California Environmental Protection Agency
AIR RESOURCES BOARD

Glenn 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. In conducting the program evaluation, Glenn County Air Pollution Control 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.

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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 Glenn County Air Pollution Control District's (District) air quality program. This is the only comprehensive review ever done by ARB staff of the District. As part of this review, ARB staff evaluated the District's compliance, permitting, rule development, 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 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 Glenn County, encompassing approximately 1,314 square miles. Glenn County is located in the Sacramento Valley Air Basin. Glenn County's population has grown in recent years, increasing from 24,850 in 1990 to approximately 28,163 in 2005. In 1990, approximately 725,000 vehicle-miles were traveled each day within the District boundaries. In 2005, an estimated 789,000 vehicle-miles were driven daily.[1]

The District maintains its office in Willows and is administered by the Glenn County Agricultural Department. As of May 2005, the District employs a total of six air pollution staff including the Air Pollution Control Officer (who is also the Agricultural Commissioner), an administrative office assistant, an environmental

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

program manager, a part-time inspector that works two-thirds time, and two part-time secretaries. The District is also the Certified Unified Program Agency (CUPA) for Glenn County. As such, District staff has a variety of responsibilities (e.g. responsibility for hazardous materials and underground storage tanks) in addition to implementing the air pollution control program. The District employs an additional staff person for administering the CUPA program. As of May 2005, the District has 250 permitted facilities. Agricultural burning (rice stubble, other field crop stubble, orchard pruning's) and open 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.[2]

Attainment Status

Ozone

Glenn County was designated as an unclassified/attainment area for the former federal 1-hour ozone standard during the review period. Glenn County has not recorded any days exceeding the federal 1-hour ozone standard. 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. Glenn County is designated as unclassified/attainment for the federal 8-hour ozone standard, with no recorded days exceeding the federal 8-hour standard from 2005 through June 2007.

Glenn County is a transitional nonattainment area for the State ozone standards. State air quality standards are more health protective than the federal standards.[3] Glenn County did not have any recorded days that exceeded the State 1-hour ozone standard from 2005 through June 2007. One day exceeded the State 8-hour ozone standard in 2005, no days exceeded the standard in 2006, and three days exceeded the standard in the first six months of 2007.

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.

[2] Subsequent to the review, the District added 0.9 air pollution inspector positions and 0.4 CUPA inspector positions to their staff.
[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 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. Glenn County is designated as a federal nonclassified/attainment area for both PM10 and PM2.5. However, Glenn County is designated as a nonattainment area for 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. A common theme with the administration of its compliance programs is the need to institute policies and procedures, and improve documentation of District actions in the form of logs and written reports. Specifically, better documentation and tracking is needed to adequately administer the inspection, air quality complaint, and equipment breakdown reporting programs. The District's documentation practices made it difficult for ARB staff to ensure that inspection results were followed through, all air quality complaints were addressed, and all equipment breakdown reports were evaluated.

With respect to its source inspection program, the District is currently unable to inspect all of its permitted sources annually, and when it does inspect, does not in some instances, take appropriate enforcement action. District staff said that the District attempts to inspect sources with emissions over five tons per year, gasoline dispensing facilities, and natural gas wells annually. Small sources are to be inspected every three years. However, ARB staff did not find any documentation for inspections at some large sources (characterized by the District as having emissions over 25 tons per year) for calendar years 2003 or 2004. The District may wish to evaluate its existing resources to address the inspection frequency issue, and participate in ARB inspection training courses in order to ensure air quality violations are cited and followed through.

Once a violation occurs and is documented by the District, it is a common practice for the District to send a source one document with a penalty settlement amount and the notice of violation (NOV). This practice of combining the penalty settlement with the NOV is an unorthodox process. The common procedure followed by most districts is to issue an NOV first, allow the source to come into compliance, and then issue a penalty settlement offer letter. Separation of the NOV from the mutual settlement offer sends the message to the source that it must come into compliance before any settlement agreement is reached.

When a violation occurs and the source cannot come into compliance immediately, then it must seek protection under the District's variance program. There has been no variance activity in the District for the past few years. During interviews, the District Hearing Board Clerk demonstrated a basic knowledge of

the variance process and added that a variance petition had not been filed during the review period. Further, at the time of the interview, ARB staff did not find a copy of a variance application that would be available to a petitioner. District staff should make certain they have the necessary filing documents, and understand the process to be ready to offer sound advice to a variance petitioner.

Most of the agricultural burning conducted in the District (by acreage) is rice stubble, followed by other field crop stubble, and orchard pruning's. The District adequately enforces local and State requirements related to open and agricultural burning. However, the District should make its agricultural burning rule consistent with State law by removing the rule exemption for burnings conducted at elevations above 6,000 feet. The District has agreed to remove the exemption next time they revisit the rule.

With respect to its permitting program, the District processes permit applications on time and had no backlogged projects at the time of the review. However, ARB staff found that the District lacked some major aspects necessary for administrating a thorough permitting program. Similar to its compliance program, the District does not have any policies and procedures in place that would provide consistency in permit tracking and permit issuance activities. For each application, the District should document that the permit processing deadlines have been met. Many districts use a permit tracking sheet for each application folder in order to ensure timelines are met and documentation is occurring.

Inconsistently, the District will use an "authority to construct evaluation" as the actual authority to construct. This is an uncommon practice that tends to confuse a project's evaluation with an authorization document. The District should issue an Authorization-to-Construct for those projects authorized to begin construction.

Staff found a few permits that were issued without first conducting (or documenting) an engineering analysis. Overall, better documentation is needed, especially for its engineering evaluations and BACT analysis.

As part of the BACT determination, the District does not always select the best available control technology. This usually results in missed opportunity to reduce excess emissions. The District should conduct a "top down" analysis, justifying and documenting the selection of the most stringent technology available. Further, ARB staff found that the District's BACT analysis does not specify an emission limit associated with the control device selected. This emission limit should be specified in the authority to construct and permit to operate in order to ensure that the control device is operating as assumed in the analysis.

With regard to its prohibitory rules, 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. In addition to the rules already committed to in the schedule, the District should quickly submit the

ARB suggested control measure for architectural coatings to their Board for adoption. ARB staff also suggests some improvements related to existing rules. For example, the District's Breakdown Rule should be modified to make it consistent with ARB's Model Breakdown Rule.

For its AB 2588 Air Toxics "Hot Spots" program, the District collects annual emissions data, but most of this information is not sent to ARB. The District has done well inventorying point sources for its emission inventory program, but all the facility data has not been sent to ARB.

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 Glenn County, 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 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 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

During calendar years (CY) 2003 and 2004, the District employed a part-time air pollution inspector who worked for eight months of each year. The environmental program manager conducted air pollution inspections part-time as well as CUPA inspections. The District also employed a CUPA manager who was involved in some air pollution inspections during the review period. The District has approximately 250 permitted stationary sources, including 142 natural gas wells, 22 retail gasoline dispensing facilities (GDFs), and 1 Title V source (Johns Manville). The District has an extensive workload for its relatively small inspection staff.[4]

Recommendation: The District should augment staff resources to fully meet its source inspection program requirements.

[4] Subsequent to the review, the District added 0.9 air pollution inspector positions and 0.4 CUPA inspector positions to their staff.

A.1.2 Inspection Policies and Procedures

The District does not have a written policy for the administration of its source inspection program. The District would benefit from adopting written guidelines for its source inspection program that include a discussion of issues such as inspection frequency, thoroughness of inspections, and the documentation of violations discovered during the inspection process[5].

Recommendation: The District should adopt written guidelines for the administration of its source inspection program.

A.1.3 Inspection Frequency

The District's verbal policy is to inspect small sources (emissions less than 5 tons per year) every three years. The District attempts to inspect all other sources and gas wells every year. In order to determine actual inspection frequency, ARB staff relied upon file review of 48 District facility files, representing all source categories. ARB staff found 28 inspection reports from CYs 2003 and 2004 in the 48 facility files. Staff also reviewed a copy of a District report, which indicated the most recent inspection date for permitted facilities. In some cases, ARB staff could not locate inspection reports in office files, although the District's report indicated the inspections were conducted.

File review indicates that the District was not able to meet all its inspection goals in CYs 2003-2004. For example, Valley Rock Products (two sites PTO #8 and PTO #25) and Baldwin Contracting Company PTO #10, categorized by the District as sources with emissions over 25 tons per year, did not have any inspection reports from 2003 or 2004 in office files. As other examples, Orland Sand and Gravel PTO #04 and Artois Feed PTO #12, (both with emissions of 10 tons per year or more) did not have inspection reports for either 2003 or 2004 in the source files. To verify the actual compliance status of permitted facilities, ARB staff advocates annual inspections for all permitted sources.

The District's only Title V source was inspected during 2004, according to the last inspection date on the District's report of inspections. ARB staff could not locate the inspection report in office files. File review indicates that most GDFs were inspected in 2004. However, as discussed in section A.1.4 below, an examination of sample GDF inspection reports shows that many air pollution GDF "inspections" are too brief to be considered annual compliance inspections.

Recommendations: The District should strive for annual inspections at all permitted sources.

[5] As a result of the review, the District adopted an inspection policies and procedures document for general inspections and for natural gas well inspections.

A.1.4 Inspection Documentation

ARB staff reviewed 28 inspection reports from CYs 2003-04 for adequate documentation of results and enforcement actions taken. Some inspection reports were complete, but others were very brief and did not document the compliance status of all permitted equipment. For example, many GDF reports had no nozzle inspection record or phase I inspection information. The GDF air pollution inspection reports often consisted of a brief form with the words "air pollution" and "yes" (for in compliance) circled. As air quality files contain CUPA information, some air quality compliance information was difficult to locate. Some individual inspection reports included CUPA issues as well as air pollution issues.

The District has a general inspection form and a natural gas well inspection form, but does not have a form for air quality compliance GDF inspections. Half of the inspection form for gas wells is for the air district inspection and the second half of the form is for the CUPA inspection. The general inspection form is a half-page and contains spaces to fill in general items including the inspection date, facility name, permit number, inspector name, compliance status and comments. However, the general inspection form is not suitable for GDF inspections because it does not provide areas for verifying compliance with the phase I system (i.e. underground tank gaskets, and caps certified and not defective and fill tube clearance under 6"), the phase II system Title 17 defects (i.e. nozzles, hoses, face plates, bellows, etc.) and the posting of adequate instruction signs and the correct complaint phone numbers on dispensers. The District should use a GDF inspection form similar to those used by most California air districts.

We were generally unable to determine from inspection reports (due to lack of detail) if the District issues NOVs for all emission-related violations observed during inspections. However, the District's enforcement action log indicates that the District issued only eight NOVs to stationary sources for air pollution issues in CYs 2003 and 2004 (not open/agricultural burning related). The log shows that the District did not issue any notices to comply (NTC) for air pollution issues. Considering that the District has approximately 250 permitted sources operating in its jurisdiction, we believe that these eight NOVs are probably not indicative of the actual number of emission-related violations that occurred within District boundaries during CYs 2003-2004. As evidence, ARB staff observed violations during the joint inspections (noted in Section 1.5) that did not result in NOV or NTC issuance.

Recommendations: The District should consistently document inspection results with thorough inspection reports.[6]

[6] Subsequent to the review (in March 2007), the District developed new policy guidelines for conducting inspections.

A.1.5 Compliance Results of ARB and District Staff Source Inspections

Joint inspections were conducted at 23 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. Because of the District's small size and the few sources in each category, it is difficult to obtain meaningful compliance statistics from the field information. Therefore, we have not attempted to generate compliance rates on limited data.

The District did not issue any NOVs or NTCs as a result of the joint inspections. However, an aircraft coating facility was found to be in violation with its permit (condition #15) since it had no usage records. A gasoline station was found to have no instructions or complaint phone number posted on its dispensers and it did not have its permit on site.

ARB staff observed that the District inspectors are knowledgeable about the facilities they regulate and their major compliance issues. However, there are few enforceable permit conditions in the District's permits due to nonexistent or minimal regulations in place, so the District inspectors do not have many means to measure compliance. For example, at the District's rice driers there were no gas usage or throughput limits to enforce. The inspector can generally just determine compliance with the visible emissions limit (40 percent). At gas wells that were inspected, which are a majority of the facilities in the District, the District can look for unpermitted sources or equipment, but there are no throughput limits to enforce and fugitive leaks are not regulated.

The District indicated that the permitting of rice driers and fuel burning equipment at gas wells is based on the maximum allowable emissions (potential to emit). The limits for rice driers were established many years ago, so the facility would be able to stay below any cap in usage, thus avoiding enforcement action. However, for sources permitted after 3/2/93, the District should include daily emission limits as required by Rule 51. For other sources, the District should include emission rates or maximum allowable throughput limits based on facility's permit application data.

The District inspects gasoline stations when it witnesses annual gasoline station testing by contractors, to maximize available inspector resources. However, the District may be missing the opportunity to conduct unannounced inspections at gasoline stations under normal operation since the stations are aware of the test dates and testing contractors may replace defective, non-compliant equipment before the District's inspection. Testing may normally be conducted on an announced basis; however, inspections at GDFs should be unannounced. The District does not inspect the Phase I system for the fill tube clearance (must be

less than 6”). The District believed that inspecting the fill tube clearance once after installation was sufficient; however, the fill tube clearance could change as the tubes may be removed and replaced after installation.

The District does not inspect for more than 100 ml of liquid in the vapor path of the hoses, which is a newer Title 17 requirement, or enforce the posting of instructions and complaint phone numbers. The District indicated that for testing they require the contractor to drain hoses and perform Test Procedure 201.6c if more than 25 ml is measured. TP-201.6c is a test procedure to determine compliance with the liquid removal rate. The full procedure will typically be used by a testing contractor.

However, based on joint inspections conducted at GDFs, it was our experience that the District’s inspection forms did not have any indication that the District was performing an inspection procedure to check for more than 100 ml of liquid in the vapor path of the hose as part of compliance inspections. Sections 6.1 through 6.4 of TP-201.6c provide a simple procedure which can be used by the District inspector to check if the liquid in the vapor path of the hoses exceeds 100 ml.

The use of a gasoline station inspection form would help make sure that all the equipment at all gasoline stations is consistently inspected and help document equipment defects found at each inspection. The District could use copies of GDF inspection forms used by other air districts to use as a template to create its own form.

Table I summarizes the joint inspection results.

Table I
Joint Inspection Results Summary

Facility Name	Equipment Description	Compliance Status and Inspection Observations	District Action
Major Sources			
Johns-Manville	Fiber glass insulation manufacturing: Controls: baghouses for storage silos, HEAF filter and Regenerative Thermal Oxidizer (RTO)	In compliance	None
Baldwin Contracting Co	Asphalt plant & Aggregate plant: Nat gas fired drum mixer & baghouse, heater, conveyors, crushers, screens	In compliance	None
Rice Driers			
Great Western Growers	2 rice drier plants (one modern, one built in 1920's) each with natural gas burners. Modern plant has a baghouse for control old plant has a cyclone	Minor issue: several holes in duct leading to baghouse at elbow (largest the size of a quarter). In compliance	Source notified that holes were in ducting
Glenn Growers	2 rice drier plants (one modern, one built in 1940's) each with natural gas burners. Modern plant has a baghouse for control, old one has a cyclone	In compliance	None
Gas Wells			
14 facilities inspected	Typical equipment: ICEs, heaters, produced water tanks, wells	In compliance	None
Other Sources			
Land-O-Lakes	Cheese production: ICE (700 hp), 2 boilers	In compliance	None
Nor Cal Aircraft	Aircraft refinishing: spray booth hanger	Violation: No usage records – permit condition #15	None
Cal Dry	Crop Waste drying piles (tomatoes & olives) for cattle feed	In compliance	None
Borges of California	2 methyl bromide fumigation chambers	In compliance	None
Willows Shell	Gas station: phase I & II vapor recovery	Violation: No instructions or complaint phone number posted, No permit on site	None

Recommendations: The District should issue NOVs for all emission-related violations and NTCs for minor procedural violations. The District should develop and use an inspection form for inspections of GDFs, to facilitate the documentation process. The District should include on the form the compliance status of the fill tube clearance, caps and gaskets, components from ARB's vapor recovery equipment defects list (i.e. hoses, nozzles, no more than 100 ml liquid in the vapor path, etc.) and the posting of instructions and current complaint phone numbers.

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 notices of violation

issued to non-compliant sources and any civil actions that may follow unsuccessful mutual settlement attempts. The goal of the legal action program is to ensure that a facility returns to compliance before settlement, and that notices of violation are settled for penalties that are commensurate with the magnitude of the violation.

A.2.1 Policies and Procedures

The District has one brief procedure document for creating NOV/Mutual Settlement Offer letters, preparing case files, and logging settlements. However, the District does not have complete written policies for the issuance of NOVs and the administration of its mutual settlement program (e.g., to handle issues such as multi-day violations and transfer of cases to County Counsel/District Attorney).[7] The District has a civil penalty schedule that utilizes the eight factors 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, action taken by the defendant to mitigate the violation, and the financial burden to the defendant.

Recommendation: The District should adopt a complete policy document(s) to provide for the issuance of NOVs and the day-to-day administration of the mutual settlement program.

A.2.2 NOV/Mutual Settlement Offer

The District typically combines the mutual settlement offer with the NOV as a single document, in accordance with the District's NOV procedures. In practice, the combined document may be labeled as a "Notice of Violation," a "Mutual Settlement Offer," or as a "Notice of Violation/Mutual Settlement Offer." However, the document generally functions as both an NOV and mutual settlement letter. The NOV/mutual settlement letter is issued for all violations that the District desires to settle with a penalty amount. The settlement letter sets a dollar amount and provides an opportunity for the responsible party to request a conference.

In our opinion, the District would benefit by separating the NOV from the mutual settlement letter, especially for stationary source violations. For example, some mutual settlement letters do not stipulate that the violator shows proof of return to compliance before settlement (e.g., Johns Manville NOV/Mutual Settlement Offer, dated September 24, 2003). ARB staff recommends that mutual

[7] As a result of the review, the District developed a new legal action program policy document that provides for the issuance of NOVs and the administration of the mutual settlement program. This new policy separates NOV issuance from the mutual settlement process and specifies that the violator must return to compliance before a settlement can be considered.

settlement offers require compliance before settlement (i.e., the payment of the fine alone does not constitute settlement). Separation of the NOV from the mutual settlement offer would allow time (after NOV issuance) for the facility to return to compliance before the District offers a settlement amount. In our experience, we have found that almost every district reviewed to date separates the NOV from the mutual settlement offer.

In one case, perhaps because the NOV was combined with the mutual settlement offer, the District allowed a facility to operate in violation (without a variance) for months before issuing an NOV. The combined NOV/Mutual Settlement Offer (USA Petroleum, July 12, 2004) states that the District allowed the gasoline station to continue dispensing fuel until the appropriate repairs could be made. Attempts to repair and successfully pass the air to liquid volume ratio tests failed on March 8, 2004, April 7, 2004, and May 7, 2004. The NOV was issued after the source returned to compliance for the time it had been in violation.[8]

In contrast with this case, the normal procedure in most districts is for the district to formally document emission-related violations by issuing an NOV soon after a violation is observed. This practice promotes timely return to compliance and deters future noncompliance. The penalty settlement offer letter is issued later, after compliance has been demonstrated.

Recommendations: The District should consider separating the NOV from the mutual settlement offer, especially for stationary source violations. Mutual settlement offers should stipulate that compliance be achieved before settlement (i.e., the payment of the fine alone does not constitute settlement). The District should formally document emission-related violations by issuing an NOV soon after a violation is discovered to promote timely return to compliance and to deter future noncompliance.

A.2.3 Enforcement Action Log and NOV Documentation

The District's enforcement action log includes enforcement actions for both CUPA and air pollution violations. It is our finding that the log has most of the fields needed to track NOVs from issuance to final disposition. However, NOVs are generally not numbered. Assigning a unique number to each NOV and including the NOV number in the log would facilitate tracking. In addition, while the log has a field for the violation incident date, it does not include a field for the date of NOV issuance. The log also does not have a field for the rule violated. The utility of the District's enforcement action log would be improved by adding fields for an NOV number, the date of NOV issuance, and the rule violated.

[8] Subsequent to the review, the District provided an explanation of why the facility was allowed to continue dispensing gasoline in this case. We were not concerned that the station was allowed to dispense fuel until appropriate repairs could be made. The District's description of extenuating circumstances is well taken.

The enforcement action log shows that the District issued 30 NOVs for air pollution issues in CYs 2003 and 2004. The log indicates that eight of these NOVs were issued to stationary sources (not open/agricultural burning related). Most air pollution control entries were complete, but the dispositions of three stationary source NOVs from CYs 2003 and 2004 were not recorded in the log. Two of these NOVs were issued to Johns Manville for bypass incidents dated February 2004 and July 2004. File review showed that the other NOV pertained to a multi-district case, which was still pending at the time of the office review in June 2005.

Case file documentation is generally adequate for open and agricultural burning NOVs. However, staff found that documentation for some of the eight stationary source NOVs issued in CYs 2003-2004 was sparse or unavailable. For example, ARB staff could not locate the NOVs/Mutual Settlement Offers for the two NOVs issued in 2004 to Johns Manville (as noted in log). It appears (from the lack of documentation) that the 2004 violations at Johns Manville resulted in no further action.

Subsequent to the review, the District indicated that it now tracks all NOVs with unique numbers and also tracks the disposition of NOVs. The District also stated that it may reach a finding that "no further action is required" with respect to an issued NOV. It is our recommendation that compliance files and associated tracking logs should document the circumstances related to "no further action." This is necessary to understand the final disposition of the NOVs. For example, an NOV may have been issued incorrectly, the facility may have shut down, or the District Attorney may have chosen not to pursue a case referred to them.

Recommendations: For tracking purposes, the District should assign a unique number to each NOV. The District should improve the utility of its enforcement action log by adding fields for an NOV number, the date of NOV issuance, and the rule violated. The District should keep its NOV log updated with the disposition of all NOVs. The District should keep copies of all NOVs with supporting documentation in office files and, if applicable, include the reason why an NOV resulted in no further action.

A.2.4 Case Disposition

The District uses its mutual settlement program to settle air pollution control violations. The majority of NOVs were issued for prohibited open or agricultural burning. For some burn cases, the District offers the option of paying the penalty, referred to as a "donation," to the local fire department. As the District works closely with the fire departments, this option works well for the District. ARB staff determined from file review that eight of the burn NOVs that settled for a monetary amount originated as the result of a complaint investigation by the District.

Table II shows a count of settled air pollution control NOVs, sorted by source category. Table II also indicates penalty ranges, and the number of NOVs settled for zero penalty.

Table II
Closed NOV Count, Settlement Amounts, Ranges and NOVs Settled for Zero Amount for NOVs Issued in 2003-2004*

Source Category	Number of Closed NOVs	Settlements	# of NOVs Settled for Zero Penalty (No Further Action)	Penalty Range (from actual case settlements)	
				Low	High
Open/Agricultural Burning	22	$5,955	2	$75 (Prohibited Burning)	$1500 (Open Burn)
Gasoline Dispensing Facilities (3 NOVs issued to same facility)	3	$7000	0	$2000 (failed tests)	$5000 (multiple failed tests)
Gas Well – Unpermitted Equipment	1	$0	1	Not Applicable	Not Applicable
Title V Source -Upset Conditions	1	$3,000	0	Not Applicable	Not Applicable
Total	27	$15,955	3		

*Table II does not include the three NOVs from CYs 2003 and 2004 that did not have dispositions recorded in the NOV log by the time of the office review in June 2005.

It is our finding that penalty amounts are generally commensurate with the magnitude of the violation. In CYs 2003 and 2004, the average penalty was $591; the median penalty was $250. These figures include the NOVs that resulted in zero penalty and are typical of other districts recently reviewed in the Sacramento Valley Air Basin. Approximately 11 percent of NOVs resulted in zero penalty in 2003 and 2004.

Recommendation: *None*

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 explained that complaint priority is based on the hazard to human health. The District does not investigate complaints after regular business hours or on weekends. However, District staff monitor complaint line messages on weekends and holidays. If the District receives a complaint associated with a hazardous situation (i.e., accidental release of anhydrous ammonia), the APCO is notified. According to District staff, complainants can contact the District by letter, in person, or by telephone. The complaint line is staffed during regular business hours and District staff is aware of the ARB language line service. During the course of a complaint investigation, District inspectors can issue warnings (to citizens) but are not authorized to issue NOVs to stationary sources.

The District's complaint program needs improvement in several areas. The District has no written complaint procedures or guidelines in place to receive, process, and investigate complaints[9]. There is no mechanism in place to ensure consistent handling and tracking of complaints. The District has not maintained a complaint log since July 1998. Hence, ARB staff could not determine the overall number of complaints received in 2003 and 2004 or their ultimate disposition.

The District indicated that many complainants wish to remain anonymous. Citizens have the right to remain anonymous. On the complaint handling form, the District should put anonymous if requested by the complainant. The District was concerned about many odor and fume complaints related to confined animal feed operations. According to HSC section 41705, districts are not allowed to enforce nuisance complaints against agricultural facilities. However, the District should verify whether received complaints are from agricultural or nonagricultural sources and whether they are from composting operations. Complaint handling forms should clearly state the District's findings with respect to the odor source and also what other agency the complaint was referred to.

Complaint documents are filed at different locations (i.e., inside desk drawers of inspectors, filing cabinets). ARB staff did find 43 complaint forms related to the 2003 and 2004 time frame. Thirty five of the 43 complaint forms were related to illegal burn activity. There were four dust related complaints. The balance of the complaint activity related to odors, fumes, and fire safety. It was hard to evaluate the quality of District actions because essential information was missing from the complaint investigation forms in most cases. For example, District records did not indicate whether complainants were informed of the results of the complaint investigation. ARB staff did find eight examples where complaint investigations resulted in a monetary settlement. All these examples were related to complaints generated from illegal burning situations. Clearly, this program area is in need of improvement. Refer to Appendix A for detailed recommendations concerning

[9] Subsequent to the review (in March 2007), the District developed a new complaint program policy.

complaint procedures, maintenance of a complaint log, and guidance on investigating and documenting complaints.

Recommendations: The District should develop complaint procedures and guidelines for receiving, logging, and investigating complaints. Complaint investigations should be well documented and complainants should be informed of the results of the investigation. Please refer to Appendix A for details.

A.4 Breakdown Program

If a source reports a legitimate breakdown condition, the District's breakdown regulation, Section 95.2 Malfunction of Equipment, 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 the current District rule as well as receipt, investigation, and resolution of equipment breakdowns. It is our finding that the District's breakdown program needs major improvement in all areas.

The District's equipment breakdown regulation (95.2) is less stringent than that adopted by other air 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", equipment 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. We recommend the District amend its equipment breakdown regulation.

The District should institute written guidelines and procedures for receiving and processing reported breakdowns. The District maintains an equipment breakdown log for receiving breakdown incidents transmitted over the telephone. Typical data entered is date and time breakdown is called in, equipment involved, name of the facility, and person calling. The usefulness of the breakdown log can be enhanced by including more information such as breakdown number, date and time of occurrence, pollutant involved, time of correction, and person assigned to the case.

The District's log showed 53 breakdown entries for calendar years 2003 and 2004. Fifty entries related to one source. It is our finding that the source operators do not follow up the initial verbal report by a written breakdown report. A written report providing complete details about a breakdown is standard procedure in almost every air district we have reviewed to date. The current District Rule 95.2 requires a full report from the source upon the request of the Control Officer. Sources should be asked to submit a full written report within 10 working days of the occurrence of the breakdown incident.

ARB staff was informed that the District analyzes reported breakdowns by conducting phone interview with the source operator. Even though District staff may be familiar with the equipment and processes involved, sole reliance should not be placed on phone interviews as a means of analyzing reported breakdowns. On-site investigations should be the preferred method of investigating breakdown reports.

ARB staff could not find written reports on the District's analysis of reported breakdowns. In the absence of a written analysis, it is not possible to determine whether breakdown relief was correctly granted to the source operators in every instance. Our concern stems from the fact that 50 of the 53 reported breakdowns (for CY 2002 and 2003) originated from a single source. All reported breakdowns were considered allowable. None of the reported breakdowns resulted in a notice of violation or a request for a variance.

The District does not incorporate excess emissions arising from breakdowns in its emission inventory. ARB recommends the District should develop a systematic approach to determining and then adding emissions resulting from breakdowns to the emissions inventory.

Refer to Appendix B for detailed information which can be used by the District as a template for improving its breakdown program. We have included ARB's Model Breakdown Rule, and examples of an Upset/Breakdown log, a written breakdown report transmitted by the source, and District analysis of a reported breakdown.

Recommendation: The District should review the information provided in Appendix B to improve its program. The District needs to create written procedures and guidelines for receiving and analyzing breakdowns. Current District Rule 95.2 Malfunction of Equipment should be amended. Sources should be required to provide a written breakdown report on every reported instance. The District should analyze every reported breakdown and provide clear reasoning in a written format for either denying a breakdown or providing relief.

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 has one facility where source testing is conducted periodically. Johns Manville manufactures fiberglass insulation products and is the District's only major source. Johns Manville's District Permit to Operate Number 05-1000 does not include specific emission limits or source testing requirements. Source testing of this facility is required by their Prevention of Significant Deterioration (PSD) Permit which also contains specific emission limits for this facility. The PSD Permit is enforceable by U.S. EPA but not by the District. Source testing of Line 133 (Curing Oven Exhaust Stack) was conducted in 2001 and 2002. Stack emissions were determined to be in compliance with the PSD particulate limits. Source testing protocols were not submitted to the District prior to testing. The District does not have the expertise to review the protocols or observe the tests.

Since 2002, Line 133 was retrofitted with a Regenerative Thermal Oxidizer (RTO) but had not been source tested at the time of the program evaluation[10]. A source testing protocol was prepared by the facility's source testing contractor which was reviewed by ARB.

Recommendations: The District's Permit to Operate for Johns Manville should incorporate the PSD emission limits and specify source testing requirements for source testing frequency and submittal of protocols and reports.

The District should develop the expertise to review source testing protocols and observe the tests or, as an alternative, obtain help from ARB.

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 June 23, 2003. The AFS Business Rules contain a description of the minimum data reporting requirements.

[10] Subsequent to the review, the RTO was successfully source tested in 2007.

Based on our review, it is our finding that the District is failing to meet 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.

A.6.1 Full Compliance Evaluations Program

The District has had a Title V Permit application, Engineering Analysis, and a draft Title V Permit for its only Title V source since 2001 and 2002. The District has failed to submit the Title V Permit to U.S. EPA for review.

There are numerous letters alluding to source tests being performed and only a few source test reports for the only Title V source of the District. The District has not entered any of these source tests into AFS as required. Source tests are required to be updated into AFS database within 90 days after their completion.

The District has not been reporting any inspections to AFS since 2004 for the Johns Manville facility, even though they said they perform annual inspections of this facility. ARB staff and District staff performed an inspection of the Johns Manville facility on August 20, 2005, and this inspection has not been updated into AFS database.

The filing system of the District is inadequate to support documentation of source tests and inspections. No inspection reports could be found. Not all source tests could be found or only a few cover pages were found in the files.

A.6.2 High Priority Violations Program

The District has issued NOVs to Johns Manville on at least six occasions since the calendar year 2000. None were identified as HPVs. Descriptions of the violations along with mutual settlement offers did not identify the actual violation. Discussions with staff indicate that the NOVs should have been HPVs and updated into AFS.

The filing system of the District is inadequate to support documentation of Notice of Violations. Very few written Notice of Violation documents were found for the NOVs issued to Johns Manville. Only a couple of Mutual Settle Letters or notices of Mutual Settlement Conference were found in the District files.

The District is required to compile and submit monthly Notice of Violation (NOV) logs to the Air Resources Board. In 2002 and 2003, the District maintained they did not issue any NOVs. During this time frame, the District was informed in

writing and verbally that all NOVs were to be reported on the monthly NOV log. All violations included illegal burning and gasoline station vapor recovery violations. In 2004, the District supplied ARB with their AP/UST Enforcement Log for 2003. The District was again informed that all the violations listed in this Log were to be reported to ARB on a monthly basis.

After the review, the District commented that sending Underground Storage Tank (UST) violations to ARB was unnecessary. However, the U.S. EPA Region 9 program manager confirmed that UST violations must be evaluated to determine if they meet the definition of a HPV. ARB staff found that all the District's entries in the AP/UST Enforcement Log should have been reported to ARB as a requirement of the HPV Program.

Johns Manville has frequent process fires. The District has a fee schedule for these process fires based on the number per year. These violations are not reported on the NOV Log to ARB. Some of the process fires meet the requirement of being HPVs. Subsequent to the review, the District believed that process fires should not be classified as HPVs and do not need to be reported to ARB. ARB staff cannot evaluate the process fire violations to determine if they meet the definition of a HPV, unless the District complies with the program requirements by sending these violations to ARB.

It is our finding that the District needs to make several improvements to its FCE and HPV programs. ARB staff proposes to arrange a training session (in cooperation with U.S. EPA) in which all program requirements related to FCE and HPV can be fully discussed with District staff.

Recommendations: It is our recommendation that the District do the following:

1. *Submit the Title V permit to U.S. EPA.*
2. *Update all inspections and source tests into AFS within 60 days of their completion.*
3. *Report accurately all violations from all District sources to ARB the month they occur, including the process fires at John Manville.*
4. *Send ARB a signed copy of all correspondence related to violations at John Manville Facility.*
5. *Organize the filing system and keep all documentation.*

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 quite limited due to the District having no variance

activity during the study period[11]. Therefore, no variance files, staff reports, hearing tapes, etc. could be obtained for review. An interview with the District Hearing Board Clerk regarding the District's policies and procedures was conducted. Basic knowledge of the variance process was demonstrated although the District showed deficiencies in some required areas.

The District has the required five hearing board members in place although the term dates were not clear in documents obtained and a selection of a chair had not been determined (HSC sections 40804 and 40806). ARB staff was unable to obtain a copy of a variance application used by the District due to it not being accessible at the time of the interview[12]. The District indicated they use ARB's draft template, but without having review of the document, ARB staff was unable to determine if all necessary and required information is included within the document (ARB criterion #6).

According to the limited information available, ARB staff was unable to determine how the District would handle a variance petition. Although the District has not dealt with variances in the last few years, the need will eventually arise. District staff should be aware of all documents available and have a process in place that offers sound and efficient advice to a variance petitioner.

Recommendations: District staff should make certain they have all documents and a process in place to offer sound and efficient advice to a variance petitioner.

A.8 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 the ARB program evaluation criteria document. Documents reviewed for this evaluation included District rules, public information handouts, burn permits, policy procedures, maps, and computer summary reports.

Most of the agricultural burning conducted in the District (by acreage) is rice stubble, followed by other field crop stubble and orchard pruning's. District records show that 13,337 acres of rice stubble were burned in calendar year 2003, and 13,756 acres in 2004. The second largest category is other field waste burning: 5,952 acres were burned in 2003, and 6,614 in 2004. Orchard pruning acres were 2,399 in 2003 and 2,861 in 2004.

There is national forest land covered by chaparral on the west, some California Department of Forestry and Fire Prevention (CDF) acreage, and a national

[11] After the review, the District processed two variances.
[12] As a result of the review, the District updated its variance application forms.

wildlife refuge. The agencies conducting prescribed burning on these lands are required to submit a smoke management plan to the District. Prescribed burning acres totaled 4,789 in 2003 and 2,404 in 2004.

The District has a comprehensive set of rules for agricultural burning and for open [nonagricultural] burning. Except for an exemption of agricultural burning above 6,000 feet above sea level in Article II of Section 16 A of the District's rules, the rules are consistent with the Smoke Management Guidelines in Title 17, and with the nonagricultural and agricultural burning rules in the HSC[13].

The District issues burn permits. Growers may renew their burn permits when they come in for a pesticide permit, or they may renew by mail. Field burning permits are renewed annually; orchard waste burn permits are every three years. Residential burners also receive fire safety permits from the fire districts.

The District field crop agricultural burn permit costs $10 to $250, plus the $5 Basin surcharge, for burning <10 to 500+ acres. Orchard burn permits range from $15 to $55, depending on acreage.

CDF contracts with the District to issue the residential burn permits west of Orland; there is no charge for these permits. CDF has a burn ban in effect from June 1st until the fire danger is over for the year. Any agricultural burning during that ban time is by special arrangement only. All burners are required to call their local fire district before they can burn.

The busiest time of the year for agricultural burning is during the fall rice burning season. The District begins with a "harvested" list when the growers report their harvest dates. These fields are then placed on the day's Ready Fields lists for the county's four burn zones, and the growers are contacted when their fields come to the top of the list.

The District determines the daily burn decisions by consulting with ARB Meteorology online. The information is made available to the public on the 800 burn line by 8:30 am each day. Requests to burn pruning's, fence lines, ditches and yard trimmings can leave a message regarding their intention to burn; however, field crop burners must talk to one of the staff directly to receive permission to burn.

As each grower may only burn 25 percent of the total rice acreage planted each year per HSC section 41865(i)(2) (upon demonstration of disease), acres burned annually have dropped since this became effective in 2001. Some growers burn all of their acres every four years as tracked by the District's computer program.

During the intensive fall burn season, three District staff and two inspectors from the Department of Agriculture are ensuring that only authorized burning is

[13] After the review, the District indicated they plan to remove this exemption from the rule.

occurring. District staff often works seven days a week during the intensive rice burn season. Growers can make arrangements to conduct weekend burning ahead of time.

The District works closely with the fire departments, and will use their run reports to document illegal burns. The Sheriff's Department staff will also cite for illegal burns. Each case is reviewed individually, and settlements depend on the circumstances. For some burn cases, the District offers the option of paying the penalty, referred to as a "donation," to the local fire department. Suggesting a "donation" to the local fire district has been successful.

The District has an information brochure on burning residential waste, which was last updated in 2003 to implement the ATCM. All of the burning-related complaints occur during the rice burning season. On south windy days, fires in Butte County will tend to smoke out Orland. There is also a wind eddy current occurring around Williams that can cause smoke entrainment.

<u>Recommendation</u>: The District should make its agricultural burning rule consistent with Title 17 by removing the exemption for burnings conducted at elevations above 6,000 feet.

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 25 of 148 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 250 permitted facilities. The District has 142 permitted gas well operations, 22 gasoline stations, 3 sand and gravel operations, and a one perchloroethylene dry cleaner. Johns Manville Corporation, a fiberglass insulation manufacturing facility, is the only Title V source in the District. A majority of the District permitting work is with gas well facilities. From the year 2002 to 2004, the District received 34, 29, and 52 applications respectively and had received 33 in 2005 as of the time of the program review.

At the time of the program review, the District did not have any permitting backlogged projects. For new applications, the District's new source review rule

requires that the District determine application completeness within 30 days, and take final permitting action (either issuance or denial) within 180 days from the date the application was deemed complete. The District has a handwritten "Mail/Walk in Correspondence" log to document the new applications received. However, the log was not entirely complete and timeline requirements were not always clearly documented. A single handwritten log may be sufficient for tracking the relatively small number of applications received; however, the District needs to provide the date the application was deemed complete, and other important interim dates, such as when an authority to construct was issued. This general tracking log is a useful management tool for obtaining the status and progress of each application. As an additional management tracking tool, each permitting project file should have its own activity tracking sheet[14]. Many districts are successfully using this file tracking sheet to ensure timelines are met, and the necessary documentation is occurring.

Recommendation: The District should improve the documentation of meeting its timeline requirements by using a permit tracking sheet for each permit file.

B.1.1 Staff

At the time of the program review, the District employed six total staff including an Air Pollution Control Officer (APCO), (who also serves as the agricultural commissioner), an administrative office assistant, an environmental program manager, a part-time inspector that works 2/3 time and two part-time secretaries. The District's environmental program manager does most of the permitting, but the inspector also helps. The environment program manager reviews the inspector's permitting work. The APCO is not ordinarily involved in the day-to-day permitting activities, but occasionally reviews high profile projects.

The environmental program manager has been at the District for over ten years, and has a lot of institutional knowledge of all the District's programs. The District inspector has over three years of experience at the District. In October 2005, the County CUPA program manager resigned, leaving the environmental program manager in charge of all the District's programs and the CUPA program until the return of the inspector in January or until the hiring of a new staff.

The environmental program manager indicated that there has been an increasing workload from the administration of the Carl Moyer Program, Enhanced Vapor Recovery, and recently ARB-adopted diesel-fired engine Air Toxic Control Measures. He indicated that the workload of the Carl Moyer program could be handled by the inspector, but at least two additional staff should be hired.[15] The budget for the county has been a limiting factor for adding staff.

[14] As a result of the review, the District implemented a permit tracking sheet with timelines.
[15] Subsequent to the review, the District added 0.9 air pollution inspector positions and 0.4 CUPA inspector positions to their staff.

Recommendation: *If funding is available, the District should enhance staff resources to help with the increased workload.*

B.1.2 District Permit files

The District has file drawers for its facility files categorized by the size of the facility emissions with color coded tabs (yellow - less than 5 tons/year, blue - 5 to 10 tons/year, white - 10-25 tons/year and over 25 ton/yr). The District also had separate file drawers for gasoline dispensing facilities, gas wells, CUPA, and pending. Since the District also handles the CUPA program, some CUPA related material is integrated with the files. The District's files were categorized for easy access.

Recommendation: *None*

B.1.3 District Application Review

When the District receives an application, it is dated and logged in by the front office administrative or secretarial staff. The program manager or inspector receives the application, checks the application for completeness, and reviews the plot plan for sensitive receptors. The program manager or inspector then conducts an "Authority to Construct Evaluation" which is the District's engineering evaluation. This document can also serve as the authority to construct.

The District's use of its Authority to Construct Evaluation as the actual authority to construct is an uncommon district permitting procedure. There are no conditions listed in these evaluations and ARB does not consider it a proper authority to construct[16]. For example, Royale Energy Inc. (Jones-Miner 34-1), applied to replace a Cummins G855 ICE engine with an Ajax DPC-80 IC engine. The evaluation states that the engine triggered BACT and that the engine should have a catalyst, but there are no conditions, emission limitations, throughput limits, recordkeeping and reporting, or source testing requirements as would normally be stated in an authority to construct.

The project for Veneco Inc., permit #05-436 and evaluation issued on October 27, 2004, is another example where the evaluation was issued as the authority to construct.

Despite the above examples, the District has recently been issuing an "Authorization to Construct." Out of the approximately 25 project applications reviewed, about six had been issued an Authorization to Construct. The "Authorization to Construct" (with minor changes mentioned for the permits) is considered by ARB staff to be a proper authority to construct. The District should

[16] As a result of the review, the District began issuing Authorizations to Construct with numbered conditions.

continue to refine this new authority to construct format and utilize this format for the issuance of permits.

The District uses the Macintosh 4D program for permitting. In the 4D program, the District has a spreadsheet of data which includes fields for facility ID#, facility name, address, city, expiration date, invoice date, contact, phone, and Universal Transverse Mercator coordinates. In the program, the District has actual emissions for its facilities based on data received from sources during annual renewals. The District hired a consultant to determine the feasibility of replacing the 4D program with a new computer database that combines permitting with all the District's other programs. The District anticipated they would move to the new system in early 2007[17].

Recommendation: The District should not use its engineering evaluation as an authority to construct. Where required, projects should be issued their unique ATC. Conditions on the authority to construct should be numbered and include, at a minimum, all conditions to ensure the facility will comply with all applicable rules and regulations, list specific emission limitations, specific recordkeeping and reporting requirements, list all permitted equipment (including make, model and serial number), and all emission control equipment.

The District should continue its plans to implement its new permitting database.

B.1.4 Permit Renewals

Health and Safety Code section 42301(e) requires that upon annual renewal, each permit be reviewed to determine that the permit conditions are adequate to ensure compliance with district rules. Permit conditions must be reviewed on an annual basis to ensure that they are consistent with the latest District rules and regulations.

The District renews its permits for minor sources (those with emissions less than five tons per year) every three years. Permits for larger sources are renewed annually. Upon renewal each source receives a new copy of their permit and each year the official permit is issued in a different color. During renewal, permits are updated to include requirements from newly amended District rules.

After the review, the District indicated that permit conditions are re-evaluated at the time that the annual emissions and throughput information is received from all its permitted facilities and input into the permitting program database. However, the District should formalize its annual review of permit conditions to document that the requirements of HSC 42301(e) have been met.

[17] Subsequent to the review, the District fully implemented its new permitting database.

Recommendation: The District should formalize its annual review of its permit conditions to document that they have met the requirements of HSC section 42301(e).

B.2 Permitting Policies

The District does not have any policies for its permitting program.[18] The only policy-related document the District has is an office procedures manual.

The District needs to develop a policy document to cover all the areas of its permitting program such as the method of permit tracking, the structure of its engineering evaluations, the interpretation of rules, BACT and other related issues. The District should also develop standardized permit application forms for common equipment and source categories to assist applicants in submitting complete applications. Such documents help industry in learning about District policies and enable processing of permits in a consistent manner. The District should refer to websites maintained by Shasta County and Sacramento Metropolitan Air Quality Management Districts to obtain standard application forms and miscellaneous policy documents. These can easily be adopted for use by Glenn County.

Recommendation: The District should develop a permitting policy document by referring to websites maintained by other districts such as Shasta County (http://www.co.shasta.ca.us/Departments/Resourcemgmt/drm/aqmain.htm) and Sacramento County (http://www.airquality.org/permits/index.shtml).

B.3 Best Available Control Technology Determinations

The District has had very few projects that have triggered BACT (25 pounds/day). Most of the District's projects that required a BACT determination consisted of internal combustion engines at gas well facilities. A BACT analysis should indicate the BACT trigger level, the potential emissions, the methods of control, the reasons for choosing the emissions control utilized, and an indication of the clearinghouse used.

The District does not include a top down BACT determination in its engineering analysis. 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

[18] As a result of the review, the District developed a permitting policy document.

eliminated in this fashion, then the next most stringent alternative is considered, and so on[19].

Crest Oil and Management Corp. authority to construct application (Permit #05-120) illustrates the example of excess emissions resulting from not performing a top-down BACT determination. Crest Oil applied to install a 95 Bhp IC engine. The emissions estimate section of the evaluation listed the NOx emissions as 12.73 tons per year yet, because of the installation of a catalytic converter, it was assumed that the emissions would be reduced 98 percent to 0.12 tons per year. The District's file included a guarantee from the catalyst vendor that the catalyst would meet an emissions limit of 640 ppm NOx @ 15% O2. BACT for a natural gas fired IC engine is currently 0.15 grams/Bhp or approximately 9 ppm. Requiring only a catalyst in this case did little to reduce emissions beyond the rule limit. When the permit was issued there was no BACT requirement to have a catalyst installed on the engine and no associated BACT emission limits.

When making a BACT determination, the District's practice is to only specify an emission control technology without its corresponding emission limit. This becomes an issue when a BACT determination is made that relies only on the type of control and does not set an emission limit 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. For example, Cimerex Energy Company (Perrmit #05-179) applied to install a 60 BHP IC engine. The authority to construct evaluation showed that the emissions from this engine were 8.02 tons/year (equates to 43.94 lbs per day). The calculation sheet shows that the engine catalyst will achieve an 89 percent control resulting in 0.88 tons/year of NOx emissions. The permit that was subsequently issued did not list any emissions limit for the control device (catalyst).

<u>Recommendations</u>: In the BACT determination section of the engineering analysis, the District should include a top down analysis by discussing controls and or emission limits that were eliminated from consideration for a given project because they were not achieved in practice or were not technically feasible and cost effective. The specific BACT clearinghouse used should be cited as part of the determination.

A BACT emission limit as well as the emission control technique utilized to meet the BACT limit should be documented and appear in the authority to construct and permit to operate.

[19] After the review, the District agreed to take advantage of ARB training classes to address top down BACT.

B.4 Adequacy of Permit Conditions

District permits should include a list of conditions that facility owners or operators are required to meet in order to be in compliance with applicable rules and regulations. Permit conditions should 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.

B.4.1 Format of District Permit to Operate

ARB staff found that the District could improve the format of their Permits to Operate[20]. The District includes the address of the equipment owner on their permits, but not the address of the location of the permitted equipment. Gasoline station permits, for example, have the owner's address in southern California, but the address of the gasoline station facility is not indicated (see ARCO gas station permit (Permit #4-305).

Almost every District permit, in every equipment category, has the same 15 permit conditions. For example, a permit for a gasoline station, a gas well or an emergency engine have the same 15 conditions. Very few permits have conditions for monitoring, record keeping and reporting requirements that are source specific. The 15 conditions discussed above are contained in the "General Conditions" Section. These conditions include requirements for posting the permit, right of entry, notification of breakdown, public nuisance, and other similar-type conditions. The District's permits could be more useful to source operators if these general conditions were minimized by combining them.

The fourth page of the District permit is titled "Additional Operating Conditions"; however, no sequentially numbered conditions are listed on this page[21]. This section of the permit lists VOC, NOx, SOx, PM, and CO emissions, but the permit does not indicate if the emissions are actual or potential and if these limits must be met. A section called "device information" follows with a listing of primary equipment with hours of operation. The equipment descriptions in this section are sometimes incomplete. For example, Venoco, Inc installed a Ford 460 I-4 engine. The device information section of the permit lists a natural gas fired IC engine, but does not include a make, model, or serial number. This information is important in that it documents the specific piece of equipment that was permitted. The District's ATCs usually provide a more complete equipment listing than the District's permits.

[20] As a result of the review, the District has made improvements to the format of its permit to operate document.

[21] Subsequent to the review, the District no longer uses the 4D program and, therefore, no longer needs the fourth page of it permit entitled "Additional Operating Conditions."

Recommendations: *The District should reformat its permits more similarly to its authorization to construct. More specifically, permits should include the address of the owner and the location of the permitted equipment. Permits should have enforceable conditions for all monitoring, recordkeeping and reporting requirements (i.e. throughput limits, emission limits, source testing requirements). Permit conditions should be grouped for clarity and permits should have complete equipment descriptions including make, model and serial numbers of pollution generating and control equipment.*

B.4.2 Transfer of Assumptions from the Evaluation to the Permit

The District should transfer all assumptions made in the engineering evaluations, (such as operating limitations), to the authority to construct and permit to operate. For example, in the engineering evaluation for CA Water Services (Permit # 05-103), for a new Diesel emergency ICE, the evaluation stated that the operation would be limited to a maximum of 250 hours per year and use a maximum of 1,000 gallons of Diesel fuel, but these limitations were not transferred to the authority to construct.

The District should also transfer limits from authorities to construct to the permits to operate. In the authority to construct for The Termo Company (# USA 05-06-03-ATC), condition #23 has emission limits for the 220 BHP IC engine, but these limits do not appear in the permit to operate.

Aspen Exploration Company applied to install a 60 BHP IC Engine. The authority to construct evaluation states that the engine will have a Johnson-Mathey CX2-3 catalytic converter and listed the emissions as 0.84 tons per year NOx. The evaluation then stated that the engine was not subject to BACT because of the low emissions. When the permit was issued, the engine is listed as not having a catalytic converter, no conditions were required for the catalyst, a control efficiency was omitted, and the internal combustion engine emissions were 8.04 tons per year NOx. (Note: This is also an example where BACT should have been applied, but was not.)

Recommendations: *Assumptions stated in engineering evaluations should be transferred to permit conditions as quantifiable limits such as throughputs or emission controls.*

During permit renewal, the District should take the opportunity to correct the deficiencies found in permits as discussed above.

B.4.3 Johns Manville Permitting Issues

The District's only Title V source, Johns Manville, a fiberglass insulation manufacturer, was also issued a Prevention of Significant Deterioration (PSD)

permit in 1977 (#NSR 4-4-4: SAC77-07) and has a District permit #05-1000. The District's permit for Johns Manville does not have all the requirements of the federal PSD permit conditions for the facility. The permit issued by the District only has the 15 general conditions that are found in every District permit and has no emission limits.

Johns Manville was source tested in 2001 and 2002 to verify compliance with the PSD permit. The source was in compliance with the particulate emission limits on the PSD permit. However, the District did not review the source test protocols or witness the test since they feel they do not have the expertise to do so.

The District has not been delegated the authority by the EPA to enforce the PSD permit for Johns Manville. In addition, the Title V permit has not been issued since the facility has not source tested its regenerative thermal oxidizer (RTO). The RTO was installed in August 2002 under authorization to construct #JM-02-05-ATC and should have expired in August 2004.

ARB staff suggests that the District incorporate conditions similar to the PSD permit into the District permit and develop the expertise to witness the source testing and review the source test protocols. The District also needs to address their authority to construct since according to District Rule 50 C an ATC expires after two years, or upon the issuance of a permit, or when construction has been commenced and is being diligently pursued.

After the review, the District believed that the ATC for the RTO did not expire. However, the ATC was supposed to expire in eighteen months according to the fourth condition. At the time of the review, the ATC had not been reissued. For several years the RTO appears to have had an expired ATC.

Recommendations: The District should issue a Title V permit. The other recommendations are the same as those in subsection A.5 of the report.

B.5 Organization and Adequacy of Permit Evaluations

ARB staff found that the District's format for its engineering evaluations has most of the elements needed for a complete evaluation, but about six of the District's processed applications did not have an engineering evaluation.

The District's engineering evaluation format includes the facility name and address, a project summary, a listing of existing permitted equipment, material throughput, emission estimates, a summary of applicable District rules, and a conclusion section. The District discusses BACT within the discussion of the summary of applicable rules under the new source review rule. To make its evaluations more complete, the District could also include a section for 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.

Recommendations: *The District should do an engineering evaluation for each project.*

In its engineering evaluations, the District should address whether any school sites are within 1000 feet of the proposed project as required by HSC section 42301.6.

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.

During the review period, the District did not have any projects triggering offsets or ERCs. 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 last project that involved ERCs was the shutdown of Holly Sugar seven years ago. The District indicated that it verifies that the emission reduction credits are real, quantifiable, enforceable, and surplus.

The current total of ERCs in the District (as of 6/5/02) is shown in Table IX:

Table IX

	VOC (Tons/Yr)	NOx (Tons/Yr)	PM10 (Tons/Yr)	Sox (Tons/Yr)	CO (Tons/Yr)
ERCs	0.7	173.6	147.65	65.8	0.0
Community Bank					

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 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. 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.

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.

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 was not aware of the agreed ARB/CAPCOA rule review protocol. ARB staff has sent them a copy.

ARB staff also conducted a limited review of the District's adopted rules. Appendix C contains a summary of rule improvement, and clarity issues found in the Valley's new source review rules. The District's new source review rule, Article III, Section 51 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 committed to in the BCC endorsed Air Quality Attainment Plan. Some of the rule categories up for adoption consist of architectural coatings, internal combustion engines, wood products coating operations, and metal parts and products coatings operations. The ARB approved the latest update to the suggested control measure (SCM) for architectural coatings in 2000. By the end of 2002, 16 districts had amended or adopted architectural coating rules that incorporated the 2000 SCM. Since that time, the total has gone up to 19 districts. The District Board considered the rule at a hearing in December 2002, but did not adopt the rule. It has been more than three and one half years since then, and the District Board has not yet considered adopting the rule. ARB staff has contacted the District staff repeatedly over the past four years to urge them to adopt the rule, has provided all the supporting documents requested, and has offered to write support letters and provide supporting testimony, if requested. Also, all of the other districts in the Sacramento Valley air basin have an architectural coatings regulation in place.

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. The District should explore adopting a rule for this category since districts with these operations have rules addressing glycol dehydrators; gaseous leaks from valves, flanges, and components; and vapor recovery for produced water tanks. The District should also review its existing regulations to ensure they are clear, enforceable, and with appropriate rule stringency standards. Permit Exemption Rule 57 is an example that has clarity and enforceability issues. Specifically, this rule exempts a source from obtaining a permit if they are a "minor significance"; however, the rule does not define this term.

Most districts outside the Valley restrict the permitted visible emissions to Ringelmann Number 1; however, Rule 96 restricts the visible emissions to Ringelmann Number 2. The District should work with other Valley districts to propose lowering the permitted visible emissions to Ringelmann Number 1.

Recommendation: The District should revisit its new source review rule and address the rule improvement issues raised in Appendix C. The District should also review its existing regulations to ensure they are clear, enforceable, and with appropriate rule stringency standards.

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 quickly submit the ARB SCM for architectural coatings to their Board for adoption. The District should consider developing a rule that regulates VOC emissions from gas recovery operations and should also consider lowering its permitted visible emissions level from Ringelmann number 2 to 1.

D. "Hot Spots" Program

The District collects annual emissions data, but most of this information is not sent to ARB. District staff should verify that their facilities have completed all of the "Hot Spots" requirements, including submitting toxics inventories, within the next year.

The District has completed the evaluation of all Phase I (greater than 25 tons/yr of a criteria pollutants) and Phase II (10 tons/yr or greater) facilities, including facilities that emit greater than 5 tons/yr. It is unclear if the District has adequately identified additional facilities subject to "Hot Spots" that emit less than 5 tons of any criteria pollutants and that fall in a facility class in Appendix E of the "Hot Spots" Emission Inventory Criteria & Guidelines Regulation (Phase III facilities, which represent facilities that emit <10 tons/yr). ARB staff interviewed the District staff to determine if other classes of facilities have been evaluated under "Hot Spots." Although emission inventories have been collected for many of those facilities, this information has not been sent to ARB. The District should evaluate all facilities subject to "Hot Spots" within the next year. ARB staff has committed to helping the District accomplish this task and providing any training necessary.

The District has identified gasoline dispensing facilities as an industrywide category. The District states that there are very few dry cleaners and other industrywide facilities in the District. The District has determined that autobody shops are not subject to "Hot Spots." The District should verify that there are no other facilities subject to Appendix E of the "Hot Spots" Guidelines.

The District submitted initial emissions data for their major facilities, but has not substantially updated their toxics data in more than 7 years. The District does not have the time or a system in place to track the submittal of emission inventory information to ARB. The District should work with ARB staff to prioritize the submittal of the most important emissions data for stationary sources.

It is unclear what the District policy is for calculating a prioritization score for facilities subject to "Hot Spots." The District must adopt either the CAPCOA Prioritization Procedure or their own method for evaluating facility toxic emissions. The District should create a mechanism so that facilities are prioritized as part of the regular permit process. Due to change in District staff, it is unclear what the District policy is for recalculating a prioritization score for facilities subject to "Hot Spots." The District should create a mechanism so that facilities are prioritized on a more regular basis. The District has only required one health risk assessment (HRA) to be conducted.

The District collects annual facility information such as throughput for gasoline dispensing facilities, and amount of material processed for other types of facilities. The District recalculates the criteria pollutant emissions and total VOCs, but does not quantify toxics on a regular basis. The annual information collected by the

District appears to be sufficient for the District to recalculate a toxics emission inventory, and then to provide updated inventories to ARB for facilities subject to "Hot Spots" on a more regular basis.

A large number of major facilities have gone out of business over the past 7 years, and none of this information was submitted to ARB. The District does not have a process for notifying ARB when a facility is out of business. This is a major concern. 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 have changed for each facility in the inventory.

The District has not added any new facilities to the "Hot Spots" program in recent years. It is unclear if new facilities should have been added to "Hot Spots." The District should determine if new facilities are subject to "Hot Spots" before a permit to construct is granted.

The District focuses on criteria pollutant emission inventory data, and does not regularly report toxics data. Total VOCs for facilities are calculated, but toxics data is not regularly quantified. The District should strive to collect inventory data for facilities that includes stack parameters, and process and device-level data when possible.

The District has evaluated Industrywide facilities using the CAPCOA Guidelines for gasoline dispensing facilities (GDFs). The District has recently submitted emissions data for all of their 22 GDFs. The District should submit toxics data for classes of facilities for which the District has collected emissions data.

The District does not have an emission inventory database, and paper copies are difficult to compile and summarize. The District's current system may be adequate for managing data for a small District. However, some program goals are not being achieved. The District should begin using their new system as soon as possible to maintain a database of emissions and facility information.

The District states that staff analyzes the quality of the facility data to the best extent possible. The District should consider using CATEF or other sources of emission factors that can improve the accuracy of the emissions estimates.

The District does not differentiate non-compliance of "Hot Spots" requirements with their regular annual permit and 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 adequately assesses warnings and penalties (Notice to Comply and/or Notice of Violation) when facilities do not meet the requirements of their District rules.

The District has an existing annual inventory reporting requirement that allows the District to collect emissions data. However, it is unclear if facilities are evaluated under "Hot Spots" on a regular basis. District staff do not conduct a risk assessment for new facilities. Each year they evaluate whether the emissions have increased, and rarely does a facility get reprioritized. 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).

The District has identified one facility that has completed an HRA. It is unclear if any other facilities should have completed an HRA. The District should strive to evaluate facility risk as part of the permit process. The District does not publish an annual report. ARB recommends the District summarize their actions taken in response to this audit to their local Governing Board with a plan to complete all of the "Hot Spots" requirements within the next two years.

Recommendations: The District should provide to ARB a list of all of the facilities and their status in the "Hot Spots" program each year. This information should also be provided to the public on an annual basis.

The District should verify that there are no other facilities subject to Appendix E of the "Hot Spots" Guidelines.

The District should adopt a Prioritization Procedure for evaluating facility toxic emissions and create a mechanism to prioritize facilities on a more regular basis.

The District should submit emissions inventory updates to ARB for facilities subject to the AB 2588 "Hot Spots" program.

E. Emission Inventory Program

The District has done a good job of inventorying point sources, but has not sent all facility data to ARB. The District submitted their 2002 criteria emission inventory updates, but the toxics inventory was updated for only one facility since 1996[22]. The District did not merge criteria and toxics facilities into one database.

The District does not have a procedure to report changes for new and closed point sources. The ARB CEIDARS database contains 91 facilities with 10 major sources for the District, including 28 toxics facilities. The number of facilities has not changed for the past 8 years and toxics emissions have not been updated for past several years. The District has not reported data for new and closed facilities.

The District has not provided any updated area source data or area source methodologies to ARB.

The District has not provided control factors and growth data for area source 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 did not provide ARB with updated Source Classification Codes (SCC). Based on quality assurance (QA) reports run on the 2002 CEIDARS database for the District, there were 25 invalid SIC/SCC combinations that were improperly assigned to facilities and processes.

The District does not have a procedure for reconciling point and area sources. ARB has not received emission estimates for any of the 89 area source categories for which the district has responsibility.

The District provided criteria emission inventory update for 2002 in an Excel format, but toxics data has not been updated for more than 7 years. The most recent area source data submittal to ARB was for 2002. The previous comprehensive area source update was done in 1989.

Recently, the district developed a new electronic system called Quality Management which consolidates all of the district data. It will meet all internal

[22] Subsequent to the review, the District submitted 2005 criteria pollutant and toxics data in 2006. ARB staff assisted the District in correcting the toxics data that was submitted. ARB staff is happy to provide training and assistance.

District needs and will report inventory data to ARB in the HARP format. Currently the new system is in the testing phase. The data from the new system will be reported to ARB for the 2005 inventory year.

The District staff stated that they do not have a quality assurance (QA) protocol in place to check the data that they submit to ARB. The District states that all emissions data is calculated to the best extent possible.

<u>Recommendations:</u> The District should submit criteria and toxic emissions data to ARB as a merged submittal to ensure that major facilities have a complete and accurate toxics inventory. The District should use the most recent CEIDARS2.5 transaction format for annual data submittals.

The District should update area source categories and provide the information to ARB on a 3-year schedule.

The District should develop a QA/QC protocol to ensure the accuracy and precision of the estimated data.

Appendix A:
Complaint Program Recommendation Details

(Refers to Section A.3)

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

1. The District should develop complaint procedures and guidelines which address the following areas:

    a. Complaint relay procedures.

    b. Complaint logging procedures.

    c. Complaint investigation procedures (areas to inspect, questions to ask, inspector conduct, sampling procedures, etc.).

    d. Processing and filing of complaint documents. The complaint files shall be organized such that complaint reports can be retrieved quickly.

    e. Public nuisance procedures which include the number of complaints necessary to pursue a public nuisance. These shall include a system for aggregating complaints linked to a single incident or recurring incidents.

    f. After-hour complaints.

    g. Assigned priority of complaints.

    h. Complaint referrals (to and from agencies).

2. All complaints reported to the district shall be logged and the log shall include the following information:

    a. Complaint number.

    b. Date and time complaint reported to the district.

    c. Inspector assigned to complaint.

    d. Date and time complaint investigated.

    e. Nature of complaint.

    f. Name, address, and phone number of complaint.

    g. Name and address of suspected source of complaint, if known.

h. Whether ongoing complaint or recurring complaint.

i. Enforcement action taken.

j. Disposition of complaint (closed, further surveillance warranted, etc.).

k. Complaint report submitted.

l. Date and time complainant notified.

3. Adequate documentation shall be provided for all complaint investigations. Complaint report shall include the following information:

a. Statement from complainant,

b. Note of all areas inspected, including names, addresses, phone numbers, and contact persons of all suspected sources,

c. Note of time and date of investigation, including permit numbers of units inspected, operating or equipment parameters checked and visible emissions evaluations conducted,

d. Note of names and titles of all persons interviewed at source,

e. Frequency of annoyance or occurrence of emissions,

f. Duration of occurrence,

g. Location and description of property damage,

h. Description of health problems resulting from complaint source,

i. Description of emissions from complaint source,

j. Meteorological conditions,

k. Violations observed and NOV(s) issued and any other enforcement action taken,

l. New, recurring chronic complaint,

m. Investigating inspector,

n. Any other findings,

o. Investigation results, conclusions and recommendations,

Appendix B:
Breakdown Program Recommendation Details

(Refers to Section A.4)

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

1. 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. Time and date breakdown occurred,

    b. Time and date breakdown reported by source,

    c. Time and date breakdown investigated by District,

    d. Source proposed action,

    e. District investigator assigned to the case,

    f. Time and date breakdown was corrected,

    e. Breakdown number,

    g. Date breakdown correction report was filed by source, and

    h. Indicate if a variance was requested and issued.

2. 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 which includes:

    a. A statement that the occurrence has been corrected, together with the date of correction and proof of compliance;

    b. A specific statement of the reason(s) or cause(s) for the occurrence sufficient to enable the air pollution control officer to determine whether the occurrence was a breakdown condition;

    c. A description of the corrective measures undertaken and/or to be undertaken to avoid such an occurrence in the future (the air pollution control officer may, at the request for submitting the description required by this subparagraph);

    d. An estimate of the emissions caused by the occurrence; and

e. Pictures of the equipment or controls which failed, if available.

3. All District on-site breakdown investigations should be adequately documented in a breakdown report. On-site breakdown investigation reports should include the following information:

    a. Time and date on site breakdowns investigated,

    b. Permit units inspected and operating and equipment parameters checked,

    c. Specific equipment affected breakdown,

    d. Specific equipment failure,

    e. Detailed description of problem causing the breakdown,

    f. A determination that the breakdown was beyond the reasonable control of the source and is allowable under district rules or a determination that the breakdown was disallowed,

    g. A statement of which rules are being violated,

    h. Determination of excess emissions resulting from breakdown and all operating parameters needed to determine emissions under the breakdown conditions,

    i. Source contact,

    j. Source proposed action,

    k. Inspector evaluation,

    l. Date and time breakdown corrected,

    m. Date inspector re-inspected breakdown to verify that breakdown was corrected,

    n. Steps taken to correct the breakdown, including equipment replacement, repairs, or modifications,

    o. Variance application and issuance, if any, and

p. All data necessary to determine final compliance confirmation.

4. ARB's Model Breakdown Rule can be accessed at http://www.arb.ca.gov/audits/audits.htm.

5. Example of an Upset/Breakdown District Log can be accessed at http://www.arb.ca.gov/audits/audits.htm.

6. Example of a District Breakdown Investigation Report can be accessed at http://www.arb.ca.gov/audits/audits.htm.

7. Example of a stationary source breakdown report can be accessed at http://www.arb.ca.gov/audits/audits.htm.

Appendix C:
Review of Upper Sacramento Valley District NSR Rules
(Refers to Section C)

Review of Upper Sacramento Valley District New Source Review Rules for 2005 Audit

(Refers to Section C. Rule Development Program)

How this review was done:

Air Resources Board (ARB) staff looked at the New Source Review rules of the five air pollution control districts listed in Table 1 below, keeping in mind applicable requirements based on each 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 O_3 attainment status	Federal 8 hr O_3 attainment status
Butte - Rule 430	Moderate	Basic
Colusa - Rule 3.6	Non-Attain – Transitional	Attain
Feather River - Rule 10.1	Moderate	Attain except South Sutter portion, which is serious (and top of Sutter Buttes, which is basic)
Glenn - Article III, Section 51	Non-Attain – Transitional	Attain
Tehama - Rule 2:3A	Moderate	Attain

Our comments on the rules 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	
Butte Rule 430	• The BACT threshold in the current rule is 50 lb/day for ROGs and NO_x, however H&SC 40918 mandates that such thresholds be at 25 lb/day. ARB sent a letter to District regarding this in 1994, but it appears that the District did not make the requested change. **(IS)*** • In the rule, BACT is triggered only when specified emissions are exceeded; it should be triggered when the potential to emit equals or exceeds specified levels as required under H&SC 40918. **(IS)**
Feather River Rule 10.1	• 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)**

*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	
All districts	• The section that covers general offset requirements would be clearer if "offsets" were well defined in the rule. While some of the five districts (i.e. Feather River, Glenn, and Colusa) currently have a definition of "offsets," it refers simply to an "emission decrease" and not the fact that such a decrease needs to meet certain criteria, such as being banked as an emission reduction credit, to qualify for use as an offset. **(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)**
Butte Rule 430	• Section 6.3.2 should refer to section 5.2 instead of 5.1 and should include a reference to section 5.3 (offset ratios) to determine the amount of offsets required. **(CL)** • Section 5.4, Interpollutant Offsets, would be improved by adding limitations to the use of such offsets similar to those of the other nearby districts, e.g. the other districts do not allow the use of PM10 credits as offsets for NOx or reactive organic compound increases. **(ID)**
Colusa Rule 3.6	• Section d.2.B.2 should include a reference to section c.3 (offset ratios) to determine the amount of offsets required. **(CL)**
Feather River Rule 10.1	• 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)**
Glenn Article III, Section 51	• Section F.3.b., Calculation Procedure, contains two conflicting sentences regarding offset calculations. One sentence refers to sections E.2. and E.4 to determine the amount of offsets required; the other sentence refers to sections E.2. and F.5 for the same determination. It appears that this section of the rule should refer to sections E.2, E.3 (offset ratios), F.5, and F.6. **(CL)**
Tehama Rule 2:3A	• Section F.1.a.1.b. should include a reference to Section E.3 (offset ratios) to determine the amount of offsets required. **(CL)**

*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	
All districts	• 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)** • With the exception of Feather River, all the districts need to add the word "Pollutant" after the words "Secondary Air" to the definition of "Precursor." **(CL)**
Colusa Rule 3.6	• The definition for "affected pollutant" should also cover those pollutants listed in section E.1. **(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 definition of "historic actual emissions" needs to include a requirement that emissions in excess of allowed emission levels will not be included in the computation. Also, specifically tying the calculation period to the two years prior to the date of application *for an Authority to Construct* doesn't work for applications to bank emission reduction credits. The phrase "for an Authority to Construct" should be deleted from this definition. **(CL), (ID)** • The definition of "modification" improperly exempts the replacement of equipment with "functionally identical" equipment. This potentially allows circumvention of BACT for such equipment, which is inconsistent Health and Safety Code 40918(a)(1). That section requires BACT for any new or modified stationary source that has the potential to emit 25 or more pounds per day of any nonattainment pollutant or its precursors. **(IS), (ID)** • The definition of "reconstructed source" improperly exempts "modifications involving only replacement equipment." This would allow a source to be substantially rebuilt without applying BACT. **(IS), (ID)**

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Table 4 is continued on the next page

Table 4 – Comments on Definitions (continued)

Feather River Rule 10.1	• 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 is phrase is unclear because the definition states that BACT is the more stringent 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. PM_{10}, 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)**
Glenn Article III, Section 51	• The definition of "historic actual emissions" needs to include a requirement that emissions in excess of allowed emission levels will not be included in the computation. **(CL), (ID)** • In the definition of "modification," there is an exemption for "functionally identical" equipment that is limited to cases where the potential to emit of the replacement equipment would be no greater than that of the *replaced* equipment as if current BACT were applied. The new equipment may still be at less than current BACT levels, since the BACT test is applied to the old piece of equipment rather than the new one. This appears to be inconsistent with Health and Safety Code 40918(a)(1), which requires BACT for any new or modified stationary source that has the potential to emit 25 or more pounds per day of any nonattainment pollutant or its precursors. **(IS), (ID)**
Tehama Rule 2:3A	• The rule should include a definition of "halogenated hydrocarbons" **(CL)**

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Table 5 – Other Comments	
All districts	• 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)**
Butte Rule 430	• 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. Butte is classified as "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)**
Feather River Rule 10.1	• 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)**
Tehama Rule 2:3A	• 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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