

Avoid the Deviation: The Art of Compliance

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Types of Deviations

- ▶ Unavoidable Deviations
 - Malfunctions
- ▶ Preventable Events and Deviations
 - Deficient Records
 - Inaccurate Permitting
 - Poor Communication
 - Lack of Knowledge of Requirements

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Case Study

- ▶ Issues at Facility
 - Inaccurate permitting
 - Deviations during inspections
 - Missed reporting deadlines
 - Deficient recordkeeping
 - Inadequate communication between production and environmental staff
 - Poor relations with regulators

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Case Study

Issue: Inaccurate Permit Representation

Solution: Site Visit / Internal Audit

- Take notes of all potential sources and stacks (including non-regulated sources)
- Take pictures
- Update permit (if needed)



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Case Study

Issue: Inaccurate Permit Representation

Solution: Document all sources and non-sources

- Add physical signs to equipment and/or stacks with permit source number and description
- Include all information in compliance manual



Equipment Name: Cooling Tower #1

Source Number: SN-01

Source Description: Cooling Tower #1 (SN-01) provides cooling water for processes within the facility.

Emission Calculations Location: //Server/Air/Calculations/Cooling Tower 09202001

Stack Parameters:

STACK HEIGHT (FT)	INSIDE STACK DIMENSIONS (FT)	STACK GAS TEMP.(°F)	STACK GAS VELOCITY (FT/SEC)
20	Two fans each 4.75 ft	Ambient	20

Location:

UTM COORDINATES	
HORIZ. (E)	VERT. (N)
500,000	3,000,000

Case Study

Issue: Deviations During Inspections

Solution: Permit Review

- Document facility compliance methodology

SC-6 and SC-7 (Production Limits). The facility shall not exceed a throughput of 400,000 tons per 12 month rolling period. These records must be updated by the 15th day of the following month.

Compliance: Records kept in Section 4.0 of Compliance Manual

SC-12 (Watering). The facility must water all processes, storage piles, and haul roads as needed to ensure that no nuisance visible emissions extend beyond the property line of the facility.

**Compliance: Watering is done by Company XYZ when called by facility.
Records maintained in accordance with SC-13.**

Case Study

Issue: Deviations During Inspections

Solution: Permit Review

- Identify the permit condition requirements, document frequency, and type of action

Company ABC

Permit: 1000-AOP-R12

Issue Date: April 20, 2009

Expiration Date: April 19, 2014

Condition	Source	Description	Compli. Demonstration	Type of Action	Owner	Frequency	Due	Location
SC-1	SN-01	Boiler #1	N/A, Emission Limits	--	--	--	--	--
SC-2	SN-01	Boiler #1	N/A, Emission Limits	--	--	--	--	--
SC-3	SN-01	Boiler #1	Method #9 Testing and Records	Testing	Air Manager	Weekly	Every Friday	//Server/Air/Routine
SC-4	SN-01	Boiler #1	N/A, Subject to Dc	--	--	--	--	--
SC-5	SN-01	Boiler #1	Initial Notification was submitted on Jan 1, 2005	Reporting	--	One Time	Complete	Air Manager - File Cabinet
SC-6	SN-01	Boiler #1	Gas Usage Records	Records	Accounting	Monthly	15th of the Month	//Server/Accounting/Routine

Case Study

Issue: Deviations During Inspections

Solution: Review Historical Deviations

- Implement corrective action
- Revise permit
- Communicate issues with production personnel

Deviation and Upset Condition Report							
No.	Dev or UC Started		Dev or UC Ended		# of Hours	Cause of Dev or UC	Corrective Action Taken
	Date	Time	Date	Time			

Deviation and Upset Condition Report Summary Permit Number:						
No.	Source No.	Pollutant	Applicable Requirement (Include Rule Citation)	Monitor Method (Include Rule Citation)	Monitoring Frequency	Total # of Dev and UC

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Case Study

Issue: Missed Reporting Deadlines

Solution: Compliance Calendar

- Include all routine actionable items

Date	Category	Description
January 31	Routine Reporting	NESHAP Semi-Annual Compliance Report (SACR)
Apr 1	Routine Report	Annual Compliance Certification (ACC) Semi-Annual Monitoring Report (SAMR)
Apr 15	Routine Report	Emissions Inventory Questionnaire (EIQ)
July 31	Routine Reporting	NESHAP Semi-Annual Compliance Report (SACR)
Oct 1	Routine Report	Annual Compliance Certification (ACC) Semi-Annual Monitoring Report (SAMR)
Weekly	Compliance Monitoring	Visible Emissions Observation for Sources: <ul style="list-style-type: none">• SN-01• SN-05
Monthly by the 15th	Recordkeeping	Natural Gas Monthly Usage Records

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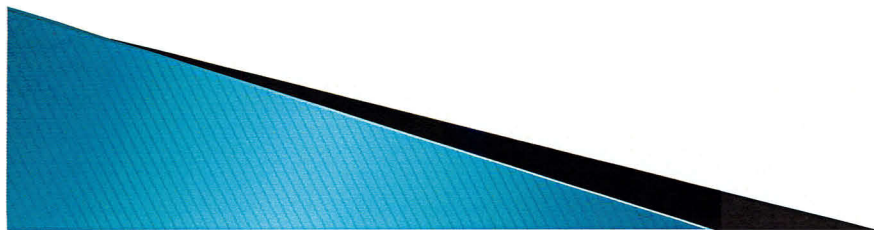
Case Study

Issue: Deficient Recordkeeping

Solution: Tracking Spreadsheets

- Excel is your friend
- Keep it simple
- Multi-media issues (i.e. Form R, EIQ, PSD)
- Set actual tracking more frequently than permit requires (as needed)
- Records reviewed monthly

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Case Study

Issue: Inadequate Communication

Solution:

- Involve management
- Require all product changes go through environmental review
- Environmental review of all capital projects
- Routine review of projects between corporate and facility environmental staff, production personnel join as need
- Production Manager responsible for updating monthly environmental records



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Case Study

Issue: Poor Relations with Regulators

Solution: Compliance Manual

- Keep it simple
- Make it something you use and not a binder on a shelf
- Include or indicate location of all pertinent files



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Recordkeeping Spreadsheet
Daily Limit Tables
Material Safety Data Sheets

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Initial Notification
Notification of Compliance Status

7.0 Reporting

Semi-Annual Monitoring Report Cover Letter Template
Annual Compliance Certification Cover Letter Template
Copy of Semi-Annual Monitoring Reports
Copy of Annual Compliance Certifications

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Case Study

Issue: Poor Relations with Regulators

Keep Records Accessible

- Compliance manual updated and organized
- Laptop with network access can be used for demonstration of required records
- CD with all records made every month to provide to inspector (if requested)



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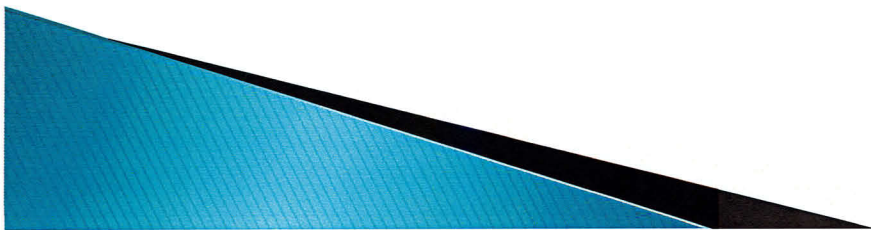
Case Study

Result

“Today’s inspection went extremely well (see summary below). Overall, the inspector was impressed with the organization of our paperwork as well as the cleanliness of the plant. All requested documentation was readily available and no issues surfaced.”

“The inspector was complimentary of our paperwork organization. She was impressed with the recordkeeping and the spreadsheets we maintain.”

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