



Lake County Air Quality Management 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, Lake County Air Quality Management District (District) staff assisted the Air Resources Board (ARB) staff through interviews and file reviews in addition to performing their normal duties. We acknowledge the professionalism and cooperation of the District staff and management.

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

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

**Lake County Air Quality Management District Program Review**  
**REPORT OF FINDINGS AND RECOMMENDATIONS**

**TABLE OF CONTENTS**

<a href="#">Introduction</a> .....	1
<a href="#">District Information</a> .....	1
<a href="#">Attainment Status</a> .....	2
<a href="#">Overall Findings</a> .....	2
<a href="#">Findings and Recommendations by Program Areas</a> .....	5
A. <a href="#">Compliance Program</a> .....	6
B. <a href="#">Permit Program</a> .....	26
C. <a href="#">Rule Development Program</a> .....	29
D. <a href="#">AB 2588 “Hot Spots” Program</a> .....	30
E. <a href="#">Emissions Inventory Program</a> .....	33
F. <a href="#">Ambient Air Monitoring Program</a> .....	36
<a href="#">Appendix A</a> Lake County AQMD Response to Report Recommendations	
<a href="#">Appendix B</a> Stationary Source Inspections	
<a href="#">Appendix C</a> Gasoline Dispensing Facility Inspections	

## Lake County Air Quality Management District

### REPORT OF FINDINGS AND RECOMMENDATIONS

#### Introduction

Air pollution control district (district) program reviews are conducted as part of the Air Resources Board's (ARB) oversight role of the districts in California. The reviews are conducted in accordance with Section 41500 of the Health and Safety Code (HSC). The purpose of district program reviews is to evaluate the effectiveness of a district's air quality program. Findings and recommendations specific to each program area reviewed are included in the report.

ARB staff conducted a review of the Lake County Air Quality Management District (District) air quality program. As part of this review, ARB staff evaluated the District's compliance, permitting, rule development, AB 2588 "Hot Spots," emissions inventory, and ambient air monitoring programs. Staff from four ARB Divisions participated in this effort.

The review activity commenced with an entrance conference with District management. 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, the staff initiated a review of the program areas identified above. 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. Refer to Appendix A for the District's response to recommendations contained in this report.

#### District Information

The District's jurisdiction is coincident with the area contained in Lake County, encompassing approximately 1,258 square miles. Lake County is located in the Lake County Air Basin. The region can be considered primarily rural with a local economy that includes agriculture, tourism, mining, and geothermal industries. The southwestern part of Lake County has significant geothermal resources. Most of the population lies along the shores of Clear Lake and in the southern part of the County at Middletown. County population has grown in recent years, increasing from fifty-one thousand in 1990 to approximately sixty-nine thousand in 2005. In 1990, approximately 1.3 million vehicle-miles were traveled each day within the District boundaries. In 2005, an estimated 1.8 million vehicle miles were driven daily.<sup>1</sup>

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<sup>1</sup> The California Almanac of Emissions and Air Quality, 2004 Edition.

The District maintains its office in Lakeport. The District's organizational structure and staffing consisted of the Air Pollution Control Officer (APCO), a Deputy APCO, an engineer, an office assistant position that is shared by two part time personnel and three to four seasonal inspectors for the burning season (November first to May first). The primary office assistant is also responsible for work related to the particulate matter monitoring program.

The District has about 100 stationary source facilities, not including gasoline stations and geothermal wells. In addition, the District has 41 permitted gasoline dispensing facilities (GDFs). The largest sources are the five operating geothermal power plants and associated steam fields: Calpine Unit 16, Calpine Unit 13, Calpine Calistoga, West Ford Flat, and Bear Canyon Creek. A sixth plant, Bottle Rock Power, is not currently operational. Aggregate processing is also a significant industry in the District. There are about ten aggregate facilities, some with multiple sites. The remaining sources are relatively small, and the District does not have large facilities like those found in other districts. Minor sources include two hospitals, three dry cleaners, a winery, a landfill, a wastewater treatment facility, approximately 25 internal combustion engines (ICEs), 41 gasoline dispensing facilities (previously noted), and about 12 bulk propane storage/distribution facilities. The District has no Title V sources.

### Attainment Status

Since about 1990, the Lake County Air Basin has been designated as being in attainment of State standards for visibility reducing particles and all measured criteria pollutants, including ozone and particulate matter (PM10 & PM2.5). Lake County Air Basin is designated as an unclassified/attainment area for the federal ozone, PM10, and PM2.5 standards.

Based on the 2005 projected emission inventory (excluding natural sources), mobile sources are the major source of ozone precursors in Lake County with approximately 63 percent of reactive organic gases and 89 percent of oxides of nitrogen coming from mobile sources.

### Overall Findings

The District has considerable technical sophistication in its computer equipment, database management, ambient air monitoring capability, in-house laboratory, and source testing equipment. In particular, the District has developed significant expertise in conducting source tests on geothermal power plants. The District actively enforces the requirements of its open and agricultural burning program. In many cases, the rules addressing open burning are more advanced than what is required by State law. The District staff and APCO are well qualified, knowledgeable, and have many years of experience administering District programs. The District is justifiably proud of the fact that Lake County is in

attainment (or unclassified) for both State and federal standards for all measured criteria pollutants.

In this District, the APCO, in addition to providing leadership and overall management for the District, also believes in a “hands on” approach with respect to daily program activities. These include permit evaluation, inspections, complaint handling, and source testing. The Deputy APCO and the Air Quality Engineer conduct source inspections, permitting, source testing, CEQA land review, complaint investigations, and the agricultural burn program. Due to extensive District workload demands, the District is not able to inspect all its sources on an annual basis. Currently, all medium and large sources are inspected on an annual basis.

The District is cautious in filling vacancies or asking for additional resources because it has no assurance of receiving continuing funds on a long term basis. Being in attainment (for a vehicle related pollutant) precludes Lake County from charging vehicle fees under the provisions of HSC section 44223 (AB 2766, Sher). The APCO informed ARB staff that most small rural air districts use Motor Vehicle Fee funds to pay for air monitoring, area source emissions inventory, and Land Use Planning activities. The District would like help from ARB and California Air Pollution Control Officers Association to make changes to existing law. The District’s current fee structure does not have a provision to collect fees for area source mitigation or CEQA (California Environmental Quality Act) review. The District comments actively during the CEQA process but is not monetarily compensated. This change could be accomplished by the District Board of Directors with relative ease.

ARB staff and District staff conducted joint inspections of industrial facilities such as geothermal plants, aggregate plants, etc. and found them to be mostly in compliance with District regulations. However, one category that needs improvement in its compliance rate is the phase II vapor recovery equipment at gasoline dispensing facilities (GDFs). Staff found that only one of the eight GDFs inspected was in compliance with Phase II balance vapor recovery requirements. Part of the noncompliance problem at the District’s GDFs may be due to the lack of routine inspections.

With respect to the District’s mutual settlement compliance program, staff found that the District is successfully able to settle almost all violations related to dust, gasoline dispensing facilities, stationary sources, and agricultural burning. The District was not able to get similar results for violations issued for residential burning cases. For NOVs issued in the open and agricultural burning category in CY 2001 and 2002, about 25 out of the 27 violations that settled for zero penalty amount were issued for residential burning. It should be noted that CY 2001 and 2002 were the first years of new agricultural and residential burn rules. There were no repeat offenders from the zero penalty cases. Subsequent to the review, the District has presented additional data for the period July 2004 through

June 2006 which shows a more successful resolution of residential burning cases.

Overall, the District operates an effective air quality complaint program. The District documents and conducts on-site investigations of the majority of complaints within 24 hours of receipt. A review of complaint reports revealed that complaints are entered, logged, and tracked until closed. The District indicated that it makes all efforts to inform complainants about the results or status of the complaint investigation. ARB staff suggests that the District should ensure that complaint investigation forms reflect this fact.

The District should consider developing a dedicated database for documenting incoming breakdowns and their dispositions. The District should ensure it gets written verification from its sources detailing the cause of breakdowns, the amount of excess emissions, and corrective action taken.

The District may have some confusion as to the type of variance that is applicable when a source petitions the Hearing Board for a variance. Staff found two examples where the variance sought was incorrectly referenced as an emergency variance. In both cases the Hearing Board made all six required findings. However, since the issuance of variances is a quasi-judicial proceeding, it is important for an air district to reference the applicable variance type and follow its corresponding procedural requirements. To provide additional clarification on variance issues, the District has agreed to facilitate an ARB staff technical presentation to the District Hearing Board and relevant staff.

With respect to its permitting program, the District processes permit applications within the prescribed legal timelines (i.e., no permitting backlog). The District issues a public notice for nearly all permitting actions. Even when there is no applicable prohibitory rule, the District uses its discretion to bring a source under the permit umbrella so it can better monitor its activities. The District has open channels of communication with other county agencies to help track unpermitted equipment and maintains a good working relationship with them. However, the District should annually review the conditions in its permits for enforceability.

The District's rule development program is proactive. Burn barrel rules and residential burning rules are good examples of the District taking an active role. The District gives adequate consideration to planning and conducting public workshops. Spanish/English brochures are available on burn issues.

The District has also met most of the AB 2588 Air Toxics "Hot Spots" requirements, but the District should submit data in the proper electronic format. The District has developed an emission inventory for each facility subject to the AB 2588 "Hot Spots" program. The District has determined that there are no significant risk facilities in the District.

The District operates, maintains, and manages the data generated for its gaseous and particulate matter ambient air monitoring site at Lakeport. The Annual Quality Assurance Data Analysis Report for years 2001 to 2003 gave the District an accuracy rating of "excellent," a precision rating of "excellent," and a data capture rating of "excellent." In addition, Lake County received a "top performer" award in appreciation for their continuing efforts to meet ARB's ambient air monitoring data quality objectives for precision, accuracy, and data completeness for years 2001 through 2003. The District is also very active in conducting air monitoring efforts in areas around large scale geothermal operations. This ongoing effort known as the Geysers Air Monitoring Program (GAMP) monitors hydrogen sulfide and other contaminants to document long-term air quality trends in The Geysers Known Geothermal Resource Area. GAMP is managed under a Memorandum of Understanding by a consortium that includes public, industry, and regulatory members. The District is proactive on naturally occurring asbestos issues with the development of serpentine rules and public education information.

#### [Findings and Recommendations by Program Area](#)

As discussed in the overall findings, the District has several accomplishments to its credit. Particularly noteworthy is the fact that District staff is able to conduct its mission with limited resources. 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 Lake 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 detailed findings and recommendations for program improvement by program area.



## A. Compliance Program

This section covers the evaluation of the District's Compliance program. The evaluation consisted of an office review of relevant records, interviews with District management, 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](#)
- [Equipment Breakdown Program](#)
- [Source Testing and Continuous Emission Monitoring Programs](#)
- [Asbestos 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 and inspection frequency. 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 and Source Inspection Frequency

The APCO, in addition to providing leadership and overall management for the District, believes in a "hands-on" approach with respect to daily program activities, including source inspections. The District's inspection staff includes the Deputy APCO, the Air Quality Engineer, and an Air Quality Technician who are responsible for inspecting 389 permitted units. The Air Quality Technician position was budgeted for but vacant during the time of the review. The inspection staff is also responsible for permitting, source testing, California Environmental Quality Act project reviews, complaint investigations, and administering the agricultural burn program.

The District while inspecting the majority of sources, did not inspect all of its sources. Currently, all medium and large sources are inspected on an annual basis. Staff resources are rightly focused on large and problem sources. However, in this process, some small sources have not been inspected for several years.

The District is cautious in filling vacancies or asking for additional resources because it is not assured of receiving continuing funds on a long term basis. Being in attainment (for a vehicle related pollutant) precludes Lake County from charging vehicle fees under the provisions of HSC section 44223.

*Recommendation:* The District should continue its effort to inspect all permitted sources on an annual basis and focus on large and problem sources.

### A.1.2 Inspection Policies and Procedures

Chapter VII of the District's Rules and Regulations describes the categories of violations which could be encountered by District inspectors, and provides guidance on enforcing such violations. The District's preferred response to the violation is also described in its 1998 enforcement guidelines that were modified in July 2003. Guidelines for enforcing open burn violations are included in the 1998 document. The five violation categories are described below.

Category O: These are minor violations which are primarily procedural, have no emission impact, and do not result in a financial gain to the operator. A Memorandum of Verbal Warning (MOVW) or a Notice to Comply (NTC) are issued for these violations. MOVWs are issued when a minor violation can be immediately corrected in the presence of the inspector. The District keeps a written document of these MOVWs for future reference, but the source does not receive any written documentation of the noncompliance problem. MOVWs are unique to this District. NTCs are written notices issued to a person in the course of conducting an inspection and require a written response to be filed with the District as well as a certification of correction. The District has an NTC guideline that specifies when they should be issued. District inspectors may issue NTCs for minor violations in the field, without prior approval from a supervisor or manager.

Categories I through IV: These categories cover emissions-related violations and require the issuance of a Notice of Violation (NOV). The difference between the categories lies in the extent of harm caused to the environment and other factors such as operator intent, negligence, and past behavior. A direct citation (Notice to Appear in Court) may be issued when other levels of enforcement have failed or for serious offenses. The NOV may also be elevated to a Notice to Appear after review by the APCO, or if the operator fails to respond. District staff have arrest and citation powers to assist in enforcing air pollution control regulations.

ARB staff reviewed the District's logs to determine the type of enforcement action taken during the review period. NOVs were the majority of enforcement actions followed by verbal warnings. The majority of notices were issued for burn-related

violations followed by violations at gasoline dispensing facilities. This information is summarized in Table I for the review period (January 2001 through 2003).

**Table I  
Notice Issuance Summary**

<b>Type of Notice</b>	<b>Total Based on Review Period</b>	<b>Typical Examples</b>
MOVW <sup>1</sup>	64	Burning green vegetation; Smoke nuisance from burn pile; Potential for burning prohibited materials
NTC <sup>2</sup>	4	Broken fill cap; No air toxic notices; Failure to post permit
NOV <sup>3</sup>	94	Excessive visible emissions from silo; Failure to operate Equipment as permitted; Commercial burning
Arrest	01	Burning on a no burn day. Arrest for interfering with a fire official

<sup>1</sup>Memorandum of verbal warning

<sup>2</sup>Notice to Comply

<sup>3</sup>Notice of Violation

Most of the enforcement actions were related to open burn violations. Table II below gives the breakdown of enforcement actions by category for the review period (January 2001 through 2003).

**Table II  
Enforcement Actions by Category**

<b>* Notices Issued</b>	<b>Percent</b>
Burn	82
Gasoline Dispensing Facilities	6
Dust	6
Stationary Sources	5
Automobile Coating	1

\* Notices mean either MOVW, NTC or NOV.

Recommendation: None

[A.1.3 Inspection Documentation](#)

A review of NOVs and inspection reports indicates that the District adequately documents their inspection and enforcement findings. Inspection reports are prepared according to the District's inspection procedures and report preparation policy. The District uses source specific inspection forms for GDFs, power plants, geothermal wells, and open burning. A general field inspection report form is used for other source categories. Inspection reports include pictures,

visible emission evaluation forms, and notices issued. At the time of the review, recent updates of Title 17 requirements for GDFs had not been incorporated into the inspection forms. ARB staff understands that the District plans to automate form generation into the permit database when time allows.

*Recommendation: The District should update its inspection forms for GDFs to include the most recent Title 17 requirements.*

[A.1.4 Joint Source Inspections](#)

ARB and District staff conducted joint inspections at 12 facilities. These included two geothermal plants, two aggregate plants, a hospital, a landfill, an incinerator, and a soil & water decontamination site. In addition, ARB staff conducted inspections at eight GDFs. Table III below gives a summary of the inspection results, and [Appendix B](#) provides the detail results of these stationary source inspections.

**Table III  
Summary of Source Inspection Results**

<b>Facility/Equipment Type</b>	<b>Number of Facilities</b>	<b>Comments</b>
Geothermal Power Plant	2	In Compliance Inspection included source testing for H2S emissions from cooling towers
Aggregate Processing	2	In Compliance
Incinerator, IC Engines, Boilers, Furnaces	4	Two Facilities found in full compliance Two facilities were issued verbal warnings for minor nonemissions related violations: - inadequate records - permit not posted
Landfill	1	NOV issued for excessive fugitive dust
Auto Coating, Vapor Extraction, Waste Management	3	In Compliance
Gasoline Dispensing Facilities	8	Phase I - 6 facilities in full compliance Phase II - 1 facility in full compliance (about 30 percent of the 107 nozzles had torn face seals)

A summary of the compliance status for each source type is given below.

Both the geothermal power plants were found to be in compliance. Source tests were conducted at each facility’s cooling tower to determine hydrogen sulfide (H<sub>2</sub>S) emissions. The District is well equipped to source test and inspect its

geothermal power plants. The District has personal H<sub>2</sub>S safety monitors, source testing probes, Jerome units for measuring H<sub>2</sub>S, and a van with a mount for a probe. The District is very knowledgeable about the operation, inspection, and source testing of their geothermal power plants.

The aggregate plants inspected were in compliance. The equipment units and items inspected included diesel engines and fugitive dust control on roads and facility grounds. Inspected units at Redbud Community Hospital were essentially in compliance. A MOVW was issued for not having the permit to operate posted for an internal combustion engine. Other units inspected at this facility, and found in compliance, included an incinerator and two boilers.

An NOV was issued during the inspection of the Eastlake Landfill for poor fugitive dust control and excessive visible emissions. A MOVW was issued at the Lake County Animal Control incinerator for inadequate records. A visible emission evaluation was conducted on the incinerator during its operation and the unit was in compliance.

#### [A.1.5 ARB Staff Inspections of GDFs](#)

ARB staff found noncompliance issues at the District's GDFs. Six of the eight GDFs were in compliance with Phase I (underground storage tank) requirements. However, only one of the eight GDFs was in compliance with Phase II balance vapor recovery requirements. The most common problems found were torn nozzle face seals and torn hoses. In fact, out of the 107 balance vapor recovery nozzles inspected, about 30 percent were found to have torn face seals. Refer to [Appendix C](#) for detail description of inspection results. Part of the noncompliance problem at the District's GDFs may be due to the lack of routine inspections.

At the time of the program review, the District had 41 GDFs. Twelve were equipped with bootless vacuum assist systems. The District witnesses contractors conducting integrity testing, i.e., air to liquid ratio and leak decay testing, whenever possible.

*Recommendation: The District should conduct GDF inspections on an annual basis to improve phase II vapor recovery equipment compliance rate.*

#### [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 noncompliant 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.

ARB staff interviewed District staff, reviewed applicable policies and guidelines, and used reports generated from the District's database to obtain these findings. In addition, staff reviewed 10 mutual settlement files representing about 10 percent of NOVs issued during calendar years (CYs) 2001 and 2002. Chapter VII of the District's Rules and Regulations provides the framework for the District's legal action policies and procedures. In particular, Section 950 specifies the categories of violations that should be subject to the mutual settlement process.

### A.2.1 Policies and Procedures

The District has a number of guideline documents that provide for the day-to-day administration of the legal action program. The eight factors cited in HSC section 42403 are included in the guidelines. 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.

A list and brief description of the District's documents pertaining to legal action follow:

- "District Enforcement Procedure/Policy," dated April 1983, provides for the administration of the enforcement program and includes procedures to document NOVs;
- "Memorandum," dated October 1996, updates enforcement policies and approaches concerning burning at commercial facilities;
- "Enforcement Guidelines," last modified in July 2003, covers enforcement action responses, the issuance of NOVs, administrative or office conferences, and other legal action options;
- "Exhibit A," undated, includes the mutual settlement policy and civil penalty schedules (general and asbestos);
- "Exhibit B," undated, has guidelines for writing NOV reports and procedures to implement the mutual settlement program;
- "Exhibit C," undated, consists of a burn violation penalty schedule;
- "Mutual Settlement Notice of Violation Resolution," last modified in June 2003, provides guidelines regarding case settlement; and
- "Memorandum," dated March 2003, discusses civil prosecution of District cases.

It is our finding that, collectively, the guidelines and associated penalty schedules are adequate to meet the District's legal action program requirements. However, the different policies and procedures (as noted above) have areas of overlap and

even some minor inconsistencies. For example, two different documents discuss when the District may take no further action after NOV issuance. "Exhibit B" states that after the APCO reviews a NOV report, the District may choose one of three options: cancel an improperly issued NOV with no further action; settle the case internally through mutual settlement; or file a civil lawsuit. In comparison, the document entitled "Enforcement Guidelines" allows the District to take no further action on a properly issued NOV, based on the response of the responsible party. In the interest of promoting a cohesive legal action policy, it may be beneficial for the District to review, update, and consolidate the various guidelines into one working document.

*Recommendation: The District should consider reviewing the various existing guideline documents that pertain to legal action and consolidate them into one cohesive working document.*

### A.2.2 Documentation

ARB staff found that case files are adequately documented for legal action. The District issues a mutual settlement letter for all violations that are not retracted or referred directly to the District Attorney (DA) or County Counsel. The letter recommends a dollar amount and provides an opportunity for the responsible party to request an office conference. There is an additional release letter for settled cases for documenting final settlement.

The District's electronic database has most of the fields needed for tracking NOVs from issuance to final disposition. However, the utility of the database could be improved by adding additional fields such as: referral to the DA; violations that are dropped and the reason; and violations that settle for zero penalty amount (with explanation). ARB staff observed that not all fields in the database were updated. For example, a database report showed that approximately 30 NOVs had no data in the "Penalty Amount" field. Some entries were noted "case pending," but we could not determine the status of all these NOVs. Including more information in the database about the status of pending cases would help the District track the progress of these cases. Note, however, that the District staff maintains a hard copy file for each violation incident.

The District acknowledged that it will continue to maintain a complete hardcopy record as the official enforcement file for each violation incident. The District stated that it has completed the development of the tracking database, but acknowledged that it remains only partially populated with historic data through 2004. However, the District agreed to attempt to keep the database fully populated.

*Recommendation: The District should improve the utility of its database by adding specific information about the status of pending cases and a brief reason why NOVs are dropped or result in zero penalty. The District should continue its*

*efforts to populate its database and should regularly update NOV settlement information in its database.<sup>2</sup>*

### A.2.3 Case Disposition

The District uses its mutual settlement program to settle violations. For CYs 2001 and 2002, an estimated 94 NOVs were issued. The District's database indicates that approximately 64 of these NOVs were settled at the time of the review.

Table IV gives the major source categories and penalty ranges of the 64 settled NOVs that were issued in CYs 2001 and 2002. Tabulated figures are based on a report from the District's NOV database.

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<sup>2</sup> Subsequent to the review, the District has presented an NOV log for July 2004 through June 2006, which shows successful implementation of this recommendation. The current NOV log is much more complete, and NOV settlement information has been updated.



**Table IV  
Summary of Penalty Settlement Amounts and Ranges by Source Category  
for Closed NOVs Issued in CYs 2001 and 2002**

Source Category	# Closed NOVs (Including Those Settled for Dollar and Zero Amounts)	Recorded Penalty Amounts	# of NOVs Closed with Zero Penalty Amount	Penalty Range (from actual case settlements)	
				Lower	Upper
Open/Agricultural Burning*	50	\$13,775	27* (54%)	\$50.00 (typically for residential burning – improper hours or materials)	\$3,500.00 (higher penalties typically for larger commercial or agricultural cases)
Dust	5	\$3,693.74	0	\$150.00 (excessive road dust)	\$1,843.74 (construction in serpentine; construction without permit)
Gasoline Dispensing Facilities	3	\$1,761.08	0	\$150.00 (missing hold open latches)	\$1,225.00 (multiple deficiencies)
Stationary Sources	6	\$2,356.40	1	\$356.40 (construction without permit)	\$500.00 (excessive visible emissions; construction without permit)
<b>Total</b>	<b>64</b>	<b>\$21,586.22</b>	<b>28 (44%)</b>		

\*25 out of 27 were for residential burning cases. Also note that 2001 and 2002 were the first years of new, more stringent burn rules.

As indicated in Table IV, staff found that the District is successfully able to settle almost all violations related to dust, gasoline dispensing facilities, stationary sources, and agricultural burning. The District has not been able to get similar results for violations issued for residential burning cases. It should be noted that during 2001 and 2002 the new, more stringent rules came into effect. Also, we should note that there were no repeat violators from the zero penalty cases. To ensure deterrence of future noncompliance, ARB staff recommends that no more than ten percent of NOVs are dropped or result in no further action. This figure is based upon our experience and is accepted by many districts as a desirable target for a mutual settlement program.

Subsequent to the original review, the District has presented an NOV log for July 2004 through June 2006, which shows a more successful resolution of residential burning cases.

ARB staff spoke to the County Counsel at the time of the program review. The County Counsel informed ARB staff he would give the District his full support in prosecuting referred cases.

*Recommendation: The District should reduce the number of cases settled for zero penalty in the residential burning category.*

### A.3 Complaint Program

Overall, the District's air pollution complaint handling program is operating in an effective manner. The District documents and conducts on-site investigations of the majority of complaints within 24 hours of receipt.

The District has written complaint procedures in place that were last modified on March 4, 2003. The District's written procedures and guidelines indicate that complaints received on weekends and after-hours should be investigated the following business day. According to this policy, after-hour complaints should be investigated only if an air quality incident appears to pose a serious threat to health or safety to a considerable number of people.

The District has the ability to respond to complaints after normal business hours and during weekends. The District's answering machine directs (after hours) callers to District personnel assigned to cover incoming complaints received during non-business hours. District staff, as a matter of policy, does call back in all cases except when impossible (such as when the complaint is anonymous). A review of complaint reports revealed that complaints are entered, logged, and tracked until closed. The review also found the complaints are being screened, assigned to appropriate staff, and reviewed by the APCO. The District indicated that it makes all efforts to inform complainants about the results or status of the complaint investigation. The District believes all complainants deserve a call back and believe those that left a valid number or address received a call back or response. However, the District's complaint investigation forms do not always reflect this fact.<sup>3</sup>

The District received a total of 229 complaints during calendar years 2001 and 2002. ARB staff randomly selected and reviewed 42 complaints to determine the nature and type of complaints received by the District. Based on our sample, approximately 60 percent of complaints were found to be related to agricultural burning (wildfires, agricultural) and non-agricultural burning (residential back-yard burning, illegal construction material burning). Complaints related to odors or

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<sup>3</sup> Subsequent to the review, the District programmed its database to document that the complainant has been informed about the results or status of the investigation.

fumes were approximately 21 percent of the total. Examples in this category include complaints related to diesel exhaust or stationary source facilities (potential geothermal sources, automotive spray painting facility are examples in this category). Dust complaints from construction sites accounted for 14 percent of complaints. The remaining 5 percent of complaints were related to pesticide spraying and particulate matter (described as spider webs by the complainant).

*Recommendation: The District should make sure that complaint investigation forms indicate that the complainants are informed about the results or status of the complaint investigation.*

#### A.4 Equipment Breakdown Program

If a source reports a breakdown condition, the District's breakdown rule protects that source from enforcement action, provided all qualifying conditions listed in the rule are satisfied. 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 program was evaluated with respect to receipt, investigation, and resolution of equipment breakdowns. For CY 2001 and 2002, the District received information on eight events which could be classified as breakdowns.

The District's system for receiving breakdown reports needs improvement. There is no dedicated log for recording breakdowns reported by sources.<sup>4</sup> The District receives approximately 200 calls per year. All calls received from the public (including breakdown related calls) are initially added to a hand written "Event/Activity" log and then transferred into a computer database. This database includes notifications of agricultural burn activities, wild fires, sewage spills, maintenance activities at geothermal plants, and venting of geothermal wells. Due to the importance of breakdown calls in terms of excess emissions and the need for timely District investigation, it is recommended that a dedicated log be used for receiving breakdown calls.

The District staff indicated that the only event calls that could be classified as breakdowns occurred at the District's geothermal power plants in the dip tube portion of the Stretford process for controlling hydrogen sulfide emissions. The District used its database to sort out the dip tube events and found that eight of them occurred from CY 2001 through 2002. ARB staff made the following findings based upon the eight potential breakdowns:

- o All of the entries have a date and time documented; however, the time the breakdown was discovered by the source and the time the District received the call from the source is not always clearly documented;

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<sup>4</sup> Subsequent to the review, the District agreed to attempt to include all breakdowns in a separate log.

- o There is no documentation indicating if an on-site investigation was conducted;
- o The database did not show if the source sent documentation explaining the events; and
- o The final resolution for two events (7/25/01 and 2/20/02) was uncertain and the six other events were allowed relief from enforcement action.<sup>5</sup>

The District's Breakdown Rule has most of the requirements of ARB's Model Breakdown Rule and does not allow process upsets to be considered as valid breakdowns. However, the District Rule on this subject does not give sufficient guidance to a facility on information which should be included in a breakdown notification. The District has a "Stretford Bypass" report form which is specific for reporting breakdowns from geothermal operations. To allow other source categories to submit breakdown information in a consistent manner, we recommend the use of a standard reporting form. This notification or reporting form should have fields for supplying critical information such as: time of breakdown, location, equipment involved, cause of occurrence, excess emissions involved, and steps taken to minimize emissions.

The District has a policies and procedures document for breakdowns that was last updated in July 2003. The step-by-step procedure describes how staff should handle a breakdown or malfunction notice when a call is received and summarizes the requirements of the District's Breakdown Rule. The District maintains an office answering machine with on-call staff phone numbers for after hour or weekend calls.

*Recommendations: The District should consider developing a written log specifically for breakdowns. This written log could provide some of the details that are not always available from the District's Event/Activity Log. These details include: the time the breakdown was discovered and the time it was reported to the District; the time the breakdown was corrected; the specific equipment affected (permit number); the location or address of the facility; the results of District investigation from telephone conversations or from on-site investigations conducted and if a variance was issued; and the final resolution of the breakdown (allowed, not allowed, and if NOV issued).*

*The District should consider developing a breakdown report form for non-geothermal operations that follows Sections A-J of the District's Breakdown Rule. The form could help staff record all the elements required by the District's rule when a source notifies the District about a potential breakdown event. It may also help the District track recurrent breakdowns of the same equipment.*

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<sup>5</sup> Subsequent to the review, the District provided hard copy information showing that breakdown relief from enforcement action was provided for the events on 7/25/01 and 2/20/02.

## A.5 Source Testing and Continuous Emission Monitoring Programs

Due to the small permit inventory and type of sources under permit, source testing has been required at geothermal power plants, gasoline dispensing facilities, and an asphalt plant.

The District tests all the geothermal power plants annually and some geothermal facilities twice a year. The District conducts source tests on geothermal power plants to determine compliance with H<sub>2</sub>S emission limits. The District has the capability to calibrate its source test equipment and is very knowledgeable about this source test procedure. The District has a computer program to determine H<sub>2</sub>S emissions based on data gathered during source tests. The District has a small lab where it calibrates Jerome units that measure H<sub>2</sub>S emissions. The District has calibration gases and laboratory equipment.

The District has a published document titled, "An Improved Air Emissions Source Test Technique for BACT Equipped Geothermal Power Plants" that was published in the Geothermal Resources Council BULLETIN. The document explains the District's procedure for source testing geothermal power plants. The District keeps bound quarterly copies of all the source tests that it performs. Each quarterly report has a summary sheet listing the source tests that were performed for the quarter.

The District has the capability to conduct dynamic backpressure tests at GDFs equipped with balance-type vapor recovery systems. The District also observes contractors that do air to liquid testing and storage tank leak decay testing at GDFs.

The District requires the asphalt plant to submit a testing protocol to the District prior to the source test. Granite Construction uses an ARB certified source testing contractor to test its emission limits at the asphalt plant in Kelseyville. District staff observe the source tests.

Failed source tests result in the issuance of NOVs. The District said it has been about five years since they last issued an NOV for a failed source test at a geothermal power plant. The District issued an NOV to a GDF for a failed leak decay test and a failed air to liquid ratio test in 2003.

With respect to tracking the upcoming source test dates, the District has a field in its database tables that tracks the source test date of permitted facilities. However, it appears that the District is not using this feature to track the testing of GDFs (since the field is left blank).

There are no sources in the District that are required by permit to operate to have Continuous Emission Monitors. However, the District's geothermal power plants have process monitors that continually track H<sub>2</sub>S emissions. The sources send

quarterly reports of process monitor data to the District. The process monitors are also examined during facility inspections.

Recommendation: None

#### [A.6 Asbestos Program](#)

The District is responsible for enforcing the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Asbestos under the Code of Federal Register 40 Part 61, sections 61.145(a), (b), and (c) and sections 61.150. The District adopted the Asbestos NESHAP under their Rule 467 Asbestos Emission Control Measure. Unlike most delegated districts, the District does not receive U.S. EPA's 105 Grant money. Therefore, it is not subject to U.S. EPA's 105 Grant requirements.

ARB staff reviewed notifications, inspection reports, notice of violations, and the system used to track notifications. Joint inspections were not conducted due to the lack of asbestos abatement activity at the time of the program review. District staff was interviewed as part of the review process.

Staff has their asbestos certification and medical surveillance up to date. Staff also has the necessary inspection safety equipment. Due to the lack of asbestos abatement activities, ARB was unable to perform a joint inspection. The District generally follows U.S. EPA's inspection protocol when inspecting Regulated Asbestos NESHAP sources. The District also requires facilities to install view-ports on every jobsite.

The District reviews the asbestos notification forms to ensure completeness and accuracy. They also maintain a system that tracks all asbestos notifications. The District submits the notification documentations to the U.S. EPA quarterly. For the period between 1/1/00 through 8/19/03, the District received 31 renovation/demolition notifications, and conducted about 15 inspections. For this same time period, the District did not issue any NOVs.

The District settled five NESHAP related notices of violations from 1996 to 2000. Violation notices issued during inspections were settled for amounts comparable to other districts.

Recommendation: None

#### [A.7 Air Facility System Program](#)

The U.S. EPA compliance and permit database for stationary sources is called the Air Facility System (AFS). The requirements for AFS are governed by the Continuous Monitoring Strategy (CMS) policy. This policy requires districts 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 will include reporting of components of a Full Compliance Evaluation (FCE) on a quarterly basis, and reporting High Priority Violations (HPVs) on a monthly basis.

The District defines a major source as one that has an emission rate greater than 100 tons per year for any one criteria pollutant or a Hazardous Air Pollutant (HAP) emission rate greater than 10 tons per year for a single HAP or an aggregate emission rate of HAPs greater than 25 tons per year. Ammonia and hydrogen sulfide (H<sub>2</sub>S) are emitted from some geysers power plants in excess of 25 tons per year. Even though these two pollutants are considered by ARB to be toxic air contaminants, they are not designated HAPs by U.S. EPA; therefore, they are not defined as a source subject to AFS reporting requirements.

Since, the District has no major sources or synthetic minor sources, there are currently no requirements for data submission to AFS. During the permitting process, the District determines if a source has reached the major or synthetic minor source emissions threshold. ARB provides AFS data entry for FCEs and HPVs should the need arise.

The District is following the requirements the CMS Plan covering High Priority Violations. The documentation is adequately stored and easily accessible.

Recommendations: None

#### [A.8 Variance Program](#)

In order to evaluate the adequacy of the District's variance program, ARB staff reviewed variance files, evaluated an audio recording of a variance session and interviewed the APCO. During the study period, which was defined as fiscal years (FYs) 01-02 and 02-03, the Hearing Board issued seven variances, six of which were emergency variances and one an extension of an emergency variance.

Our findings indicate the District may have some confusion as to the type of variance that is applicable when a source petitions the Board for a variance. An emergency variance should only be used for the temporary protection of a facility from non-compliance with a district rule or permit condition resulting from an unforeseen situation. This usually involves a breakdown condition which does not give the source sufficient time to meet the noticing requirements of HSC sections 40823 through 40826. ARB staff found two examples where the variance sought was incorrectly referenced as an emergency variance.

In the case of board order # 2003-02, the hearing was duly noticed and hearing procedures were conducted according to the proper issuance of a 90-day variance (i.e., 10-day notice, proper quorum, and all findings made at the

hearing). Therefore, this variance should have been referenced as a 90-day regular variance instead of an emergency variance.

In the case of board order # 2003-01, the petition was filed on March 18, 2003 for a variance which was to be effective in May 2003. The hearing was held on March 27, 2003. ARB staff is of the opinion that since the District had sufficient time for proper noticing and conducting the hearing using regular hearing procedures, the petition should not have been handled as an emergency variance. From a procedural standpoint, the District should have published the notice, allowed for a 10 day noticing period, and called it a regular 90 day variance. It is important to note that our comments are on procedural issues only. In both cases the Hearing Board made all six required findings and also included a statement on the excess emissions which would result from the sources during the period of variance. However, since the issuance of variances is a quasi-judicial proceeding, it is important for an air district to reference the applicable variance type and follow its corresponding procedural requirements. To provide additional clarification on these issues, ARB staff is willing to make a technical presentation to the District Hearing Board and relevant staff.

Subsequent to the review, the District has agreed to have ARB hold a Hearing Board Variance Workshop. This will serve to clarify and discuss issues with District staff and Hearing Board members. The workshop will also serve to remind Hearing Board members of their role and responsibility in ensuring that procedural and substantive requirements of the HSC are followed in regards to variance petitions and permit appeals.

Two variances (2003-03 and 2003-04) were granted for vapor recovery equipment. The written order states that the variances were granted from HSC sections 41954 (Gasoline Vapor Control, Procedures; Standards; Certification; Fees) and 41960.2 (Maintenance of Vapor Control System; Identification of Equipment Defects). While the issuance of a variance may have been appropriate in this case, only District rules, not HSC, should be cited in the board order. A hearing board does not have the authority to grant variances from State law (with the exception of HSC section 41701 or an air toxic control measure), only from the District's own rules or regulations. In summary, with the exception of HSC 41701, only District rules or the appropriate air toxic control measure should be cited in a variance order.

Variance orders are not specific when stating which District rules apply. For example, two variance orders (2003-03 and 2004-04) state that the variance was granted from Rule 439.5. Therefore, the variances were granted for 439.5 in its entirety, however, they were only meant to be granted from Rule 439.5.A. The Hearing Board and the District must be diligent in writing orders that specifically define what rule(s) apply to a variance, so as to avoid issuing a variance from more provisions of a rule than is necessary and for enforceability purposes.



We recommend the District make appropriate revisions to its rules and regulations to make the variance provisions consistent with the requirements of State law on this subject. The following comments refer to Chapter X, Articles I and II of the District's Rulebook:

1. Article I subsection 1701 (G.) mentions "Petition for Revocation" and (H.) mentions "Reinstatement of Suspended Permits". It appears these items don't pertain to Article I Interim Variances and should be removed. Further, language should be included that makes it clear that an interim variance may only be applied for after a short or regular variance application has been filed with the District. (HSC section 42351(a)).

2. Article II, section 1710 refers to the findings that must be made under HSC section 42352 in order for a variance to be granted. This section is not entirely inclusive of the findings contained in HSC section 42352(a). Specifically, section 1710 has not included HSC sections 42352(a)((4) &(5) &(6). Additionally, subsection 1710(A) should be made consistent with HSC section 42352(a)(1).

The District has designed a "Variance Petition" form which is used by facilities to apply for all variances. We have several suggestions to improve the usefulness of this form and to make it technically consistent with the provisions of State law. The current form only allows an applicant to apply for an emergency or interim variance.<sup>6</sup> The form does not include information to apply for a 90-day (HSC section 40825) or regular variance (HSC section 40826), a modification of an increments of progress schedule (HSC section 42357), an interim authorization (HSC section 42351.5), a product variance (HSC sections 42365 et seq.), or an extension of a variance (HSC section 40826). These should all be included as options for the applicant. The form should also be modified to indicate that no interim variance application can be filed before an application for short or regular variance is received.

*Recommendations: The District and the Hearing Board should only refer to emergency variances and the procedures pertaining to an emergency variance for situations which qualify as true emergencies. All other situations (depending on case specifics) should be correctly referenced to as regular, short, or interim. The Hearing Board should not grant variances from State law (with the exception of HSC section 41701 or in special circumstances an air toxic control measure). The District should amend Chapter X, Articles I – II of the District's Rulebook to incorporate rule improvement suggestions as mentioned above. The District should also modify its Variance Petition form to improve its effectiveness. The District should follow through with its agreement to facilitate a technical presentation by ARB staff on variance issues to the Hearing Board and relevant District staff.*

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<sup>6</sup> Subsequent to the review, the District updated its variance petition forms.

## A.9 Open and Agricultural Burning Program

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

The District has a comprehensive Burning Procedure document, last modified in September 2003, to provide guidance in issuing all types of burn permits, recording the daily burn messages, and using the compliance inspection door hanger notices. It also outlines information on burning enforcement policies, and lists the elements required in smoke management plans.

The Lake County Pear and Grape Pestcast Network is a series of weather stations strategically scattered in the county, including some purchased by the District, which download data overnight to a base computer weather database. The website provides information for the Lake County Weather Page, twice-daily weather forecasts, and real-time hourly data during the peak frost season, March to May.

The District has developed a large number of public information brochures, printed in the English as well as the Spanish languages. These include: Agricultural and Open Burning, Residential Burning Guidelines, Residential Leaf Burning, Burning Information for Contractors and Builders, and Composting.

The District, in conjunction with the Lake County Fire Safe Council, encourages growers and residents to chip prunings and brush for fire hazard reduction. There is a chipper program, and flyers listing prohibited materials for chipping and for burning. There is also a list available of landscape, gardening, and tree service providers in the county.

The rules are consistent with the Smoke Management Guidelines in Title 17 and with the open burning and agricultural burning rules in the HSC. The District's open burn rules, section 431, Non-Agricultural Burning, and Chapter VIII, Agricultural Burning, maintain the categories used in the HSC. The definitions are all contained in Chapter I, Article 2 of the rulebook.

The rules are clearly written and easy to follow. In many cases, they are more advanced and provide more detail than State law. The burn hours are more limited, smoke management precautions are present in every burn category, and the burning of prohibited materials is repeated throughout the rules. All types of burning are prohibited during the Fire Season Burn Ban, May 1<sup>st</sup> until the ban is

lifted at the end of the fire season. Agricultural burning is allowed during that time only for serious economic reasons.

The rule lists the agencies designated to issue agricultural burn permits, and contains a tabular guide for estimating fuel-loading for various fuel types and burn pile sizes.

The District has developed burn permit forms specific to each type of burn. These forms include: Department of Public Works vegetative wood waste, land development and lot clearing, special permit to burn standing tule, no-burn day permit, smoke management plan, agricultural burning, residential burns, and residential exemption burn permit. The permit is valid for one season.

The District's No-Burn Day Permits numbered 22 in CY 2002. The majority were issued May through October, and rather than permitting burns on no-burn days, these burns were permitted for burning during the Fire Season. Fire season is a period of general prohibition of burning for fire safety purposes and not necessarily for poor air quality conditions.

Persons and agencies conducting prescribed burning are required to submit a smoke management plan to the District. The conditions and information required are consistent with Title 17.

The District has made the open burn permit conditions as strict as those for agricultural burning, and has limited the residential ignition hours to between 9 am and 3 pm. During the Fire Season, agricultural burning is limited to between 8 am and 12 noon. Permit conditions warn that the burner will be held liable for suppression costs, and/or will be issued an NOV if the burn creates a smoke nuisance.

The District does not operate a daily burn authorization program, as there is not that much burning. It does limit the amount of material that can be burned on any one day in the case of large range or forest burns. Emissions are calculated for ARB's emission inventory based on the most recent crop report compiled by the Lake County Agricultural Department.

The District staff is very proud of the fact that they are in attainment for both the federal and state standards for particulate matter. About 82 percent of the NOV's issued are for burn-related offenses. Half of the burn offenders do not live permanently in the District. Residential burns and those of amateur vintners are usually the problem. Before the summer Burn Ban season, most of the complaints received by the District are related to burning. During the Burn Ban season, most of the complaints are more about dust-related emissions.

Inspectors are on call after-hours and on weekends. During normal office hours, if they see a pile ready to burn, they will stop and inspect the pile and leave a warning notice if they see prohibited materials in the pile.

Recommendation: None

## B. Permit Program

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

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

The following discussion covers:

- Permit Administration – General
- Adequacy of Permit Conditions
- Organization and Adequacy of Permit Evaluations

### B.1 Permit Administration - General

Lake County has a sparse industrial base, which leads to lower permit activity compared to other larger districts. On average, the District processes about 20 permit applications per year. These relate to geothermal power plant operations, aggregate plants, soil/ground water remediation, boilers, internal combustion engines, and GDFs. ARB staff reviewed about 20 of the District's engineering evaluations done between 2001 and 2003 and reviewed over 40 of the District's Permits to Operate.

Projects which would be considered minor in other districts (such as a 0.9 MMBTU/HR propane fired incinerator at an animal control facility and a 15,000 gallon propane tank) are noticed in the local newspaper and allow for a 30-day comment period. Even when there is no applicable prohibitory rule, the District uses its discretion to bring a source under the permit umbrella so that it can better monitor its activities.

All of the District's full-time staff, including the APCO, participates in the District's permitting program. The APCO also provides supervision of the engineering evaluations. The District has 389 Permits to Operate in its database. There are about 100 separate permitted facilities in the District not including GDFs and geothermal wells. The District has 41 permitted GDFs.

The District does not have a permitting backlog. It takes the District about 30 days to issue Authorities to Construct, since they are usually issued soon after their 30-day public noticing period. The District has a permitting database that uses the Filemaker Pro, Macintosh-based program. With this system, the District has the capability to make source-categorized listings of its permitted facilities and review any permit to operate.

The District also has paper-files for all its sources arranged in alphabetical order. Each file contains a permitting activity log, public noticing documentation, Permit to Operate, engineering evaluation and correspondence. ARB staff had easy access to all the files, and District staff was familiar with the files and satisfied with their organization. Files for most source tests and inspections are kept separately to keep the size of the files manageable.

The District has separate logs for tracking Authorities to Construct and Permits to Operate issued. Each log has the A/C or P/O number, the applicant name, project name and date of issuance. In CY 2002, 23 Authorities to Construct were issued. Through August 7<sup>th</sup> of CY 2003, 17 Authorities to Construct were issued.

The District has policies and procedures for permitting. The policies and procedures are titled "Permit Processing Checklist." These policies have a discussion on the application processing of Authorities to Construct and permits to operate. It also has an example checklist for permit processing and an example activity log for permitting.

According to its policies, the District issues a public notice for nearly all Authorities to Construct, unless a minor modification is conducted. The District renews permits for its facilities annually by October 31<sup>st</sup> and issues them a new permit "card" once their fees are paid. The District also requests from all sources annual updates on permitted throughput levels.

Recommendation: None

## B.2 Adequacy of Permit Conditions

The District does not annually review the conditions in its permits for enforceability per HSC section 42301 (e). However, the APCO reviews all permit modifications.

Most of the conditions in the District's permits are enforceable; however, ARB staff encountered several permits with vague and unenforceable conditions. For example, in Authority to Construct #2002-5, which was for a diesel-fired boiler, a permit condition stated, "Diesel fuel utilized at this facility shall be the lowest sulfur diesel available...." The District's other permits often limit sulfur content of diesel fuel to .05% and this would be an enforceable limit for this condition (Note:

The District should consider updating its conditions to limit sulfur content in diesel fuel to 15 ppm beginning on September 1, 2006). In Authority to Construct #99-14A (renewed on 10/3/02 for a one year period), the purpose of permit conditions regarding the consumption of diesel fuel for two water trucks is not clear. We suggest that since these conditions were probably meant for a one time limited period during 1999, they should have been removed from subsequent renewals.

The District does not define “vapor tight” in its permit conditions, although the permit references the rule that does contain the definition. For example, permit #A/C 2002-1, which was for a dual phase extraction project and permit #A/C 2002-2, which was for a ground water treatment project, had conditions requiring equipment to be vapor tight. In general, ARB staff believes that permit conditions that solely state that the source must comply with a rule are less effective in achieving compliance since the source is required to review the rule to determine how to attain compliance. We also believe that a permit cannot act as a “stand alone” document with conditions that solely rely on another regulation.

*Recommendation: The District should annually review the conditions in its permits for enforceability per HSC Section 42301 (e).*

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

### B.3 Organization and Adequacy of Permit Evaluations

In its evaluations, the District discusses the location of various receptors relative to projects and any possible adverse impacts on residents. However, the District does not specifically verify compliance with HSC section 42301.6, which requires that each applicant verify whether the proposed source or modification is within 1,000 feet from the outer boundary of a school site.

*Recommendation: Each engineering evaluation should show explicit compliance with HSC section 42301.6.*

### C. Rule Development Program

The District's rule development program is proactive with respect to air quality. The regulations include air toxic control measures, NSPS and NESHAP rules (by reference), and detailed prohibitory rules for activities relevant to the District. These include rules for geothermal sources, non-agricultural and agricultural burning. In many cases, the rules addressing open-burning are more restrictive than what is required by State law. For example, the burn hours allowed are more limited, every open burning requires a burn permit, and residential open burning is permitted only if the lot is one acre or larger.

The District does not have the typical array of prohibitory rules for VOC, PM10, and NOx control, but can bring sources under permit, as needed. This is primarily because the District does not have a diverse industrial base which would necessitate adoption of additional rules. However, the District stated that they could do more with respect to rule development, outreach, and rule effectiveness studies if they had more resources.

The District ensures that rules are consistent with applicable provisions of the Health and Safety Code, Clean Air Act, State Implementation Plan, NSPS and NESHAPS. The county attorney and the ARB review all new rules.

The District ensures that ARB/CAPCOA protocols are met when submitting draft, proposed, and adopted rules to ARB. The District develops rules by following CAPCOA guidelines. A draft rule is sent to the ARB and at least one public workshop is held. A 30-day notice is given for workshops and hearings. The District gives adequate consideration to the planning and conduct of public workshops. Early meetings are held to identify problems. More than one workshop may be held if appropriate. Workshops may be held in the evenings. Spanish/English brochures are available on burn issues. A Spanish/English interpreter is available.

The current rulebook does not include adoption/amendment dates for each of the rules, which makes it difficult for industry and government to know if they have the most recent update. Having a rule revision date makes it easier to know what rule language was in effect at a specific time. This is necessary for any rule enforcement activity taken by the District. The District currently has no plans for updating their rulebook to reflect adoption/amendment dates for each of the rules. The District considers this a low priority because of limited resources.

*Recommendation: The District should consider noting the adoption and amendment dates by each rule "section" instead of relying on one overall rulebook revision date. This would help industry and interested public ensure they have the most recent rule.*



#### D. AB 2588 “Hot Spots” Program

The District is doing a good job with their “Hot Spots” program. Over the past decade, the District has been able to develop emission inventories for each of the large and small sources in Lake County. The District has completed the evaluation of all facilities subject to the “Hot Spots” program. ARB interviewed District staff and discussed the process of developing inventories for each facility. Since the District is so small and the sources are not overly complex, it is possible for District staff to develop inventories for each facility, rather than requiring facilities to submit inventory plans and reports.

The District has developed several simple spreadsheets that calculate emissions using a throughput estimate of fuel usage or material being processed. Gasoline stations are evaluated on an annual basis. All industry-wide facilities are evaluated by the District using survey data and inspection records on an ongoing basis. Since the District develops each of the inventories, there is sufficient consistency across all facilities in the same source categories.

The District requires new and modified permitted facilities to comply with the requirements of “Hot Spots”, as required in HSC Part 6 (sections 44300 to 44394). District staff evaluates facilities and prioritizes any projected emission increases to ensure that facilities meet “Hot Spots” requirements. To date, all facilities have been identified as medium or low-priority facilities.

The District has identified retail gasoline stations, boat repair facilities, cabinet shops, metal fabrication facilities, printing and publishing shops, sign shops, auto repair shops, and aircraft repair facilities as industry-wide.

Due to the small number of facilities, the District does not have a pressing need to maintain a large database for facility inventories. Hardcopy paper files are kept in several different areas of the office, depending on the type of information (permitting, inventory, compliance/inspections). The lack of an integrated data management system for emission inventories does not appear to impact the effectiveness of the District in implementing the “Hot Spots” program.

The District has provided the “Hot Spots” emission inventory data in paper hardcopy format to ARB every four to six years. The District continues to submit inventory data to ARB in paper hardcopy format, rather than in a California Emission Inventory Data and Reporting System (CEIDARS) transaction format that other districts have adopted. The District should report facility inventory reports on an annual basis using the CEIDARS transaction format.

The District prioritizes facilities using both the Emissions Potency and Dispersion Adjustment Procedures in the 1990 CAPCOA Facility Prioritization Guidelines. The District calculates priority scores in a spreadsheet that relies on a throughput estimate provided by the facility. It was not readily apparent when each facility

was evaluated and prioritized. The District should keep track of the date that a facility is prioritized.

The District automatically reprioritizes each facility when an inventory is updated. Gasoline stations are reprioritized on an annual basis since survey data is collected every year. Other major source categories are updated at least every four years, and the District reprioritizes these facilities at that time. The District has no high-level facilities and is not required to reprioritize facilities if the priority score is less than 10. Therefore, the District's actions are appropriate for reprioritization.

The District provides inventory updates for facilities in the "Hot Spots" program on an infrequent basis. The District does not regularly submit inventory updates, in part, because their computer system is not directly compatible with ARB's inventory database. District staff should work with their ARB CEIDARS liaison to submit data in a recognizable electronic format, or in the regular CEIDARS transaction format.

It is unclear if the District has added any new facilities to the "Hot Spots" program over the past several years. ARB staff reviewed the District's "Hot Spots" emissions update for inventory year 2001 and asked if a list of facilities in "Hot Spots" was available. The District completes inventory updates on spreadsheets rather than in a database, so it was not possible to easily see which facilities have been added to "Hot Spots" in the past few years.

The District develops inventories for facilities in the "Hot Spots" program. Each of the inventory reports focused on a limited number of toxics, but included diesel PM from stationary diesel engines. The District has done a good job calculating emissions for facilities. However, the number of pollutants for some facilities was smaller when compared with similar facilities in other districts. Also, there were several data elements missing from the "Hot Spots" report. As an example, there was no spatial data (UTM Coordinates) that describe where the facility is located and where each emission point (stack) at the facility is located. The District should collect more complete temporal and spatial data from facilities in the "Hot Spots" program. Also, facility emission inventories are not calculated to the appropriate degree of accuracy. In some cases, the District calculates emissions with a higher degree of accuracy than is necessary for developing a facility prioritization score. In a few cases, emissions of metals are reported with a lower degree of accuracy than is recommended in the ARB's Inventory Guidelines.

The District does not publish an annual report. The District publishes an emissions inventory report every four to six years and has no plans to provide annual reports.

*Recommendation: The District should report facility inventory reports on an annual basis using the CEIDARS transaction format. The District should keep*

*track of the date that a facility is prioritized. Files should be pulled into a database so the status of each facility can be displayed. The District should collect more complete temporal and spatial data for each facility. The District should provide the public with a brief document that describes the actions taken during the year, as well as a list of facilities and their status in the “Hot Spots” program.*

## E. Emissions Inventory Program

The data exchange process between the ARB and the District has shown some improvement. The District staff collects process rate data and calculates emissions data for facilities which emit 10 tons per year (tpy) or greater of any criteria pollutant on an annual basis. Most recently, this data has been used to update the statewide inventory for the 2001 inventory year.

The District has submitted updates to ARB's CEIDARS 2001 inventory for criteria pollutants. The District's recent updates and submittals appear to follow the four-year cycle recommended for toxic emissions under the modified AB 2588 emissions reporting guidelines. However, other air quality program mandates require annual emission inventory updates and data submittal for criteria pollutants. The District's effort to submit a merged 2001 data is acknowledged and appreciated. However, in the future, annual emissions inventory submittal in an electronic format (rather than hard copy) is recommended.

For data management, the District states that it maintains a data processing system containing emission inventory data that allows the District to compile criteria and toxic pollutants data into a single unit inventory. However, our review team was unable to verify compatibility of this system with CEIDARS2.5. The District should work with the ARB to find ways to provide annual merged criteria and toxic emission inventories to the ARB electronically, and in a format that is compatible with CEIDARS2.5. In order to track the status of facilities in the inventory, the District should submit an electronic list of all facilities as an attachment to the inventory submittal. To be current and up-to-date in the Community Health Air Pollution Information System (CHAPIS) and Consolidated Emission Reporting Rule (CERR), we believe an annual emission inventory update to ARB is necessary.

The District's point source data submittal for 2001 inventory year appears to be complete. There are 56 facilities in the ARB's 2001 criteria pollutants database. Almost all facilities contain temporal and spatial data. The most recent 2001 inventory year data submittal was in hard copy, and was manually key-entered into CEIDARS by ARB staff. Additional time may be needed to do effective quality assurance (QA) checks on the data. Such checks are necessary to verify that the data entered into CEIDARS from the hard copy is accurate and valid with respect to temporal, spatial, and other key-fields.

The District staff stated that they have a quality assurance (QA) program in place to check the data that they submit to the ARB. Based on discussions with District staff, all emissions data, including area and stationary sources, go through QA/QC checks before they are sent to the ARB. But the review team was unable to confirm the existence of such a QA/QC process or protocol.

The District has not adequately reported changes for new and closed point sources on an annual basis. As mentioned, the ARB CEIDARS database contains 56 facilities, respectively. Regarding the District's database and facility count, we are unable, through this review, to confirm the number of facilities resident in the District's database for the two consecutive inventory years. The District maintains an internal database structure and records. During the audit process, the audit team was not given access to the District database. This made it difficult to determine an accurate facility count for the different inventory years. Additionally, it appears that the District's criteria and toxic facilities are not electronically merged.

In their 2001 emissions inventory data submitted in hard copy, the District did not provide ARB with updated Source Classification Codes (SCC). Based on the District's 2001 database year quality assurance (QA) reports, there were several SIC/SCC combinations that were improperly assigned to different facilities and processes. For example, in several instances, SIC (9999) and SCC (9-99-999-99) were used as placeholders because the District did not provide proper or applicable SCCs/SICs. The result is that, for point sources, the overall quality of the emission inventory data is in question because SCC codes are directly tied to emission factors, and ultimately to the emission estimates. As soon as a new SIC/SCC combination is used or assigned, the District should notify ARB staff so that the new combination can be included in the proper category table. This will prevent emissions from a source category being assigned incorrectly or lumped into a miscellaneous category.

The District has done an outstanding job with "open burning" as an area source category. However, the District has not adequately documented, estimated, and updated criteria and toxic emissions for other area source categories for which it has responsibility. Of the several area source categories for which the District has responsibility, the District has only a documented methodology for the "Agricultural and Open Burning" category. It is recommended that the District continue documenting all relevant area source methodologies and make them available to ARB and the public, preferably on the District's website.

The District believes that many of the sources in the area source category, such as gasoline stations or auto repair shops, can be addressed under "industry-wide" categories. Moreover, the District believes that because they are in an "attainment area," some of the area source categories emissions are not significant in the overall scheme of their emission inventory program. Also, some of these sources are under permit. Consequently, they are included in the stationary source category, making their inclusion in the area source category unnecessary.

As area source data may be used for statewide regulatory purposes, we believe that the District should submit to ARB complete and updated criteria and related data for each area source category for which it estimates emissions. This data is

also required by HSC sections 39605(b), 39607(b), 39650(d), 39665(b)(1), and 40701(g). The data submittal should include process, pollutant, temporal, and spatial data as defined by the most recent version of ARB's emission inventory database (CEIDARS) transaction format and guidelines, and as required by the U.S. EPA's CERR. In addition, area source emissions submitted to ARB should be reconciled.

ARB staff found that the growth data set used for emission forecasts are comprehensive and provide sound growth and control models for estimating future year emission estimates. The District is encouraged to review and use, as needed, ARB's default growth data for their emission forecasts. The 2001 Pechan study serves as the primary source of growth surrogates for agricultural categories. Additionally, ARB has developed specific growth surrogates for agricultural categories in coordination with the Agricultural Advisory Committee. Also, other districts have developed and submitted, in collaboration with ARB staff, growth surrogates for specific emission categories.

To facilitate exchange of ideas, districts are encouraged to publish such data on their respective web sites or other public domain. The accessibility of these types of data will encourage inter-district emission estimation methods' exchange, and ultimately enhance the quality of our emissions inventory process.

*Recommendation: The District should find ways to provide annual merged criteria and toxic emission inventories to the ARB electronically, and in a format that is compatible with CEIDARS2.5. In order to track the status of facilities in the inventory, the District should submit an electronic list of all facilities as an attachment to the inventory submittal. The District should submit their area source categories annually. All relevant area source methodologies should be made available to ARB. To avoid double counting of emissions, the District should work with their ARB's emissions inventory liaison to determine which area sources, if any, should be reconciled. As soon as a new SIC/SCC combination is used or assigned, the District should notify ARB staff so that the new combination can be included in the proper category table.*

## F. Ambient Air Monitoring Program

ARB staff conducted a system review of the District's ambient air monitoring program in order to evaluate its compliance with the requirements of the U.S. EPA's 40 CFR, Part 58, and the U.S. EPA's Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II, April 1994. The District operates one site in Lakeport. The site consists of a continuous ozone analyzer, a PM10 sampler, a PM2.5 sampler, a nephelometer, an AISI (American Iron & Steel Institute) tape sampler, and a laboratory for the analysis of the PM filters. The District is responsible for the operation and maintenance of the instrumentation as well as the management of the data generated.

The District does not have a standard operating procedure for emergency episodes, such as unhealthy particulate levels caused by a fire. Currently, the APCO handles each emergency episode on a case-by-case basis. There is no set procedure to follow if the APCO is unavailable.

The Lakeport site, in general, was clean and well maintained. Logbooks and quality control checks were current and up-to-date. All quality control records were maintained in a bound and secure notebook or electronically. Data are recorded on a strip chart recorder and backed up on a data logger.

The District's site operators review all data and take appropriate action to correct any deficiencies or problems with instruments or other equipment. The District meets all siting requirements as outlined in the U.S. EPA's 40 CFR, Appendix E, and is continually reviewing site parameters to ensure compliance. The District utilizes 47 millimeter Teflon filters for both PM10 and PM2.5 monitoring. All filters are weighed on the same balance. The stricter U.S. EPA guidelines for PM2.5 are followed by the laboratory.

As part of their regular schedule to ensure data validity, District staff conduct automated zero/span checks and automated precision checks daily, and semi-annual calibrations. The results of these checks and calibrations are used to validate, correct, or invalidate data. Station operators also conduct a visual inspection of the station and note any changes that have occurred since their last visit. The inspection includes an evaluation of the surrounding area. Any changes that may have an impact on reported data are noted and addressed as quickly as possible to prevent any adverse impact.

The Annual Quality Assurance Data Analysis Report for years 2001 to 2003 gave the District an accuracy rating of "excellent," a precision rating of "excellent," and a data capture rating of "excellent." In addition, Lake County received a "top performer" award in appreciation for their continuing efforts to meet ARB's ambient air monitoring data quality objectives for precision, accuracy, and data completeness for years 2001 through 2003.

The District is also very active in conducting air monitoring efforts in areas around large scale geothermal operations. This ongoing effort, known as the Geysers Air Monitoring Program (GAMP), monitors hydrogen sulfide and other contaminants to document long-term air quality trends in the Geysers Known Geothermal Resource Area. GAMP is managed under a Memorandum of Understanding by a consortium that includes public, industry, and regulatory members. Three continuous monitoring stations are now operated in Lake County at Pine Summit Estates, Anderson Springs, and Glenbrook. Two meteorological data stations are also located on the Lake/Sonoma County line. Special projects to measure other components such as ammonia, mercury, and metals have been incorporated, and are occasionally still conducted as part of the program. The District informed ARB staff that historically there have been as many as seven hydrogen sulfide stations, and up to 17 entities participating in the program. Members meet quarterly to review and validate the data that has been collected and to guide future efforts.

*Recommendations: The District staff should continue to operate their air monitoring system in accordance with their established methods and procedures, and to establish a standard operating procedure for emergency episodes.*



**Appendix A**  
**Lake County AQMD Response to Report Recommendations**

**LCAQMD Response to Recommendations  
to the December 11, 2007 Draft  
by the  
California Air Resources Board of the  
*Lake County Air Quality Management District Program  
Report of Findings and Recommendations***

**PREAMBLE**

The Lake County Air Quality Management District (LCAQMD) program was reviewed by ARB audit teams, during the months of August and September 2003 with an “exit interview” conducted in September 2003. Several drafts were received starting in September 2006; the draft of December 11, 2007 is the revised final draft responded to herein. By protocol, LCAQMD staff comments are to be included with the draft commented on to become the final circulated Audit Report. The LCAQMD staff especially thanks the Division level staff that attempted to ensure a measure of fairness and accuracy in the report not present initially.

The process has taken extensive LCAQMD time and resource, and caused unnecessary angst for LCAQMD and (we suspect) ARB staff. The overwhelming majority of ARB staff audit teams were proficient, fair, experienced and helpful. Corrections, or changes, if needed and practical were made at or near the time of the audit. The intervening period of three years between the actual audit and the first draft resulted in ARB personnel change and loss of continuum, which likely contributed to errors and resource demand to correct.

The LCAQMD staff takes pride and cares greatly about the success and reputation of our agency. We realize and acknowledge our success over the last several decades would not have been possible without the considerable help and teamwork of successive and numerous ARB staff. At the time of the Audit, 60% of our staff had worked together for 20 years, and it is our collective judgment that the process is unnecessarily disruptive of ongoing District function.

In the following sections we specifically address each program area recommendation covered in the report. Many issues are dated at this point and we intend our response to serve as the basis for further discussion. A couple of remaining errors, or perhaps disagreements as to fact, we have again provided correction to on the record.

We thank the many ARB staff members for their courtesy, consideration and positive approach, which were clearly the rule and not the exception.

**A. COMPLIANCE PROGRAM**

**A.1 Source Inspection Program**

**Recommendation:** None – Summary Only

**A.1.1 Inspection Staff Resources and Source Inspection Frequency**

**Recommendation:** *The District should continue its effort to inspect all permitted sources on an annual basis and focus on large and problem sources.*

**Response:** LCAQMD staff agrees and always attempts to fulfill this goal. The audit did not specify a percentage of sources that had been inspected on an annual basis but at the time this goal was achieved with only a few exceptions. The comments regarding small sources would be primarily back up generators and non-fee-paying sources of little actual emissions and much difficulty in coordinating inspections.

#### **A.1.2 Inspection Policies and Procedures**

**Recommendation:** *None*

**Note:** The Memo of Verbal Warning (MOVW) is a two-part form, identical in appearance to an NOV, and a copy of the written warning is given to the responsible party. It is logged in the same manner as an NOV and is kept on record as a potential repeat consequence, but does not have a fine or further response requirement from the RP. As stated in the audit report, they are used mostly for minor immediately corrected burning violations and we believe effective while minimizing staff resources demand.

#### **A.1.3 Inspection Documentation**

**Recommendation:** *The District should update its inspection forms for GDFs to include the most recent Title 17 requirements.*

**Response:** LCAQMD staff agrees, and has automated form generation into the permit management database. However, ARB staff should recognize the LCAQMD's program operates under an approved alternative to the state ATCM enacted by our Board, and avoid criticizing the LCAQMD and using defects of the sort quoted when they were not incorporated into the defects list until September 2002 (too late to be part of permit annual renewal for 2003) and the ARB/ATCM until 2005.

#### **A.1.4 Joint Source Inspections**

**Recommendation:** *None – Summary Only*

#### **A.1.5 ARB Staff Inspections of GDFs**

**Recommendation:** *The District should conduct GDF inspections on an annual basis to improve phase II vapor recovery equipment compliance rate.*

**Response:** LCAQMD staff agrees with the recommendation and at the time of the audit had completed all such inspections with the exception of a single RGS station (we believe it was closed at the time) and two small Phase I only Marinas. Again, we do agree with recommendation and believe we can substantially accomplish on an ongoing basis. Starting in 2003 a major resource effort was carried out, but the cost benefit of the extra effort is doubted. Effectiveness of changes instituted at the state level on RGS (GDFs) for minor emissions reduction is doubted and the technologies are somewhat problematic with the resulting statewide poor compliance. We have required all RGS (GDF) subject to Phase II controls to hire an outside test company to inspect and source test annually.

#### **A.2 Legal Action Program**

**Recommendation:** *None – Summary Only*

### **A.2.1 Policies and Procedures**

*Recommendation:* The District should consider reviewing the various existing guideline documents that pertain to legal action and consolidate them into one cohesive working document.

**Response:** LCAQMD staff agrees with the goal as worthy, and has initiated and will be ongoing.

### **A.2.2 Documentation**

*Recommendation:* The District should improve the utility of its database by adding specific information about the status of pending cases and a brief reason why NOV's are dropped or result in zero penalty. The District should continue its efforts to populate its database and should regularly update NOV settlement information in its database.<sup>2</sup>

**Response:** LCAQMD staff has completed the tracking database but it remains only partially populated with historic data through 2004, although it was apparently relied on as complete data by ARB for the audit. Staff will attempt to keep it fully populated in the future; if we cannot do so, we will simply stop utilizing the computer database records. Whatever transpires, we will still maintain a complete hardcopy record as the official enforcement file for each violation incident (as was available at the time of the audit in 2003).

### **A.2.3 Case Disposition**

*Recommendation:* The District should reduce the number of cases settled for zero penalty in the residential burning category.

**Response:** LCAQMD staff agrees, and provided documentation to ARB audit staff that we had accomplished in a 2006 written submittal. As stated to ARB staff, and incorporated into the final audit report, a new, considerably changed, unique and effective residential burn rule was being implemented, and our Board requested the LCAQMD not to levy fines to first time offenders for new requirement violations during the initial year of implementation (2002-2003). Lack of support of any enforcement by the 'Roving Prosecutor' made the situation even worse and we had to set priorities. The Roving Prosecutor program was abandoned by the LCAQMD with the support of our local DA during the same period and the situation remedied by Board approval and use of County Counsel to pursue such violations civilly.

We appreciate the ARB staff breaking out of the statistic to show all but one case was residential burning and did not involve toxic emissions from illegal material. The other case involved a portable diesel generator operating at a stationary source that was immediately removed. None of the first time violators, which were not fined monetarily, have repeated during the subsequent 3 years.

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<sup>2</sup> Subsequent to the review, the District has presented an NOV log for July 2004 through June 2006, which shows successful implementation of this recommendation. The current NOV log is much more complete, and NOV settlement information has been updated.

### **A.3 Complaint Program**

*Recommendation:* The District should make sure that complaint investigation forms indicate that the complainants are informed about the results or status of the complaint investigation.

**Response:** LCAQMD staff, consistent with a decades old existing policy, does call back in all cases except when impossible (such as when the complaint is anonymous). We acknowledge the database log did not include this indication for a significant number of complaints but most often the hard copy form did. The database has been programmed to provide the alert message as indicated (and previously provided the ARB staff) to prevent closing an open record without resolving the status of call back. We do believe all complainants that left a valid phone number, or address, received a call back or written response. We acknowledge LCAQMD records were sloppily kept and did not provide written documentation of such.

### **A.4 Equipment Breakdown Program**

*Recommendations:* The District should consider developing a written Log specifically for breakdowns. This written Log could provide some of the details that are not always available from the District's Event/Activity Log. These details include: the time the breakdown was discovered and the time it was reported to the District; the time the breakdown was corrected; the specific equipment affected (permit number); the location or address of the facility; the results of District investigation from telephone conversations or from on-site investigations conducted and if a variance was issued; and the final resolution of the breakdown (allowed, not allowed, and if NOV issued).

**Response:** LCAQMD staff did attempt implementation and rejected such a procedure because it would be utilized so infrequently (only 2-3 times a year) that training and awareness of a specialized Log is not warranted.

Complete hard copy written form records for each of the events audited (with proper follow up and containing the data suggested) were twice provided to ARB audit staff for each of the incidents. It is not clear why ARB staff has not corrected this assertion and recognize that the breakdown follow up existed at the time, as is being recommended by ARB staff.

### **A.5 Source Testing and Continuous Emission Monitoring Programs**

*Recommendation:* None

**Response:** LCAQMD staff did enjoy the interactions and suggestions of ARB staff during the onsite Audit.

### **A.6 Asbestos Program**

*Recommendation:* None

LCAQMD staff did appreciate the interaction during the audit and the considerable support and help provided and being provided by ARB staff.

### **A.7 Air Facility System Program**

*Recommendations: None*

### **A.8 Variance Program**

*Recommendations: The District and the Hearing Board should only refer to emergency variances and the procedures pertaining to an emergency variance for situations which qualify as true emergencies. All other situations (depending on case specifics) should be correctly referenced to as regular, short, or interim. The Hearing Board should not grant variances from State law (with the exception of HSC section 41701 or in special circumstances an air toxic control measure). The District should amend Chapter X, Articles I – II of the District’s Rulebook to incorporate rule improvement suggestions as mentioned above. The District should also modify its Variance Petition form to improve its effectiveness. The District should follow through with its agreement to facilitate a technical presentation by ARB staff on variance issues to the Hearing Board and relevant District staff.*

**Response:** The District staff does disagree with the reviewer and assertion. It is our opinion the ARB reviewer is mistaken and perhaps confused; the Emergency Variances were given in good faith for qualifying emergencies, public notice was made whenever time would allow considering the time frame of the event and multiple member hearings used when practicable (even though not required). The duration, opportunity to notice, likelihood of air quality impact resulting from delaying, if the event is caused or controlled by the operator, type of problem and circumstances should decide if issuance of an emergency variance is within the discretion of the Hearing Board.

AQMD staff recommendations and the Hearing Board actions have benefited air quality and have been in the public interest and within Hearing Board legal discretion in our opinion. The lack of acknowledgement of corrected erroneous statement and numerous written exchange necessary to accomplish an accurate record with this reviewer has been a disheartening disappointment. Below is a table of variance petitions, and shows the short duration of all variances and duration and actual emissions in 2001, 2002 and 2003.

Variance #	Variance Type	Used	Actual Usage	Excess Emissions Rate	Days Effective
02-01	Emergency	yes	28 hrs	91 lbs/day H2S	5/22/02-5/31/02
02-01ex	Extension	yes	23 hrs	180 lbs/day H2S	6/3/02-6/20/02
2003-01	Emergency	yes	73 hrs	48 lbs/day H2S	5/5/03-5/11/03
2003-02	Emergency	canceled	0	0	6/24/03-6/27/03
2003-03	Emergency	yes	30 days	1.11 lbs/day HC	5/16/03-6/15/03
2003-04	Emergency	yes	2 days	2.25 lbs/day HC	6/25/03-7/24/03
2003-05	Emergency	yes	28 days	0.2 lbs/day HC	8/1/03-8/29/03
2003-06	Emergency	withdrawn	0	0	
2003-07	Interim	withdrawn	0	0	

**Note:** LCAQMD staff continues to disagree with the stated opinion and assertions of the reviewer(s). Clearly, all four reviewed emergency variances were for less than 30 days (the

geothermal sources less than 10 days, RGS less than 30 days). Emergency variances do not require legal notice (publication) nor 10 day service upon ARB, but are posted in the LCAQMD office and legally noticed when the petition filed dates and event accommodate; neither are the extensive finding and multi-member hearings required. The legislature up to January 1, 2003 tied the hands of Hearing Boards in H&SC 42359.6 for nearly the same type of events (high voltage line shut down) stating they were to be treated as breakdowns even though they were markedly more frequent events under power generation contracts, so the assertion is even more questioned. The approach allowed by the emergency variance has benefited all parties, primarily by avoiding emissions that would occur later perhaps uncontrolled, more significant in quantity, legal to do and likely impossible to reasonably limit in some instances. We suspect ARB staff fails to understand risking total failure results in markedly higher emissions (Geothermal plant emissions increase greatly when they go offline or cannot operate), or that the geothermal company is losing considerable income during the outages, that provides real life incentive to minimize the duration of any event. Additionally, the decision of when to act on a circumstance is most often brought on by a decision of a third party (ISO and PG&E).

#### **A.9 Open and Agricultural Burning Program**

*Recommendation: None*

Note: LCAQMD staff has benefited from historic and substantial long-term constructive support of this group and did appreciate the interaction during the audit as we do the ongoing assistance provided.

### **B. PERMIT PROGRAM**

#### **B.1 Permit Administration – General**

*Recommendation: None*

#### **B.2 Adequacy of Permit Conditions**

*Recommendation: The District should annually review the conditions in its permits for enforceability per HSC Section 42301 (e).*

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

**Response:** LCAQMD staff agrees with the need and requirement of H&SC to review, but we do not agree with the apparent interpretation of unilateral non formal permit condition changes. We initially attempted to implement some ATCM changes, as suggested, and included change of permit conditions without a formal process. Specifically for hospital backup generators and other ATCM sources, emergency ATCM changes too often subsequently resulted in a lack of enforceability and unnecessary confusion. We do not intend to revisit that approach, and will probably use general references whenever workable to avoid paper-laden ATCM requirements that simpler approaches such as requiring a tiny facility owner/operator to simply follow manufacturer's operating recommendations will suffice.

The term 'lowest sulfur diesel fuel when available and distributed locally' was a good term in 2003 and is still a good one. It was not clear when California clean diesel would actually be distributed locally back in 2003 and if it might be delayed. Permits will be updated with the new term requested.

Regarding Permit A/C 99-14A, the prior error correction is appreciated.

### B.3 Organization and Adequacy of Permit Evaluations

*Recommendation:* Each engineering evaluation should show explicit compliance with HSC section 42301.6.

**Response:** LCAQMD staff agrees with the intent of the recommendation and can do even though in a rural area with maps included in reviews it is not necessary, and many permits are for isolated locations far from any public access let alone in close proximity to a school. While we do not agree that HSC Section 42301.6 requires an explicit finding as recommended, we have nevertheless incorporated it into applications forms and will attempt to include in future permit reviews.

## C. RULE DEVELOPMENT PROGRAM

*Recommendation:* The District should consider noting the adoption and amendment dates by each rule "section" instead of relying on one overall rulebook revision date. This would help industry and interested public ensure they have the most recent rule.

**Response:** LCAQMD staff will attempt to do this when adopting future rule changes, but notes generally the approach makes for paper waste (higher carbon emissions) and appears to be desired only by reviewing/tracking agency staff that could accomplish this task for themselves when they receive the required complete rule package filings.

## D. AB 2588 "HOT SPOTS" PROGRAM

*Recommendation:* The District should report facility inventory reports on an annual basis using the CEIDARS transaction format. The District should keep track of the date that a facility is prioritized. Files should be pulled into a database so the status of each facility can be displayed. The District should collect more complete temporal and spatial data for each facility. The District should provide the public with a brief document that describes the actions taken during the year, as well as a list of facilities and their status in the "Hot Spots" program.

**Response:** LCAQMD staff has had to make emissions inventory a lower priority though as acknowledged, we will do the every fourth year report, and will report annually if any permitted source is rated high risk, as required by H&SC. Apparently this is the practice of the majority of air districts.



## **E. EMISSIONS INVENTORY PROGRAM**

*Recommendation:* The District should find ways to provide annual merged criteria and toxic emission inventories to the ARB electronically, and in a format that is compatible with CEIDARS2.5. In order to track the status of facilities in the inventory, the District should submit an electronic list of all facilities as an attachment to the inventory submittal. The District should submit their area source categories annually. All relevant area source methodologies should be made available to ARB. To avoid double counting of emissions, the District should work with their ARB's emissions inventory liaison to determine which area sources, if any, should be reconciled. As soon as a new SIC/SCC combination is used or assigned, the District should notify ARB staff so that the new combination can be included in the proper category table.

**Response:** LCAQMD staff agrees with the goal, but cannot honestly expect to accomplish such in the near term.

The LCAQMD has suffered from considerable misuse and mismanagement of computer file emissions data provided to a variety of parties, and made a major effort (several man months) to correct erroneous inventory data after what we consider a debacle for misuse of data; we are especially gun shy of any recurrence and have submitted hard copies as a means of at least identifying offending parties. More specifics can be provided if desired.

The actual value of a frequently updated emissions inventory is minimal in an all-AAQS-attainment Air Basin such as ours that is not required by the H&SC to meet increments of progress in emissions reduction, nor have an emissions bank or emissions trading program. The cost of implementing the recommendation is substantial. Design day inventories are likely to be pursued as a higher priority by the LCAQMD with less frequent updates of the annual inventory and we hope to be able to do such with ARB support.

## **F. AMBIENT AIR MONITORING PROGRAM**

*Recommendations:* The District staff should continue to operate their air monitoring system in accordance with their established methods and procedures, and to establish a standard operating procedure for emergency episodes.

**Response:** We do appreciate the historic long term technical support of the reviewers, and will evaluate the need for a SOP for emergency episodes, as time allows, and discuss it with the local County OES and our Board. We do believe that the APCO, Deputy APCO or other staff could provide needed public information release for wildfires without a plan filed with the ARB and EPA. We have provided support monitoring and public information releases historically and continue to value our good working relationships with the fire agencies and will seek to work with them on a defined procedure.

## Attachment A

### § 42359.5. Emergency variance

(a) Notwithstanding any other provision of this article or of Article 2 (commencing with Section 40820) of Chapter 8 of Part 3, the chairman of a district hearing board, or any other member of the hearing board designated thereby, may issue, without notice and hearing, an emergency variance to an applicant.

(b) An emergency variance may be issued for good cause, **including, but not limited to, a breakdown condition.** The district board in consultation with its air pollution control officer and the hearing board may adopt rules and regulations, not inconsistent with this subdivision, to further specify the conditions, and to what extent, an emergency variance may be granted.

The emergency variance shall not remain in effect longer than 30 days and shall not be granted when sought to avoid the provisions of Section 40824 or 42351.

*ADDED NOTE: SECTION 40825 AND 42351 REFER TO NOTICE REQUIREMENTS FOR INTERIM VARIANCE GIVEN TO THE ARB AND EPA.*

### § 40825. Notice of hearings; Application for 90-day variance

In case of a hearing to consider an application for a variance, or a series of variances, to be in effect for a period of not more than 90 days, or an application for modification of a schedule of increments of progress:

(a) The hearing board shall serve a notice of the time and place of a hearing to grant such a variance or modification upon the air pollution control officer, all other districts within the air basin, the state board, the Environmental Protection Agency, and upon the applicant or permittee, not less than 10 days prior to such hearing.

(b) Subdivision (b) of Section 40823 shall not apply.

(c) In districts with a population of less than 750,000, the chairman of the hearing board, or any other member of the hearing board designated by the board, may hear such an application. If any member of the public contests a decision made by a single member of the hearing board, the application shall be reheard by the full hearing board within 10 days of the decision.

**Appendix B**  
**Stationary Source Inspections**

**Appendix B**  
**Stationary Source Inspections**

<b>Facility</b>	<b>Permit Unit</b>	<b>Operating</b>	<b>Compliance Status</b>	<b>Comments</b>
West Ford Flat – Calpine	Geothermal power plant	Yes	In compliance	Source test conducted to measure H2S emissions from cooling tower.
Lake County Animal Control	Incinerator (propane fired)	Yes	In Violation MOVW #1459	Verbal warning issued for inadequate records.
Mariani Packing Co.	Fruit drying sheds & drying operation	Yes	In Compliance	SO <sub>2</sub> gas used to treat fruit in wood sheds.
Point Lakeview Rock & Redi-Mix	Aggregate processing	Yes	In Compliance	Diesel generators supply power.
Clear Lake Lava	Aggregate processing	Yes	In Compliance	Facility has upper and lower plants, both operating. Diesel generators supply power.
	ICE & aggregate processing	Yes	In Compliance	
Redbud Community Hospital	Diesel ICE	No	In Violation MOVW #1462	Verbal warning issued for no permit posted for ICE.
	Incinerator	No	In Compliance	
	Boilers (2)	Yes	In Compliance	Each boiler operated on alternating weeks, one at a time.
Eastlake Municipal Landfill	Landfill	Yes	In Violation NOV #1460	On-site inspection revealed poor dust control and excessive fugitive dust.
CARS Custom and Refinishing Specialist	Automotive coating	Yes	In Compliance	Records verified.
Dual Phase Extraction Project. Fuel spill Site.	Vapor Extraction System	Yes	In Compliance	
Nordhammer Art Foundry	Furnace	No	In Compliance	No one on-site.
Kendall-Jackson Winery	Waste Management	Yes	In Compliance	
Calpine Unit 13	Geothermal power plant	Yes	In Compliance	Source test to measure H2S emissions from cooling tower.

**Appendix C**  
**Gasoline Dispensing Facility Inspections**

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<b>Facility</b>	<b>Tanks</b>	<b>Phase I Violations</b>	<b>Nozzles</b>	<b>Phase II Violations / Other</b>
Kit's Corner Store 7990-AA E. Hwy 29 Kelseyville 95451	2	-87 Tank: Fill pipe 8.5" above bottom of tank -No gasket on dry break cap	18	-Torn face plates:#5-89, #6-87, #2-87, #4-91& 87, #3-87 & 89 -No instructions or phone number posted
Food Gas Go 13430 E. Hwy 20 Clearlake Oaks	3	None	24	-Over 100 ml gas in hoses: #1-89 (120 ml), #6-87 (300 ml) -No instructions posted -Torn face plates: #1-87, #2-87 & 89, #4-87, #3-87,
Priced Rite 15413 Lakeshore Dr Clearlake,	3	-87 Tank: Fill pipe 8" above bottom of tank -89 Tank: Fill pipe 7" above bottom of tank -No PV valves	12	-Torn face plates:#1-89, #3-89, #6-87 & 89, #5-91& 87, #8-89 & 91 -Torn hose on #3-89 -Over 100 ml gas in hoses: #8-91 (600 ml)
Lakeport Chevron 1050 S. Main Street Lakeport	3	None	8	-Torn face plates:#1, #2, #3, #5, #6, #9, #10 -Over 100 ml gas in hose: #10(200 ml),
Jonas Lower Lake Cardlock 10455 Hwy 29 Lowerlake	2	None	7	-Defective retractors: #6-91, #7-87 (2 – 3' hang) -No instructions posted
Nella Oil Company #234 15010 Lakeshore Dr Clearlake	3	None	20	-Torn hoses: #2-87 (0.25 in.), #6-89 (completely torn), -Over 100 ml gas in hoses: #6-89, #7-89 (200 ml), -No instructions
Nott's Liquor 14772 Lakeshore Dr Clearlake	2	None	10	-Kinked hose: #12-89 -Torn hose: #7-89 (complete tear) -Defective retractor: #8-87 (3' hang) -Torn face plates:#1-89, #2-87, #3-87, #5-87, #6- 89, #9-87
Tower Mart #169 1088 Lakeport Blvd. Lakeport	3	None	8	-No instructions or phone number posted (ARB/District joint inspection conducted)