection Agency's (U.S. EPA) 40 Code of Federal Regulations (CFR), Part 58, and the U.S. EPA's Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II, August 1998. The system audit consists of an in-depth questionnaire followed by an on-site review and inspection of the District's ambient air monitoring program.

The District has been operating two monitoring sites since 1986. The Red Bluff-Oak site is located at the police department and monitors for ozone. The ozone analyzer is located in a communications room with limited space. There is no routine preventative maintenance program for the sampling system. The manifold for the analyzer should be cleaned on a regular basis. The sample line should also be cleaned or replaced on a regular basis. A dirty manifold or sample line can cause ozone absorption. The "internal zero/span" of the analyzer has not been routinely calibrated. It should be done on a regular basis to assure accurate data.

The Red Bluff-Messer site is a PM10 sampler located at the sewage treatment plant. The filters are collected and sent to the ARB laboratory in Sacramento for analysis. The ARB also submits the data to the U.S. EPA's Air Quality System.

The District office is located at 1750 Walnut St, Red Bluff. There is limited space for storage of documents. The District follows ARB's Standard Operating Procedures (SOPs), but needs to download the latest versions or review them on-line to be sure all procedures are being followed. The District has procedures for many quality assurance practices, but does not have them documented. The QAS recommends the District document the following procedures: plans for response to an emergency episode, procedures for data acquisition through data submittal for both the PM10 sampler and the ozone monitor, criteria for zero and span checks, validation criteria for all data processed, and a corrective action program.

Overall, the District is organized and the sites are well maintained. The District's site operator reviews all data and takes appropriate action to correct any deficiencies or problems. Performance audits were conducted at both air monitoring sites in 2005. The audit results indicated that both instruments were operating within the ARB's control limits. The Annual Quality Assurance Data Analysis Report for the year 2004 recognized the District as producers of "excellent" quality ambient air data.

***Recommendations:** The District should implement a routine preventative maintenance program for the sampling system. The manifold for the analyzer*

should be cleaned on a regular basis. The sample line should also be cleaned or replaced on a regular basis.

The District should download the latest versions of ARB's SOPs or review them on-line to be sure all procedures are being followed.

The District should document the following procedures: plans for response to an emergency episode, procedures for data acquisition through data submittal for both the PM10 sampler and the ozone monitor, criteria for zero and span checks, validation criteria for all data processed, and a corrective action program.

Appendix A:
Complaint Program Recommendation Details
(Refers to Section A.3)

Complaint Program Recommendation Details (Refers to Section A.3)

1. To strengthen and improve the current written guidelines and procedures for the District complaint program, the District should develop and include additional complaint procedures and guidelines of the following areas:
 - a. After-hour complaints,
 - b. Anonymous complainant,
 - c. Recurring/chronic complaint,
 - d. Alleged hostile operator,
 - e. Recalcitrant violator,
 - f. Supervisor complaint review,
 - g. Complaint data record bank,
 - h. After-hour complaints.
 - i. Assigned priority of complaints, and
 - j. Ability to accept complaints in foreign languages.
2. Adequate documentation should be provided for all complaint investigations. Review of the complaint reports in the District's "Complaint Investigation Result" form lacked essential complaint information. To help improve complaint reports, the District should include the following additional information in the report:
 - a. Violations observed and rules or regulations violated,
 - b. Meteorological conditions (including wind-speed, wind-direction, and relative humidity),
 - c. A determination if this is a new, recurring, or chronic complaint,
 - d. Date and time of follow-up actions and results,
 - e. Follow-up reports should referenced in and to the initial/recurring complaint investigation reports,

- f. Disposition of complaint (closed, further surveillance warranted, etc.),
- g. Date and time complainant was notified of complaint disposition, and
- h. Date, time and initial of supervisor who reviewed the complaint.

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

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

1. To complete and strengthen the District's policy and procedure on equipment breakdown, ARB staff recommends the District provide the following additional guidelines:
 - a. Recurrent breakdown criteria (specify maximum number of breakdowns per year and/or quarter that would constitute a recurrent breakdown),
 - b. After-hour breakdowns, and
 - c. Breakdown conditions lasting longer than maximum allowable time under district rules (variance procedures).
2. All 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. Confirmation that breakdown is allowable under rules,
 - b. Time and date breakdown investigated by district,
 - c. Source's proposed action,
 - d. District investigator assigned to the case,
 - e. Date breakdown correction report was filed by source, and
 - f. Indicate if a variance was requested and issued.
3. As part of the stationary source reporting requirements, ARB staff recommends that within one week after a breakdown occurrence has been corrected, the owner or operator shall submit a written report to the air pollution control officer. ARB also recommends the following:
 - a. Have all breakdown reports reviewed and initialed by a District supervisor or manager for thoroughness and appropriate District action,
 - b. Include a field for the actual time the breakdown was discovered in the District standard breakdown report form for source operator to fill out. This could be different from the actual time the breakdown occurred, and
 - c. Include a field for the source operator or the District staff to enter the estimated amount of emissions due to the breakdown. The District should account for the excess emissions from the report to the District emission inventory.

Appendix C:
Review of Tehama County APCD NSR Rule
(Refers to Section C)

Review of Tehama County Air Pollution Control 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 Tehama County Air Pollution Control 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.

Table 1 Air Quality Status of Districts for State and Federal Ambient Air Quality Standards for Ozone		
District – NSR Rule Number	State O₃ attainment status	Federal 8 hr O₃ attainment status
Tehama - Rule 2:3A	Moderate	Attain

Our comments on the rule are categorized according to topic area. Table 2 lists comments on offsets. Table 3 lists comments on definitions, and Table 4 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 Offsets

Tehama Rule 2:3A	<ul style="list-style-type: none">• The section that covers general offset requirements would be clearer if “offsets” were well defined in the rule.• 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 Districts’ rule, 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 F.1.a.1.b. should include a reference to Section E.3 (offset ratios) to determine the amount of offsets required. (CL)
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*Abbreviations used to characterize nature of comments: **(CL)** = Improvement to clarity and/or completeness

Table 3 – Comments on Definitions

Tehama Rule 2:3A	<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 District needs to add the word “Pollutant” after the words “Secondary Air” to the definition of “Precursor.” (CL)• The rule should include a definition of “halogenated hydrocarbons” (CL)
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*Abbreviations used to characterize nature of comments: **(CL)** = Improvement to clarity and/or completeness

Table 4 – Other Comments

Tehama Rule 2:3A	<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)• Sections E.8 a. and b. should be joined into a single paragraph; the paragraphs currently breaks in mid-sentence. (CL)
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*Abbreviations used to characterize nature of comments: **(IS)** = Inconsistent with State law, **(CL)** = Improvement to clarity and/or completeness