

Oil & Gas Industry Compliance
with
EAC Ozone Action Plan Requirements
for Condensate Tanks



**Data Compiled by
APCD & RAQC staff**

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Overview

1. Overview of affected sources
2. Condensate Tank Regulation 7 Requirements
3. 2005 Regulation 7 compliance summary
4. Projected 2006 Regulation 7 compliance



Condensate (Flash) Tanks in Ozone Action Plan

- Oil and gas exploration and production (E&P) operation, SIC 1321.
- Condensate tanks in 8-hour ozone control area
- Located upstream of a natural gas plant
- Air Pollution Emissions Notice (APEN) pursuant to AQ Regulation No. 3
- System wide VOC emissions of 30 tpy or greater under one owner or operator.
- ~ 4070 condensate tanks in 8-hour control area in 2005.



Condensate Tanks

Regulation No. 7 Requirements

- 2005 Reduction Requirements
- Reductions from uncontrolled actual emissions
 - Ozone season – 37.5% VOC reduction from May 1 – Sept. 30 on daily basis
 - Shoulder seasons – 30% VOC reduction from Jan. 1 – April 30 and Oct. 1 – Dec. 31 averaged over 7 months



Condensate Tanks

Regulation No. 7 Requirements

- 2006 and beyond Reduction Requirements
- Reductions from uncontrolled actual emissions
 - Ozone season – 47.5% VOC reduction from May 1 – Sept. 30 on daily basis
 - Shoulder seasons – 38% VOC reduction from Jan. 1 – April 30 and Oct. 1 – Dec. 31 averaged over 7 months



Condensate Tanks

Reg. 7 Reporting Requirements

- Spreadsheet must be maintained at all times and include:
 - All affected condensate tanks and pollution controls
 - Production volumes of condensate
 - Control equipment efficiency
 - All planned and unplanned shut downs of control equipment
 - Daily uncontrolled and controlled actual emissions in ozone season
 - System wide daily percentage reduction of emissions in ozone season
- Annual report due by April 30 of each year containing all data shown above and indicating compliance status.
- APCD prepared a template spreadsheet and provided training for industry in early 2005. In addition small business assistance outreach was provided.



2005 Reg. 7 Compliance Emission Reductions

Ozone Season

Average Uncontrolled VOC	197 TPD
Average Controlled VOC	120 TPD

Average Emission
Reduction – 39%

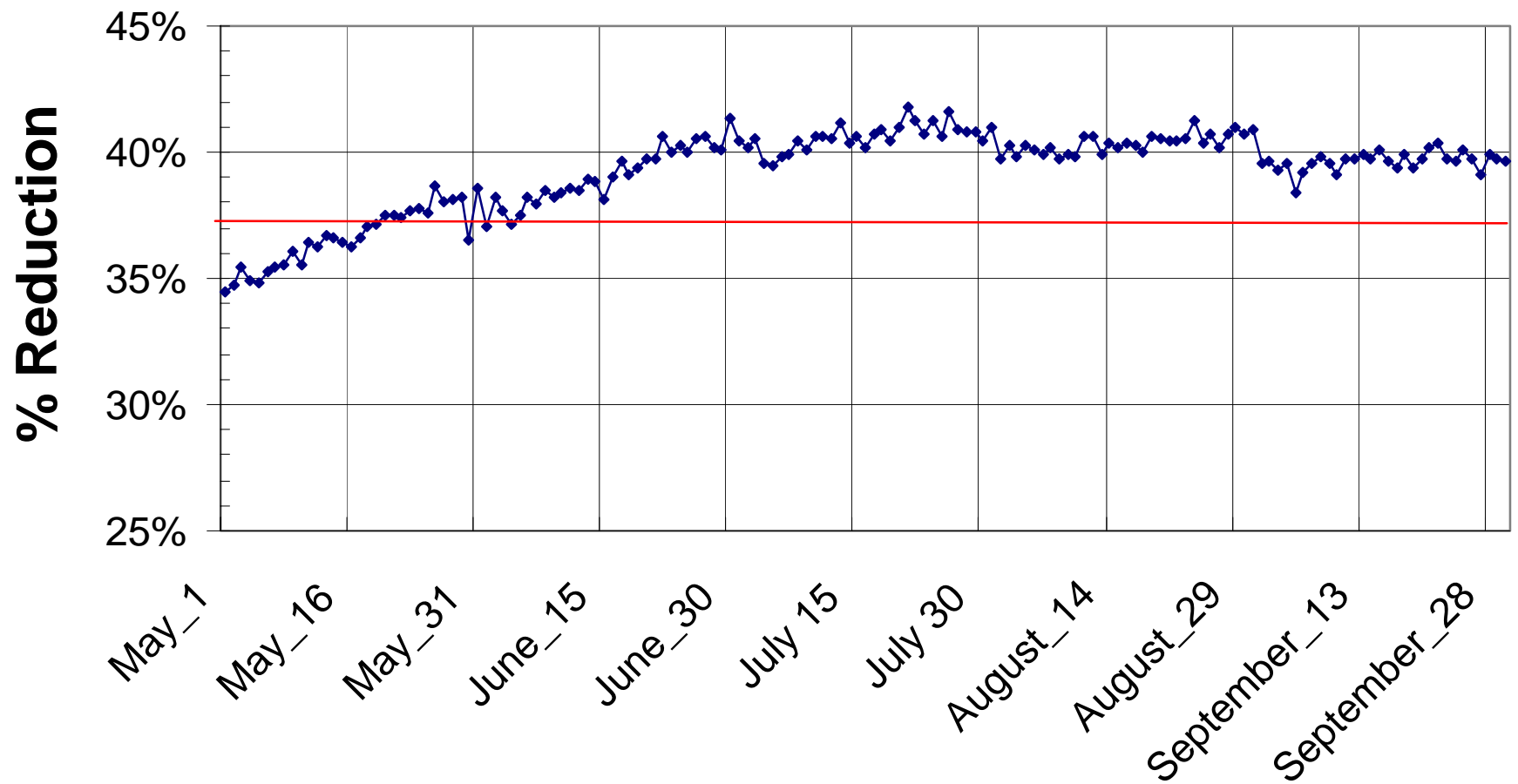
Shoulder Seasons

Average Uncontrolled VOC	197 TPD
Average Controlled VOC	135 TPD

Average Emission
Reduction – 32%

- On average daily compliance was achieved mid to late May

Daily 2005 Ozone Season Emissions Reduction





2005 Reg. 7 Compliance Recordkeeping and Reporting

- Daily recordkeeping requirements proved to be onerous for industry
 - Field reporting, data gathering, and monitoring of control equipment are not typical daily activities for field workers.
 - Condensate production is not tracked on a daily basis
- Annual Report – 26 of 30 companies have reported, 4 are being investigated for applicability.
- Initial review of OGCC records found ~ 30 companies not reporting condensate tank VOC emissions and not in APEN system.
- Enforcement commenced for 7 of the 30 companies based on further review.
 - Resulting in an increase of 2005 condensate tank uncontrolled VOC emissions of ~ 3 TPD.



2006 Ozone Season Compliance and Beyond

- Emission reductions as of May 1, 2006 estimated to be ~ 45% based on industry reporting.
- Through APCD enforcement activities and compliance assistance 2006 compliance (47.5% reductions) is currently being achieved.
- 23 of 26 companies are currently compliant.