



BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT

Work Plan for  
Action Items Related to Accidental Releases  
from Industrial Facilities

Prepared by the staff of the  
Bay Area Air Quality Management District

October 11, 2012

**APPROVED BY THE BOARD OF DIRECTORS OCTOBER 17, 2012**

## Background

On August 6, 2012, a substantial fire resulted from a hydrocarbon leak at a crude oil processing unit at the Chevron Richmond Refinery. The fire resulted in a large plume of black smoke and continuous visible emissions from a nearby flare. The Contra Costa County Health Department issued a community warning and ordered a shelter-in-place that lasted for about five hours in Richmond, San Pablo and North Richmond. In the weeks following the incident, thousands of residents sought medical treatment at nearby hospitals with most reportedly complaining of respiratory and eye discomfort.

The August 6, 2012 incident has prompted the Air District staff and Board of Directors to consider a series of follow-up actions intended both to improve the District's response to accidental releases, and to provide additional incentives for petroleum refineries and other large industrial facilities to take proactive measures to avoid such accidents. Seven specific action items are included in this Work Plan; they are listed below and described in more detail as follows.

1. Continue the investigation of the Chevron incident, in coordination with other agencies, into violations of applicable air quality requirements in order to take appropriate enforcement action;
2. Review and update Air District incident response procedures;
3. Evaluate enhancements to the Air District's air quality monitoring capabilities, including convening experts to provide input on monitoring options;
4. Expedite development of a rule that would track air emissions at refineries over time, require mitigation of any significant increases in emissions that may occur, and require additional community air monitoring at refineries;
5. Evaluate the Air District's needed incident response resources, and develop amendments to the District's fee regulation to recover the costs of these resources;
6. Evaluate enhancements to community outreach during and after incidents to provide additional services to the public; and
7. Sponsor legislation that would provide the Air District with the authority to collect more substantial penalties that would provide industry with additional incentives to take proactive measures to avoid accidental releases.

## Follow-up Actions

1: Continue the investigation of the Chevron incident, in coordination with other agencies, into violations of applicable air quality requirements in order to take appropriate enforcement action.

## Description

Staff is conducting a joint investigation of the Chevron incident along with the U.S. Chemical Safety Board (CSB) and Cal OSHA. The joint investigation involves collection of evidence

(e.g., through review of records, interviews of facility personnel, and collection of samples and other physical evidence) needed by the CSB and/or Cal OSHA, some of which is also needed by the District. After the joint investigation is completed, the District will begin a District-specific investigation which will focus on determining non-compliance with applicable air quality requirements, and collection of additional evidence to support appropriate enforcement action associated with Notices of Violation (NOVs) issued. An NOV was issued by the District on August 14, 2012 for the Chevron incident causing a Public Nuisance. As the investigation continues additional NOVs may be issued.

Staff will also continue to inspect the progress of the crude unit’s demolition, site clean-up, and re-construction to ensure all regulatory requirements are satisfied.

Tasks and Timelines

<b>Task</b>	<b>Expected Completion Date</b>
<b>Complete Joint inter-agency investigation</b>	Fourth quarter 2012
<b>Complete District-specific investigation</b>	First quarter 2013
<b>Issue any additional NOVs</b>	First quarter 2013
<b>Inspect crude unit demolition and re-construction</b>	Ongoing

2: Review and update the Air District’s incident response procedures.

Description

As provided by State law, emergency response agencies (e.g., the California Highway Patrol, Sheriff, local police, or local fire agencies) have the primary responsibility for scene management during an accidental release or emergency incident. The Air District is neither an emergency response agency nor a first responder. However, the Air District contributes in a support capacity to emergency response agencies utilizing District resources and expertise for air sample collection, air monitoring, laboratory analysis, engineering, inspection, and community and media relations. In this regard, the District has existing Incident Response Procedures, the focus of which is on operations within the District’s Compliance and Enforcement Division. Following the August 6, 2012 incident at the Chevron refinery, staff has begun the process of reviewing and updating the District’s Incident Response Procedures. The update will broaden the scope of the procedures to provide additional detail as to how District coordinates internally and with other agencies, and on improved communication strategies. The District will evaluate a coordinated message response program to ensure that consistent and timely information is delivered throughout incidents.

Tasks and Timelines

<b>Task</b>	<b>Expected Completion Date</b>
<b>Review existing Incident Response Procedures identify potential enhancements</b>	First quarter 2013
<b>Confer with affected parties and incorporate improvements</b>	Second quarter 2013
<b>Finalize updated Procedures, and begin any necessary staff training</b>	Second quarter of 2013

3: Evaluate enhancements to the Air District’s air quality monitoring capabilities, including convening experts to provide input on monitoring options.

Description

Staff has begun the process of identifying a contractor who will evaluate the current air monitoring network around affected facilities and provide a framework to broaden community monitoring. The contractor will focus on identifying equipment and methodologies to provide nearby residents with real-time exposure measurements to compounds potentially emitted from the identified facilities, and that will potentially provide a starting point for enforcement investigations when air concentrations are elevated.

The contractor will create a report identifying equipment and methodological options that will act as the basis for further evaluation and development from a panel of monitoring experts gathered from academia, industry, the community and other governmental agencies. The panel will discuss and weigh the various options and provide input to guide the Air District in the most effective and efficient way to conduct community air monitoring and provide this information to the public.

Tasks and Timelines

<b>Task</b>	<b>Expected Completion Date</b>
<b>Retain contractor</b>	Fourth quarter 2012
<b>Contractor produces report outlining options</b>	First quarter 2013
<b>Report finalized and provided for review by panel of experts</b>	Second quarter 2013
<b>Panel convened and input provided based on contractor’s report</b>	Second quarter 2013
<b>Report finalized outlining panel’s recommendations</b>	Third quarter 2013

4: Expedite development of a rule that would track air emissions at refineries over time, require mitigation of any significant increases in emissions that may occur, and require additional community air monitoring at refineries.

Description

Staff has previously developed a Regulatory Concept Paper for the development of a new Petroleum Refinery Emissions Tracking Rule. The concept paper was prepared to address concerns expressed about the air quality impacts that may result from the use of lower quality crude oil slates at refineries. These concerns include emissions associated with accidents that may be related to the higher corrosiveness of lower quality crudes, along with more routine air emissions.

Staff has begun the initial tasks involved in developing this new rule that would apply to all five petroleum refineries in the Bay Area and that would track changes in the facility’s air emissions, including those related to accidental releases. The scope of the new rule under development would also include monitoring of emissions through fence-line and/or community based air monitors. Any observed increases in air emissions at the facility above baseline levels would trigger a requirement for an analysis of the cause of the emissions increase (which may include various factors such as increases in production levels or declining crude oil quality), and a requirement for an assessment of public health impacts in the surrounding community resulting from the emissions increase. Any significant increases in emissions, as determined based on the impacts analysis, would trigger a requirement for mitigation through the use of best management practices or other appropriate measures. Information associated with rule implementation would be made available to the public, and a process would be established whereby information of a “business confidential” nature would be protected. Many aspects of the proposed rule would be patterned after the District’s highly successful rule adopted in 2005 to minimize emissions from flares at petroleum refineries.

Tasks and Timelines

<b>Task</b>	<b>Expected Completion Date</b>
<b>Brief Board of Directors on rule status and solicit direction on issues</b>	Periodically during rule development
<b>Prepare Public Workshop Report and distribute Workshop Notice</b>	Second quarter 2013
<b>Hold community-based Public Workshops</b>	Second quarter 2013
<b>Meet with Stakeholder Workgroup</b>	Throughout 2013, as needed

<b>Prepare draft final rule and staff report for comments</b>	Fourth quarter 2013
<b>Contractor completes draft socioeconomic and CEQA Analyses</b>	Fourth quarter 2013
<b>CEQA document comment period</b>	Fourth quarter 2013
<b>Consider public comments and prepare final proposed rule</b>	First quarter 2014
<b>Set public hearing to consider rule adoption</b>	Second quarter 2014
<b>Hold public hearing to consider rule adoption</b>	Second quarter 2014

5: Evaluate the Air District's needed incident response resources, and develop amendments to the District's fee regulation to recover the costs of these resources.

Description

A large incident involving an accidental release at an industrial facility can consume significant District staff resources related to investigation of the incident (including developing and pursuing an enforcement case if NOVs are issued), the collection and analysis of data, and communications with the affected community and the press. Additionally, capital resources such as specialized monitoring equipment are often used in incident response, or are currently needed to enhance capabilities. Currently, the District's costs associated with responding to, and following-up on, incidents involving accidents at industrial facilities are not recovered through fees that are specific to these activities. Staff recommends amending the District's fee regulation to include a provision for recovery of ongoing and event-based costs related to incident response and associated activities. Potentially, fees would be charged to facilities likely to have incidents and an additional fee charged to incidents at facilities to which the Air District is requested to respond.

Tasks and Timelines

<b>Task</b>	<b>Expected Completion Date</b>
<b>Brief Board of Directors on rule amendment status and solicit direction on issues</b>	Periodically during rule development
<b>Evaluate on-going activity costs associated with incident response program activities</b>	Fourth quarter 2012
<b>Develop draft amendments to Regulation 3: Fees, to recover ongoing and event-based costs related to incident response</b>	Fourth quarter 2012
<b>Prepare Public Workshop Report and distribute</b>	First quarter 2013

<b>Workshop Notice</b>	
<b>Hold Public Workshop</b>	First quarter 2013
<b>Consider public comments and prepare final proposed rule amendments</b>	First quarter 2013
<b>Establish appropriate timekeeping codes to track costs of program activities that new fee covers</b>	First quarter 2013
<b>Set public hearing to consider adoption of new fee</b>	First quarter 2013
<b>Hold public hearing to consider adoption of new fee</b>	First quarter 2013

6: Evaluate enhancements to community outreach during and after incidents to provide additional services to the public.

Description

A large incident involving an accidental release at an industrial facility can require significant community outreach resources. A deluge of inquiries and comments to District staff often begins during, or shortly after, the incident. Inquiries may continue for days, weeks, or even months afterwards. Community members often request follow-up on a variety of issues related to, or unrelated to, the incident. At times, existing staff resources may be inadequate to provide a high quality level of service to the public. Staff therefore believes that it is appropriate to evaluate potential enhancements to the District’s community outreach capabilities, including additional staffing.

Tasks and Timelines

<b>Task</b>	<b>Expected Completion Date</b>
<b>Conduct analysis and prepare a report on recommended enhancements to the District’s community outreach program.</b>	First quarter 2013
<b>Present report and staff recommendations to Board of Directors</b>	Second quarter 2013

7: Sponsor legislation that would provide the Air District with the authority to collect more substantial penalties that would provide industry with additional incentives to take proactive measures to avoid accidental releases.

## Description

Staff has in the past unsuccessfully sought legislative changes to increase maximum penalties allowed under State law for violations of air quality requirements in order to serve as a more effective compliance incentive. Existing penalties are generally capped at \$10,000 per day, per violation, unless negligence is involved, in which case the penalty cap generally increases to \$25,000 per day, per violation. Staff believes that these penalty caps are generally too low, and especially so when the violation involved is a large incident with substantial excess emissions that results in a public nuisance. These incidents often take place on only a single day and thus the “per day” ceilings in the civil penalty statutes tend to undervalue these cases.

## Tasks and Timelines

<b>Task</b>	<b>Expected Completion Date</b>
<b>Develop an updated proposal to amend State law for increasing air district penalty caps</b>	Fourth quarter 2012
<b>Brief Board of Directors on status and solicit direction on issues</b>	Fourth quarter 2012
<b>Coordinate with other air districts and public agencies as appropriate</b>	Ongoing
<b>Pursue legislative channels for a bill author</b>	First quarter 2013
<b>If a bill is introduced, provide appropriate staff support during the legislative process</b>	Ongoing