Largest VOC Facilities in Ozone Non-Attainment Area

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If you'll recall…

- Summarized the largest VOC sources in NAA
- Excluded condensate tank batteries due to recent control requirements
- Six remaining sources with control options
- Met with facilities to develop options

Largest Emitting Facilities: Ozone NAA

From April 10, 2008 Presentation

- Suncor Energy
  - 1,035 tpy permitted vs. 339 tpy actual
  - Storage tank/fugitive controls
- Coors Brewing
  - 494 tpy
  - Bottle/can filling controls (route to VOC duct/burner)
- Metal Container Corp.
  - 246 tpy
  - Can coating operation control (thermal oxidizer)
- Anheuser Busch
  - 196 tpy
  - Can filling & possibly other operations' controls (similar to Coors' VOC duct/burner)
- CEMEX, Inc
  - 147 tpy permitted
  - Currently assessing actual emissions and potential control options
- Insulfoam LLC
  - 145 tpy
  - Resin storage controls (carbon filtration)

Based on 3/3/08 inventory query (APEN data)

Meeting Outcomes

- Differences in actual emissions
- Potential control options
  - Rough $/ton
  - Feasibility
  - Limitations
- Discussions of next steps

Suncor Energy

- APEN Reported VOC Emissions: 1035 TPY
- Actual VOC Emissions: 339 TPY

Emissions primarily from:

1. Storage Tanks 156 tons
2. Fugitives 90 tons

- Control could be obtained from installation of a geodesic dome around a storage tank.
- Enhanced maintenance on fugitive emissions

Coors Brewing

- APEN Reported VOC Emissions: 494 TPY
- Actual VOC Emissions: 390 TPY (2007)

- Emissions primarily from packaging (can, bottle and keg filling)

- Emission factors are facility-specific
- Cost of controls would include installing a new line to route VOCs to the boiler.
- Potential joint venture with Miller could have an impact on emissions

- Coors provided a schedule for stack testing to be performed in July, results will be available in August. Control costs will also be provided.

Metal Container Corp.
(Owned by Anheuser-Busch, Packaging Group, Inc.)

- APEN Reported VOC Emissions: 246 TPY
- Actual VOC Emissions: 200 TPY last 2 years

- Emissions Primarily from: can coating operations

- Control could be obtained from regenerative thermal oxidizer (RTO)
- An RTO would be feasible from a technical basis, and other facilities have installed them
- The company is working on an economic analysis for installing/operating and the difference between RACT/BACT.

Anheuser Busch

- APEN Reported VOC Emissions: 196 TPY
- Actual VOC Emissions: 196 TPY

- Emissions Primarily from:
  1. Packaging Lines (can and keg filling) 135 TPY
  2. Nutriturf (land application) 61 TPY

- The company has done some analysis in NJ, NY, and Houston, TX and controls weren't cost-effective
- Just received a similar analysis for a Houston facility

- Nutriturf RACT analysis will also be analyzed

CEMEX, Inc.

- APEN Reported VOC Emissions: 147 TPY
- Actual VOC Emissions: 6.66 TPY

- AP-42 Emission factors were being used for the dryer and kiln.

- New APENs were filed with the Division which show the rotary kiln (95OPBO082) with 4.5 TPY of VOC actuals based on CEMs (2007).

- The raw materials drying is 2.16 TPY in 2007.

Insulfoam LLC

- APEN Reported VOC Emissions: 145 TPY
- Actual VOC Emissions: 82 TPY

- Synthetic Minor permit (permit limit of 99 TPY) since 2002. Duplicative APENs were filed with the Division, therefore emissions were double-counted.

- The Division is working with the source to address this issue.

Summary

- Division has not developed rule language, and is in the process of firming up cost estimates and associated emissions reductions
- Will not be fully developed for September request, but will continue developing this option separately from the ozone SIP process
- Need time to install (~ 3 yrs), thus reductions, if any are adopted, will not be achieved by 2010

Next Steps

- Continue working with facilities
- Develop the best emissions information
- Obtain cost data for specific facilities