712 Reporting Environmental Releases & Violations- When Time is of the Essence

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Winfred T. Colbert

Winfred T. Colbert is an attorney with The Goodyear Tire & Rubber Company in Akron, Ohio. He leads Goodyear's global environmental, health, and safety legal group and also has substantial responsibility for transactional and other general corporate legal matters.

Mr. Colbert has previously served in-house counsel for Exxon (Houston), Mobil Chemical Company (New York), and TXU Electric & Gas (Dallas). He was also a partner at Haynes & Boone LLP and Cantey & Hanger LLP (Fort Worth).

He has served as chairman of the North Texas Clean Air Coalition, The Fort Worth Economic Development Corporation, Southern Connecticut Lawyers Association, and Tarrant County Black Lawyers Association. He has also served as vice president of the National Bar Association and chairman of its environmental law and real estate law sections. He is currently a member of Sustainable Cleveland.

Mr. Colbert received his undergraduate degree from Yale College and is a graduate of the Columbia Law School.

David J. Owens

David J. Owens is the associate general counsel for Anadarko Petroleum Corporation in The Woodlands, Texas. His areas of responsibility include environmental, health, safety and natural resources law, employment law, benefits and compensation, and corporate security.

Before joining Anadarko Petroleum Corporation, Mr. Owens was environmental counsel at several large law firms, in-house counsel with Exxon Corporation, vice president and project manager for BCM Engineers, Inc. and The Chester Engineers, Inc. and a manager of environmental control systems for USX Corporation.

Mr. Owens graduated from West Virginia University at Morgantown with a B.S., and a M.S. Mr. Owens is a graduate of the Duquesne University School of Law in Pittsburgh.

Darren W. Stroud

Darren W. Stroud is environmental, safety, and regulatory law affairs counsel for Valero Energy Corporation (Valero) headquartered in San Antonio. Mr. Stroud is currently responsible for all environmental, safety, and regulatory matters related to Valero's Western United States refining, terminaling, pipeline, and retail operations.

Prior to joining Valero, Mr. Stroud practiced environmental and land use law in California. Prior to becoming an attorney, Mr. Stroud worked for the South Coast Air Quality Management District in various capacities, including as a permitting engineer, rule developer, rule implementer, and environmental analysis preparer.

Mr. Stroud is a member of the California and American Bar Associations. Mr. Stroud is also a member of ACC. As a Valero volunteer, Mr. Stroud works with the Habitat for Humanity to build affordable housing in low-income neighborhoods of San Antonio.

Mr. Stroud received a B.S. from the University of Texas at Austin and graduated cum laude from Chapman University School of Law.

Robert K. Temple

Robert K. Temple represents City Public Service ("CPS Energy™"), the nation's largest municipally-owned electric and gas utility, as the senior member of its in-house legal staff. CPS Energy serves greater San Antonio and owns or operates a diverse fuel mix of generation with over 5,000 megawatts of generation capacity, serving more than 600,000 electricity customers and 300,000 natural gas customers. He oversees and addresses regulatory issues in courts and before administrative agencies and matters related to significant commercial contracts involving CPS Energy. Bob also oversees six other attorneys, CPS Energy's Claims Group, and additional staff.

Mr. Temple previously was in private practice in the Chicago office of law firms with a national energy practice. In private practice, he represented clients in federal courts in commercial litigation, before federal and state agencies on energy and environmental matters, and counseled clients on the interpretation of rules and regulations issued by the U.S. Environmental Protection Agency, U.S. Nuclear Regulatory Commission, Federal Energy Regulatory Commission, Department of Energy, as well as state public utilities commissions and environmental agencies.

Mr. Temple serves on ACC's Energy Committee and the Environmental Health and Safety Committee, the southern chapter of the Energy Bar Association and is an board member of prevent blindness, San Antonio.

He received a B.S. from Southern Illinois University and his J.D. with honors from Chicago-Kent College of Law.

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Author:	Enviro Engineer	ON CALL: DEVIATION / EVENT REPORTING PROCEDURE	REVISION DATE:	10/23/06
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PURPOSE

The purpose of this procedure is to provide guidance on what to do when encountering potential deviations, equipment breakdowns, and/or incidents that require reporting under rules and regulations governed by South Coast Air Quality Management District (SCAQMD), Office of Emergency Services (OES), and National Reportable Center (NRC).

This procedure is primarily intended for use by the Environmental personnel. Specific environmental guidelines for work area/departments other than environmental are posted on Facility Web. Only Environmental is to make the notifications/reports to SCAQMD, OES, and NRC described in this procedure.

Rules and regulations covered in this procedure include Title V emergency reporting (SCAQMD Rule 3002); equipment breakdown (SCAQMD Rule 430, 2004, 218); other Title V reporting requirements (Section K under Facility Permit); CEMS failure (SCAQMD Rule 2011, 2012); SCAQMD Rule 1118 flare event; and sensor alarm or breakdown (Air Permit condition) at the Facility. In addition, California Hazardous Material Spill/Release Notification Guidance published by OES in April 2006 is also discussed.

WHAT IS A DEVIATION?

A deviation is any non-compliance with a SCAQMD enforceable requirement, such as an emission limit, equipment standard, work practice, monitoring requirement, or reporting and recordkeeping requirement. SCAQMD requirements may be found in a rule or regulation, variance, compliance plan, or most likely, in the Air Permit. Determining when a deviation has occurred is sometimes not a straightforward task. Obtaining "credible evidence" is essential in determining whether a deviation has occurred or not. "Credible evidence" may include historical data, operating experience, and engineering knowledge.

DEFINITIONS

Breakdown: A condition caused by an accidental fire or non-preventable mechanical or electrical failure. (SCAQMD Rule 102.)

Emergency: Any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which:

(A) requires immediate corrective action to restore normal operation; and
(B) causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency; and
(C) is not caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

(SCAQMD Rule 3000 (b)(8).)

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Technology-Based Emission Limits: Those standards or limits contained in the Air Permit, SCAQMD Rule, or other state or federal regulations, the stringency of which are based on determinations of what is technologically feasible, considering relevant factors. Examples of technology-based emission limits include Best Available Control Technology (BACT), lowest achievable emission rate standards (LEAR), maximum achievable control technology (MACT) under 40 CFR 63, and new source performance standards (NSPS) under 40 CFR 60.

(http://www.epa.gov/Region7/programs/artd/air/title5/t5memos/r10qa2.pdf.)

Deviation: The term deviation is not defined in 40 CFR Part 70. It is generally understood to by the SCAQMD to mean any failure to comply with a permit term - which may or may not result in a violation. In absence of a federal definition for deviation, the statement on EPA's reporting form for deviation under 40 CFR Part 71 is used as reference:

> "Deviations from permit terms occur when any permit term is not met, including terms that establish emission limitations, emission standards, control equipment requirements, work practices, and parameter ranges, and those designed to assure compliance with such requirements, such as monitoring, recordkeeping, and reporting requirements. For example, included in the meaning of deviation are any of the following: (1) a condition where emissions exceed an emission limitation or standard; (2) a situation where process or emission control device parameter values indicate that an emission limitation or standard has not been met; (3) a situation in which observations or data collected demonstrate noncompliance with an emission limitation or standard or any work practice or operating condition required by the permit (including indicators of noncompliance revealed through parameter monitoring); (4) a situation in which an exceedance or an excursion, as defined in 40 CFR part 64 (compliance assurance monitoring or CAM), occurs; (5), a situation in which required monitoring of emissions or parameters is not performed (including where parameters; and (6) failure to comply with a permit terms that requires records to be kept or submittal of a report 3. A deviation is not necessarily a violation. Violations will be determined by EPA (or its delegate Agency)."

(http://www.aqmd.gov/titlev/requirements.html and See http://www.epa.gov/air/oaqps/permits/prompt.pdf to view the form.)

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PROCEDURE

Activity	Responsibility
Discovery of Deviation/Incident	
1. Upon discovery of a potential deviation or incident described in facility Environmental Guidelines – Air, contact the Shift Supervisor or Maintenance Supervisor.	Person Observing or Discovering Deviation / Incident
2. Determine applicable "Deviation Priority Code" as outlined in area Environmental Guidelines-Air and contact Environmental personnel per priority code. If unsure of "Deviation Priority Code", notify the Environmental On-Call Representative immediately.	Shift Supervisor or Maintenance Supervisor; or Environmental Staff
3. If safe to do so, immediately implement mitigation measures and corrective actions to correct the deviation/incident and minimize emissions and potential impact to the community and environment. (See Attachment F – Example Mitigation Measures)	Shift Supervisor or Maintenance Supervisor
Initial Incident Notifications	
4. Gather all available information regarding potential deviation or incident when contacted and fill out internal notification form.	Environmental On-Call Representative
5. Determine all applicable Air Permit conditions from Air Permit and environmental guidelines developed for operational unit.	Environmental On-Call Representative
6. Check with applicable operational unit personnel on whether any Air Permit conditions or environmental guidelines have been violated.	Environmental On-Call Representative
7. Determine if Air Permit conditions have been violated, i.e., deviation.	Environmental On-Call Representative
8. Go through Deviation/Incident Reporting Check List and/or Flowchart for Deviation Reporting to determine whether verbal reporting to SCAQMD is required.	Environmental On-Call Representative
9. If applicable, obtain SCAQMD Notification number by notifying SCAQMD at 800-CUT-SMOG (800-288-7664) and SCAQMD Inspector at 909-396-2000 within the timeframe specified in the Check List. If unsure of notification timeframe, notify SCAQMD within 1 hour. If an SCAQMD operator is not available, leave a message and note the date and time the notification call was made.	Environmental On-Call Representative
10. Save complete internal notification form in Facility computer system folder and e-mail a copy of the form to environmental department personnel as FYI in the incident they are contacted by the SCAQMD regarding the notification.	Environmental On-Call Representative

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Activity	Responsibility
11. If there is a "Potential" for either NO_x or SO_x emission to exceed the Federal Reportable Quantity as stated below, then make notifications to both OES at 800-852-7550 AND NRC at 800-424-8802, as soon as possible, but no later than 24 hours. NO_x Federal Reportable Quantity: 10 pounds SO_x Federal Reportable Quantity: 500 pounds Obtain notification and/or report number when making notifications to both OES and NRC. Note: Emergency spill/release of hazardous material needs to be reported to 911 immediately. Coordinate with Facility Safety representative for making notifications to 911.	Environmental On-Call Representative
Deviation and Incident Response Follow-Up	
12. If applicable, escort SCAQMD inspector that visits the Facility to investigate the reported deviation or incident per the Regulatory Inspection Guidelines. The inspector may request evidence of mitigation measures and corrective actions performed and supporting documentation such as work requests and CEMS printouts.	Environmental On-Call Representative
13. Follow up with Operations on repair or mitigation/corrective measures progress and determine if deviation will **exceed 24 hours**. Archive all documentation on all mitigation/corrective measures undertaken. (See Attachment F – Example Mitigation Measures).	Environmental On-Call Representative
14. Evaluate the need to file a local Variance under SCAQMD Rule 518, or an Alternative Operating Condition (AOC) under SCAQMD Rule 518.2.	Environmental Manager; and Legal Counsel
Written Reports For Deviations	
15. Submit applicable written reports according to Deviation/Incident Reporting Check List and Attachment G – Written Reports within specified timeframe. Save deviation written reports to Facility computer system and notify Title V coordinator when submissions are complete.	Environmental On-Call Representative initially notified of Deviation/Incident
16. If written reports are needed for SCAQMD Rule 1118 or Rule 2011/2012 CEMS, contact responsible environmental staff and Title V coordinator for written report preparation.	Environmental On-Call Representative initially notified of

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Activity	Responsibility
	Deviation/Incident
17. If applicable, send written reports to OES and NRC within 30 days from initial notification date.	Environmental On-Call Representative initially notified of Deviation/Incident
Program Administration	
18. The Environmental On-Call Representative on duty when an incident is reported is responsible for all agency communication and follow-ups (verbal/written reports) and communications with applicable Facility personnel regarding deviation/incident details, mitigation/corrective measures progress, and Variance/AOC filing, if applicable.	Environmental On-Call Representative
19. Prepare and submit Title V Semi-Annual Monitoring and Annual Compliance Certification Reports.	Title V Coordinator

AGENCY NOTIFICATION PHONE NUMBERS

SCAQMD:	1–800-CUT–SMOG (1-800-288-7664)
SCAQMD Inspector:	909 – 396 - 2000
OES:	1-800-852-7550
NRC:	1-800-424-8802

ENVIRONMENTAL ON-CALL PHONE NUMBER

Environmental On-Call:	1-800-ENV-HELP

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Attachment A – Description of Types of Deviations and Incident Reporting

TYPES OF DEVIATIONS -

1. **Emergency under SCAQMD Rule 3002(g) – Title V:** Title V emergency reporting is very similar in purpose and procedure to SCAQMD Rules 430 and 2004 breakdown reporting. Under Title V, emergency reporting, exceedances of certain emission limits (with excess emissions) that result from an emergency incident, can qualify for "affirmative defense." This means a compliance deviation has occurred, but SCAQMD will not assess a penalty or issue a Notices of Violation (NOV). To qualify as a Title V emergency, the incident must not be the result of human error, neglect, or improper operation or maintenance procedures. In addition, immediate steps must be taken to minimize excess emissions and correct the violation.

   Title V emergency reporting only applies when an emission limit from a technology-based emission standard is exceeded. Most technology-based emission standards are federal standards. In general, technology-based emission standards include:

   - BACT/LAER standards under SCAQMD Regulation XIII;
   - NESHAP standards under 40 CFR 63 (NESHAP standards before 1990, such as 60 CFR 61 Subpart FF, are health-based standards, not technology-based standards); and
   - NSPS standards under 40 CFR 60.

   As with SCAQMD Rules 430 and 2004 breakdown reporting, the affirmative defense only lasts 24 hours. If the deviation cannot be corrected or the equipment cannot be shut down within 24 hours, the Environmental Department must file a petition with SCAQMD Hearing Board for a Title V Alternative Operating Condition (AOC).

   The Title V emergency reporting provisions can also found in Section K of the Facility Title V Permit and Rule 3002(g).

2. **Breakdown under SCAQMD Rules 430, 2004, 218 (Non-RECLAIM CEMS):** The purpose of a breakdown report under the provisions of Rule 430 (for non-RECLAIM requirements) and Rule 2004 (for RECLAIM requirements) is to provide the facility with relief from SCAQMD enforcement, i.e., NOV, in the event of a mechanical or electrical failure that causes a compliance deviation of certain SCAQMD rules and/or permit conditions. The failure must not be the result of human error, neglect, or improper operation or maintenance procedures, and immediate steps must be taken to minimize excess emissions and correct the compliance deviation.

   The enforcement relief provided by Rules 430 and 2004 only lasts 24 hours, within which the deviation must be corrected or the equipment shutdown. If one of these options is not possible, an emergency Title V AOC or a Variance under Rule 518 is required to continue operation. It is extremely important the Environmental Department be informed immediately after determining the equipment cannot be repaired or shut down within 24 hours so that Legal Counsel and Environmental Department staff can prepare and file the appropriate variance petition with the SCAQMD Hearing Board.

   Similar to SCAQMD Rules 430 and 2004, Rule 218 also provides the facility with relief from SCAQMD enforcement when appropriate actions are taken according to the rule. Rule 218 applies to Non-RECLAIM Continuous Emissions Monitoring System (CEMS). In the event of a system failure or shutdown, which exceeds 24 hours, notification needs to be made to the SCAQMD within

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   24 hours or the next working day. If the failure or shutdown incident lasts longer than 96 consecutive hours, an AOC or a variance petition needs to be filed in order to have Rule 218 requirements waived during system shutdown.

   Rule 218 applies to non-RECLAIM CEMS only which include certified CEMS installed to meet a permit condition or rule requirement, not Continuous Monitoring Systems (CMS) or Continuous Opacity Monitoring Systems (COMS). CEMS refers to analyzers that monitor emissions to atmosphere whereas CMS generally refers to analyzers that monitor parameters in process streams, such as H2S in fuel gas, and COMS refers to analyzers that monitor opacity (i.e. FCC opacity monitoring system).

3. **SCAQMD Deviation with excess emissions – Title V:** Section K of the Facility Title V permit defines an excess emission as a deviation from the permit or applicable rule emission limitations, equipment operating conditions, or work practice standards that results in emissions greater than those allowed by the permit or applicable rules. Excess emission deviation must be reported within 72 hours, or less if specified in any other applicable state or federal regulation, of the discovery of the deviation.

   Under Title V, the facility is required to self-report compliance deviations according to required timeframe. Title V deviation reporting that does not qualify as Title V emergency reporting (SCAQMD Rule 3002(g) or Rules 430 and 2004 Breakdowns), does not receive the benefit of affirmative defense or enforcement relief from regulatory agencies. These incidents include, for example, those resulting from an operational change, not a mechanical equipment failure. It is possible that in these instances the SCAQMD will issue a NOV after receiving a Title V deviation report.

   The Title V deviation reporting provisions are found in Section K of the Facility Title V permit and Rule 3004(a) (5).

4. **SCAQMD Other Deviations – Title V:** Any deviation that is not a breakdown, emergency, or that does not result in excess emissions is considered an Other Deviation under Title V. This includes failure to complete and submit Semi-Annual monitoring reports (form 500-SAM), Annual Compliance certifications (form 500-ACC), discovery of the failure to keep required records, maintenance logs, being issued a NOV, etc. An Other Deviation needs only be reported with the Semi-Annual monitoring report in the time period when they are discovered. There is no necessity for obtaining a notification number for Other Deviations.

   The Other Deviation reporting provisions are found in Section K of the Facility Title V permit.

TYPES OF INCIDENT REPORTING -

5. **SCAQMD Rules 2011 & 2012 - CEMS Failure Reporting:** Continuous Emissions Monitoring System (CEMS) are subject to certain reporting requirements upon failure or shutdown.

   When a RECLAIM CEMS is non-operational for more than 24 hours as the result of being shut down for maintenance or malfunction/failure beyond the facility's reasonable control, a written report needs to be submitted to the SCAQMD within 96 hours after the device becomes non-operational. If the source monitored by the CEMS is not operating when the CEMS is in maintenance or being repaired, and either the flow or concentration monitor is properly operational, and missing data procedure is applied properly, then an additional 96 hours will be granted. Otherwise, if the CEMS is not operational within 96 hours, the facility may need to file for an

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Alternative Operating Condition (AOC) or a Variance to obtain enforcement protection from Rules 2011 or 2012.

6. **SCAQMD Rule 1118 - Flare Event Notification:** When an unplanned flare event emits >100 lb VOC, >500 lb SO_2 or combusts >500,000 scf vent gas or when a planned flare event is expected to emit >100 lb VOC, >500 lb SO_2 or combust >500,000 scf vent gas, SCAQMD Rule 1118 reporting is triggered. A Specific Cause Analysis of the unplanned flare event must also be submitted within 30 days, identifying the cause and duration of the flaring event and specifying any mitigation or corrective actions taken.

   In addition, planned maintenance of flare monitors (flow meters, HHV analyzers, or total sulfur analyzers) requires written notification prior to or within 24 hours of the monitors being taken out of service. This notice shall include the reason for maintenance and the methods to be used to determine emissions while the monitors are out of service.

   Quarterly reports shall include details on the above flare events and monitoring device(s) maintenance. In addition, quarterly reports must include relative cause analyses of flare events combusting >5,000 scf vent gas.

   If the flare event results in emission of a Federal Reportable Quantity of the pollutants shown below, the associated written notices to OES and NRC are required to be included in the quarterly SCAQMD flare report.

   - NO_x: 10 pounds
   - SO_x: 500 pounds

7. **Sensor Alarm:** Per Air Permit conditions, some sensor alarms are required to be connected to the SCAQMD's remote terminal unit (RTU). To confirm that the SCAQMD receives each alarm, a verbal report shall also be made to the SCAQMD immediately upon Facility staff becoming aware of the alarm. In addition, immediate notification of confirmed false alarms should be made to the SCAQMD.

   When an alarm is triggered, the facility printer connected to the RTU computer prints out a log. SCAQMD inspectors requests copies of the alarm print outs. Accordingly, copies of the alarm printouts and transmittal of the alarm notification to the SCAQMD's RTU must be kept an archived.

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Attachment B – SCAQMD Deviation/Incident Reporting Checklist

	SCAQMD Types of Deviations (Non-CEMS): (Use flowchart if desired) Check ALL that apply.	Initial Incident Notification 1-800-CUT-SMOG (1-800-288-7664) AND Call SCAQMD Inspector (909-396-2000)	Written Report Due
1 ☐	Emergency under Rule 3002 (g) * File AOC or variance if repair lasts > 24 hrs	< 1 hr of discovery	< 2 working days from when emission limit was exceeded < 7 calendar days after the breakdown has been corrected, but no later than 30 days from initial date of breakdown
2 ☐	Breakdown under:		
a. ☐	Rule 430 (Non-RECLAIM)	< 1 hr of discovery	< 7 calendar days after the breakdown has been corrected, but no later than 30 days from initial date of breakdown
b. ☐	Rule 2004 (RECLAIM - NO_x, SO_x) * File AOC or variance if repair lasts > 24 hrs		With Title V Semi-Annual Reports
c. ☐	Rule 218 (Non-RECLAIM CEMS) (Rule 218 (f)(3)) * File AOC or Variance if Non-RECLAIM CEMS down > 96 hrs	< 24 hrs or the next business day	With Title V Semi-Annual Reports
3 ☐	Deviation with excess emissions (Title V Permit Sec. K)	< 72 hrs of discovery	< 14 days of discovery With Title V Semi-Annual Reports
4 ☐	Other Deviation (Title V Permit Sec. K)	None	With Title V Semi-Annual Reports
	SCAQMD Types of Deviations (CEMS): (Use flowchart if desired) Check ALL that apply.	**Initial Incident Notification 1-800-CUT-SMOG (1-800-288-7664) AND Call SCAQMD Inspector (909-396-2000)**	**Written Report Due**
5 ☐	Rule 2011 & 2012 (RECLAIM CEMS) (Rule 2011, 2012 (c)(2)(C)(iii)	None	< 96 hrs if non-operational for > 24 hrs
6 ☐	Rule 1118 (Flare) (Rule 1118(i)(2,3)) Report if: > 100 lbs of VOC; OR > 500 lbs of SO_2; OR > 500,000 scf of Flared vent gas	< 1 hr of unplanned flaring	< 30 days
7 ☐	Sensors (Permit Cond., Rule 3004)		
a. ☐	Equipment Breakdown	< 8 hrs of discovery	None
b. ☐	Alarm Triggered	None (suggest calling AQMD immediately to confirm alarm is received or if false alarm)	None
	OES and NRC Notification / Reporting Requirements Check ALL that apply.	**Initial Incident Notification OES: 1-800-852-7550 NRC: 1-800-424-8802**	**Written Report Due**
8 ☐	Nox emission exceeds 10 pounds	< 24 hrs	< 30 days
☐	Sox emission exceeds 500 pounds		

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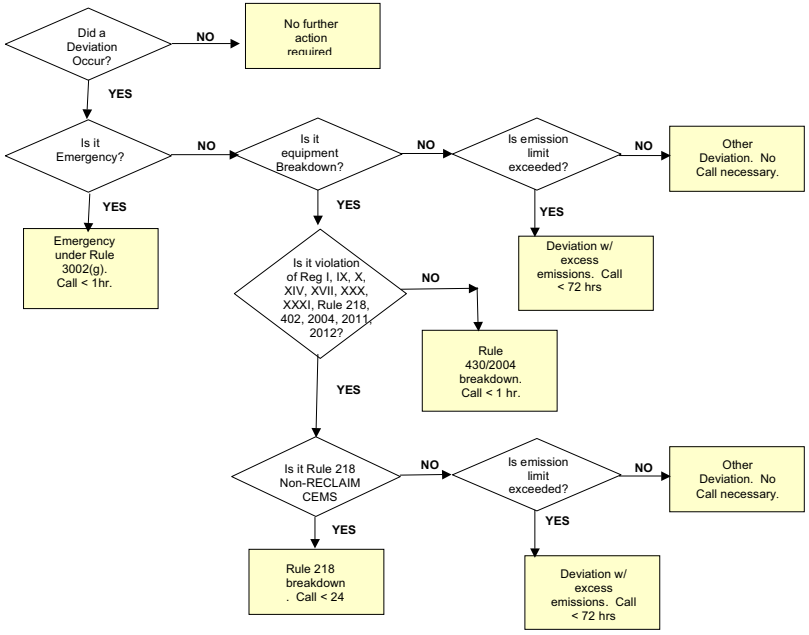
Attachment C – Flowchart for SCAQMD Deviation Reporting



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Attachment D – Internal Deviation/Incident Reporting Notification Form

NOTIFICATION SUMMARY

Name of person making notification:		Date and Time Environmental Dept. Notified:	
Notification Reason:		Environmental Person(s) Contacted:	
Notification Comments: (e.g., any information provided by Environmental Person when notified)			

INCIDENT INFORMATION

Incident Date:		Report Date:	
Incident Start Time:		Discovery Time:	
Incident Ongoing? (Y/N):		If No, End Time:	
Process Area/Unit:			
Equipment Causing and Affected by Incident:			
Corrective Actions Taken So Far:			
Mitigation/Corretive Measures Taken to Minimize Excess Emissions:			
Estimated Time for Repairs:			
Shift Supervisor:		Unit Operator:	
Other Witnesses:			
Incident Comments: (e.g., all known details regarding the incident)			

Distribution: Title V Coordinator via email

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Attachment E – Potential Deviation Scenarios

The following table lists the more common potential deviations and the notification(s) typically required. This table is provided as a guidance only. Each incident is unique and may not exactly match one of the listed scenarios. If unsure whether a notification is required, make the notification within 1 hour.

Equipment or Process	Scenario	Rule(s) or Permit Condition(s) Violated	Breakdown (2)	Title V		
				Emergency (1)	Excess Emission Deviation (3)	Other Deviation (4)
Carbon Adsorber	VOC monitoring event missed, but subsequent monitoring showed no excess emissions	Condition requiring monitoring				X
	Outlet VOC emissions exceed 500 ppm found during routine VOC monitoring	Rule 1176			X	
Coatings	Use of metal coatings exceeding the Rule 1107 VOC content limit	Rule 1107			X	
Flare	Power failure, steam system failure, or other equipment failure causes flaring with visible emissions > 20% opacity for more than 3 total minutes in any hour.	Rule 401	X	X		
	Pilot flame detector malfunctions, but flame is visually confirmed to be present	Condition requiring monitoring	X			
	Pilot light extinguishes due to high flare gas flow during an emergency, allowing uncombusted flare gas to escape	Rule 203(b), Condition requiring full use, NSPS Subpart A	X	X - if an NSPS emission limit exceeded		
Fugitives	Flange in VOC service leaking above 1,000 ppm not repaired within Rule 1173 repair period	Rule 1173			X	
	PRD in VOC service relieves > 100 pounds VOC to atmosphere due to a process upset caused by operator error.	Rule 1173			X - R1173 notification also required	
SCR	SCR malfunctions due to bearing or damper failure, resulting in excess NOx emissions	Rule 203(b), Condition requiring full use	X			
	Ammonia pump malfunctions, resulting in no ammonia injection and excess NOx emissions	Rule 203(b), Condition requiring full use	X			
	Ammonia injection continued after heater drops below temperature limit for SCR operation during controlled heater shutdown, resulting in excess ammonia emissions	BACT condition limiting NH3 slip			X	
Heater/	SCR temperature gauge or pressure gauge	Condition requiring				X

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Equipment or Process	Scenario	Rule(s) or Permit Condition(s) Violated	Breakdown (2)	Title V		
				Emergency (1)	Excess Emission Deviation (3)	Other Deviation (4)
	malfunctions, but SCR is operating normally	monitoring				
Boiler	Fuel usage and/or firing rate limit exceeded due to operational changes	Condition limiting fuel usage or duty			X	
	CO exceeds 2,000 ppm due to poor heater tuning	Rule 407			X	
	Emissions found to exceed limit during source test being performed under normal operating conditions	Condition limiting emissions			X	
IC Engine	Firewater emergency IC engine operated for hours exceeding annual limit due to poor monitoring	Condition limiting use			X	
	Firewater emergency IC engine operated for hours exceeding annual limit due large Facility incident	Condition limiting use	X	X		
	Fuel injection timing of IC engine not certified once every three years	Condition requiring certification				X
Storage Tank	Vapor pressure limit exceeded due to accidental storage of light materials	Condition limiting vapor pressure			X	
	Vapor pressure limit exceeded due unit malfunction	Condition limiting vapor pressure	X			
Thermal Oxidizer	Minimum temperature limit not maintained due to inadequate monitoring, resulting in incomplete incineration	Condition limiting minimum temperature			X	

Notes: Initial Incident Notifiation
1 & 2 - verbal notification <1 hour
3 - verbal notification < 72 hours
4 - verbal notification not required; include on Title V Semi-Annual Report only

FOR DISCUSSION PURPOSES ONLY – CALIFORNIA EXAMPLE

Attachment F – Example Mitigation Measures

Immediate steps should be taken to mitigate excess emissions, if any, and correct the deviation. In fact, these steps are required by the SCAQMD Title V emergency and breakdown provisions. Mitigation/corrective measures should be determined by first considering the safety of the employees and community and the protection of the environment. They should be documented to clearly show the SCAQMD inspectors that mitigation/corrective measures were timely initiated. Documentation can be in the form of work requests, pictures, CEMS printouts, etc., and should be provided to the Environmental On-Call Representative for the file.

Example mitigation/corrective measures include, but are not limited to:

1. Start repair work on equipment causing the deviation as soon as possible.
2. If heater SCR malfunctions, reduce firing rate on heater affected or other heaters and boiler in the facility to offset some of the excess NO_x emission, if any, resulting from the malfunctioning SCR.
3. If a pipeline, flange, valve, vessel, tank, or other equipment develops a leak, reduce the pressure in the system to minimize the amount of excess VOC emissions, if any.
4. If pipeline, flange, valve, vessel, tank, or other equipment develops a leak, install a temporary clamp to minimize the amount of excess VOC emissions, if any.
5. If a pump seal or compressor seal is leaking, utilize spare equipment so that pump or compressor with the bad seal can be shutdown and repaired.
6. Make process changes to reduce the emissions of excess pollutants, if any, resulting from the deviation. This must be determined on a case by case basis, based on safety an operational parameters.

FOR DISCUSSION PURPOSES ONLY – CALIFORNIA EXAMPLE

Attachment G – Written Reports

Written reports for reported deviations must be signed by the Responsible Official. The Responsible Official is the Facility Manager or someone else responsible for overall operation of the facility.

	Content included in Written Report (SCAQMD Form 500-N needs to be included for ALL reports)	**Emergency under Rule 3002 (g) – 2 day (1*)**	**Emergency under Rule 3002 (g) – 7 day (1*)**	**Breakdown (Rule 430, 2004) (2 (a, b)*)**	**CEMS Breakdowns (Rules 218 & 2011/2012) (2 (c)*)**	**Deviation with excess emissions (Title V Permit, Sec. K) (3*)**	**Other deviations (Title V Permit, Sec. K) (4*)**
1	Description of deviation	X	X	X	X	X	X
2	Identification of the equipment involved in causing, or suspected of having caused, or having been affected by the deviation		X	X	X	X	
3	Duration of the excess emissions		X	X	X	X	
4	Date of correction and information demonstrating that compliance is achieved		X	X	X	X	X
5	Identification of the types of excess emissions		X	X	X	X	
6	Quantification of excess emissions and the basis used to quantify the emissions		X	X	X	X	
7	If a breakdown or Title V emergency is claimed, proof that the deviation did not result from operator error, neglect, or improper operation or maintenance procedures		X	X	X		
8	Corrective actions immediately taken to correct the deviation (and supporting information)	X	X	X	X	X	X
9	Steps immediately taken to minimize excess emissions (and supporting information)	X	X	X	X	X	
10	Mitigation/Corrective measures undertaken and/or to be undertaken to avoid such a future deviation		X	X	X	X	X
11	Pictures of the equipment that failed, if available		X	X	X	X	

* Number references applicable section of Attachment B – Deviation/Incident Reporting Checklist

Panel 712

Reporting Environmental Releases & Violations- When Time is of the Essence Reporting Environmental Releases

Darren Stroud
Win Colbert
David Owens
Bob Temple - Moderator

Panel 712

Reporting Environmental Releases & Violations- When Time is of the Essence Reporting Environmental Releases

Reporting Environmental Releases & Violations (Air Releases – California Example)

Darren Stroud

Overview

- The purpose of this presentation is to provide guidance on what to do when encountering potential deviations, equipment breakdowns, and/or air incidents that require reporting under local, state, and federal rules and regulations.
- For the purposes of this presentation, a California example will be used.

California Example

- The Local notification and reporting requirements covered in this presentation include Title V emergency reporting (SCAQMD Rule 3002); equipment breakdown (SCAQMD Rule 430, 2004, 218); other Title V reporting requirements (Section K under Facility Permit); CEMS failure (SCAQMD Rule 2011, 2012); SCAQMD Rule 1118 flare event; and sensor alarm or breakdown (Air Permit condition) at a Facility.
- In addition, the Reportable Quantity notification requirements of the California Office of Emergency Services (OES) in April 2006 and the Federal National Reportable Center (NRC) are also discussed.

Air Release (Deviation)

- A deviation is any non-compliance with a SCAQMD enforceable requirement, such as an emission limit, equipment standard, work practice, monitoring requirement, or reporting and recordkeeping requirement. SCAQMD requirements may be found in a rule or regulation, variance, compliance plan, or most likely, in the Air Permit.
- Determining when a deviation has occurred is sometimes not a straightforward task. The facility is required to consider all "credible evidence" to determine whether a deviation has occurred or not. "Credible evidence" may include historical data, operating experience, and engineering knowledge.

Important Definitions

- **Breakdown:** A condition caused by an accidental fire or non-preventable mechanical or electrical failure. (SCAQMD Rule 102.)
- **Emergency:** Any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which :
  - requires immediate corrective action to restore normal operation; and
  - causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency; and
  - is not caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

  (SCAQMD Rule 3000 (b)(8).)
- **Technology-Based Emission Limits:** Those standards or limits contained in the Air Permit, SCAQMD Rule, or other state or federal regulations, the stringency of which are based on determinations of what is technologically feasible, considering relevant factors. Examples of technology-based emission limits include Best Available Control Technology (BACT), lowest achievable emission rate standards (LEAR), maximum achievable control technology (MACT) under 40 CFR 63, and new source performance standards (NSPS) under 40 CFR 60.

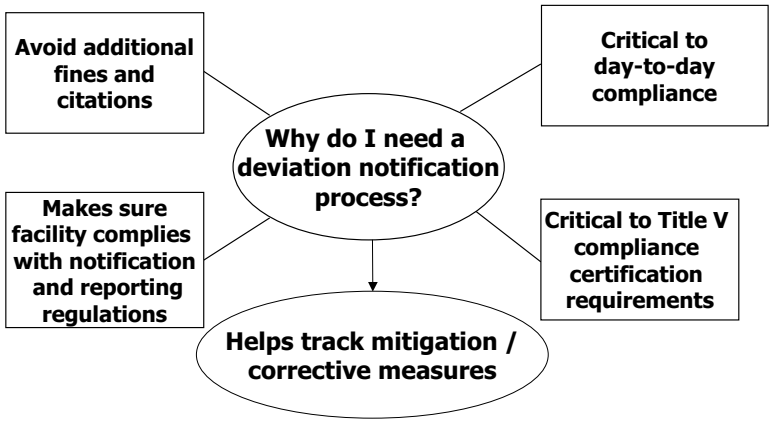
Deviation Notification Process (Course Materials)

- **Discovery of Deviation/Incident**
- **Initial Incident Notifications**
- **Deviation and Incident Response Follow-Up**
- **Written Reports For Deviations**
- **Program Administration**

What's the Bottom Line?

- An good deviation notification process can:
  - **Improve facility profitability**, by lowering compliance costs
  - **Lower compliance liability**, by:
    - Correcting problems,
    - Assuring due diligence for reporting and certifications.

Preventing Problems…



Panel 712

Reporting Environmental Releases & Violations- When Time is of the Essence Reporting Environmental Releases

Reporting Water Releases

Win Colbert

Overview

- The purpose of this presentation is to provide guidance when regulatory and permit reporting requirements are triggered:
  - Clean Water Act
  - EPCRA
  - TCSA
  - Safe Drinking Water Act

Clean Water Act

- 33 U.S.C. §§ 1251-1387; 33 C.F.R. Parts 320-220, 335-338; 40 C.F.R. Parts 104-140, 230-233, 401-471
- The Clean Water Act (CWA) is the cornerstone of surface water quality protection in the United States. The statute employs a variety of regulatory and nonregulatory tools to reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff.

Clean Water Act (cont'd)

- The Clean Water Act prohibits the discharge of "pollutants" through a "point source" into a "water of the United States" unless they have an NPDES permit.
- The permit will contain limits on authorized discharges, monitoring and reporting requirements, and other provisions.

Clean Water Act (cont'd)

- Oil Spills
  - To address the potential environmental threat posed by petroleum and non-petroleum oils, the U.S. Environmental Protection Agency has established a program designed to prevent oil spills.

Clean Water Act (cont'd)

- A spill of oil or a release of a hazardous substance release must be reported to the National Response Center (NRC) at (800) 424-8802.
- For more information on the National Response Center, visit the NRC website http://www.nrc.uscg.mil/nrchp.html
- The National Response Center (NRC) is the sole federal point of contact for reporting oil and chemical spills. If you have a spill to report, contact may be made via the referenced toll-free number. For those without 800 access, please contact us at 202.267.2675. The NRC operates 24 hours a day, 7 days a week, 365 days a year.

EPCRA

- Emergency Planning & Community Right to Know Act
  - 42 U.S.C. 11001 et seq. (1986)
  - EPCRA was passed in response to concerns regarding the environmental and safety hazards posed by the storage and handling of toxic chemicals.

EPCRA (cont'd)

- EPCRA has four major provisions:
  - Emergency planning (Section 301-303)
  - Emergency release notification (Section304)
    - Facility owners/operators must report accidental releases of "extremely hazardous substances" and CERCLA "hazardous substances" to state and local officials (Section 304)
  - Hazardous chemical storage reporting requirements (Sections 311-312), and
  - Toxic chemical release inventory (Section 313).

EPCRA (cont'd)

- Toxic chemical release inventory
- (Section 313).
- The Toxics Release Inventory (TRI) is an EPA database that contains information on toxic chemical releases and other waste management activities reported annually by certain covered industry groups as well as federal facilities.
- The inventory was established under the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) and expanded by the Pollution Prevention Act of 1990.

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Toxic Substances Control Act

- 15 U.S.C. 2601 et seq. (1976)
- The Toxic Substances Control Act (TSCA) was enacted to give EPA the ability to track the thousands of industrial chemicals produced or imported into the United States.
- Pursuant to TCSA, EPA screens chemicals and can require reporting or testing of those that may pose an environmental or human-health hazard.
- EPA can also ban the manufacture and import of chemicals that pose an "unreasonable risk".

Safe Drinking Water Act

- 42 U.S.C. 300f et seq. (1974)
  - The Safe Drinking Water Act (SDWA) was established to protect the quality of drinking water in the U.S.
  - The SDWA focuses on all waters actually or potentially designed for drinking use, whether from above ground or underground sources.
  - The Act authorizes EPA to establish safe standards of purity and required all owners or operators of public water systems to comply with primary (health-related) standards.

Safe Drinking Water Act (cont'd)

- Drinking Water Public Notifications
  - Depending on the severity of the situation, water suppliers have from 24 hours to one year to notify their customers after a violation occurs.
  - EPA specifies three categories, or tiers, of public notification. Depending on what tier a violation situation falls into, water systems have different amounts of time to distribute the notice and different ways to deliver the notice:

Safe Drinking Water Act (cont'd)

- Immediate Notice (Tier 1): Any time a situation occurs where there is the potential for human health to be immediately impacted, water suppliers have 24 hours to notify people who may drink the water of the situation.
- Water suppliers must use media outlets such as television, radio, and newspapers, post their notice in public places, or personally deliver a notice to their customers in these situations.
- Notice as soon as possible (Tier 2): Any time a water system provides water with levels of a contaminant that exceed EPA or state standards or that hasn't been treated properly, but that doesn't pose an immediate risk to human health, the water system must notify its customers as soon as possible, but within 30 days of the violation. Notice may be provided via the media, posting, or through the mail.
- Annual Notice (Tier 3): When water systems violate a drinking water standard that does not have a direct impact on human health (for example, failing to take a required sample on time) the water supplier has up to a year to provide a notice of this situation to its customers. The extra time gives water suppliers the opportunity to consolidate these notices and send them with annual water quality reports (consumer confidence reports).

Panel 712

Reporting Environmental Releases & Violations- When Time is of the Essence Reporting Environmental Releases

Reporting Environmental Releases

David J. Owens

Benefits of Voluntary Reporting

- **Prevention** - Avoidance of civil and criminal penalties arising out of uncertain consequences from spills and releases.
- **Affirmative Benefits** - Potential for an improved relationship with EPA, a lower monitoring rate and pre-emption of future regulation.

Benefits of Voluntary Reporting: Prevention Example

Example: Spill reporting under the Clean Water Act ("CWA")

- Violations of spill reporting regulations can lead to significant civil and criminal penalties.
- EPA has an expansive view of its own jurisdiction and what needs to be reported.
- It is difficult to know volumes or locations of spills that have jurisdictional importance.
- It is always easier to defend cases when there is a report to EPA.

Benefits of Voluntary Reporting: Prevention Example

- Even CWA experts have trouble discerning the limits of EPA jurisdiction.
- In 2003, the Sixth Circuit in *U.S. v. Rapanos* adopted EPA's expansive view of its jurisdiction under the Clean Water Act:
  - Wetlands do not need to be directly adjacent to navigable waters; and
  - Jurisdiction can be established by a hydrological connection running from wetlands through a man-made drain, to a non-navigable tributary and finally to a navigable water, covering over ten miles in the process.

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Benefits of Voluntary Reporting: Prevention Example

- A small tank with a slight leak can have a major environmental impact.
- Are field personnel equipped to determine:

  Whether a spill went to an "ephemeral" stream or an "intermittent" stream?

  Whether a particular feature has a sufficient "nexus" with a "navigable" water to merit a report to the National Response Center?

- Often it cannot be determined whether the spill is reportable until after the time for reporting has passed.

Affirmative Benefits of Voluntary Reporting

Potential for:

1. Improved standing with EPA
2. Lower monitoring rate
3. Preemption of future regulation

Establish Better Relationship with EPA - Future CIVIL Sanctions

- EPA considers past 'good-faith efforts' in setting civil sanctions. *See* 33 U.S.C. 1319(g)
- Under EPA's Audit Policy, the Agency rewards voluntary reporting by waiving or reducing gravity-based penalties.*
  - 'Gravity-based' refers to that portion of the penalty over and above the portion that represents the entity's economic gain from noncompliance, known as the 'economic benefit'.

*** Source: "Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations" 65 Fed. Reg. 19,617 (April 11, 2000)**

Build Relationship with EPA – Future CRIMINAL Sanctions

- EPA will generally elect not to recommend criminal prosecution as long as discovery and disclosure were conducted in good faith and the entity adopts a systematic approach to preventing recurrence of the violation.*

*** Source: "Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations" 65 Fed. Reg. 19,617 (April 11, 2000)**

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Lower Monitoring Rates

- Firms engaging in voluntary environmental 'over-compliance' designed to obtain higher compliance levels than required under existing regulations may be able to obtain lower monitoring rates from a regulating agency.*

* Source: Thomas P. Lynn & John W. Maxwell, "Voluntary Approaches to Environmental Regulation: A Survey" Environmental Economics: Past Present and Future (2000)

Preempt Future Regulation

- Over-compliance is a rational response to the anticipation of stricter regulation in the future.
- Studies have shown that industry may 'volunteer' to exceed existing environmental standards in order to forestall additional formal regulation.*

· Source: Maxwell, John, Thomas Lyon and Steven Hackett "*Self Regulation and Social Welfare: The Political Economy of Corporate Environmentalism*" Journal of Law and Economics (2000)

Voluntary Reporting for the Oil and Gas Industry*

Drivers

- Highly diversified industry with varied reporting styles.
- Difficulty in drawing comparisons between companies and assessing the industry sector's overall performance on key indicator issues.

* See Generally: "*Oil & Gas Industry Guidance on Voluntary Sustainability Reporting*" International Petroleum Industry Environmental Conservation Association, American Petroleum Institute and the International Association of Oil & Gas Producers

Voluntary Reporting for the Oil and Gas Industry

Benefits

- Enhanced investor confidence
  - Clear demonstration of risk management
  - Positioned to address emerging opportunities
- Improved performance by increasing awareness
- Demonstrated commitment to socially responsible performance
- Improved community relations

Voluntary Reporting for the Oil and Gas Industry

Indicators

- The petroleum industry has developed performance indicators for:
  - Environmental
  - Health and Safety
  - Social Responsibility
  - Economic Performance

Voluntary Reporting for the Oil and Gas Industry

For each indicator, the Program is designed to:

- Establish data consistency and quality
- Create benchmarking opportunities
- Demonstrate consistency and transparency in performance reporting
- Encourage stakeholder feedback
- Utilize data to improve business processes

S.E.E. Change Initiative*

The Business Roundtable has announced the Society, the Environment and the Economy ("S.E.E.") Change Program

- Support from manufacturing and non-manufacturing sectors.
- Based on the premises that goals of higher profits and lower costs are not incompatible with environmental stewardship and social improvement.

*** See generally, The Business Roundtable's S.E.E. Change Initiative.**

S.E.E. Change Initiative

Provides flexibility in determining key indicators based on:

- Materiality (Do the indicators represent important social and/or environmental challenges?)
- Do the indicators challenge the company to significantly improve performance?
- Can transparent and reliable metrics be established?
- Are the time horizons sufficient to demonstrate meaningful changes in performance?

State Audit Privilege and Immunity Laws

Privilege Only

- **Arkansas**
- **Indiana**
- **Illinois**
- **Oregon**

Immunity Only

- **New Jersey**
- **Rhode Island**
- **Minnesota**

Source: http://www.epa.gov/region5/orc/audits/audit_apil.htm

State Audit Privilege and Immunity Laws

Privilege AND Immunity

- Alaska
- Arizona
- Colorado
- Idaho
- Iowa
- Kansas
- Kentucky
- Michigan
- Mississippi
- Montana
- Nebraska
- Nevada
- New Hampshire
- South Carolina
- South Dakota
- Texas
- Utah
- Virginia
- Wyoming

Source: http://www.epa.gov/region5/orc/audits/audit_apil.htm

State Civil Penalty Mitigation Laws

- Illinois

Source: http://www.epa.gov/region5/orc/audits/audit_apil.htm

State Self-Disclosure Policies

- Arizona
- California
- Connecticut
- Delaware
- Florida
- Hawaii
- Indiana
- Maine
- Maryland
- Massachusetts
- Minnesota
- New Mexico
- New York
- North Carolina
- Oregon
- Pennsylvania
- Tennessee
- Vermont
- Washington

Source: http://www.epa.gov/region5/orc/audits/audit_apil.htm

Is It Working?

- Companies are more likely to disclose if:
  - They were recently inspected.
  - They were recently subjected to an enforcement action.
  - Their industry segment has been targeted for heightened scrutiny.
  - They are highly visible.
- Evidence supports the conclusion that immunity fosters disclosure
  - Audit privileges do not seem to foster disclosure.

Source: Short, J.L. and Toffel, M.W., Turning Themselves In: Why Companies Disclose Regulatory Violations
July 13, 2005 – University of California, Berkeley