

## **Minutes of the Aboveground Storage Tank (AST) Enhanced Vapor Recovery (EVR) Workshop on August 20, 2002**

Meeting Place – Air Resources Board's Monitoring and Laboratory Division in Sacramento, California.

Meeting Presentation – The Air Resources Board (ARB) gave a Powerpoint presentation at the workgroup meeting. This presentation can be viewed on ARB's vapor recovery website at <http://www.arb.ca.gov/vapor/ast/ast.htm>.

### Workgroup Meeting Highlights

Highlights from the April 17 and July 23 Workgroup meetings were presented and included the revised AST definition, status on the AST inventory in California, and the potential use of rupture disks as emergency venting devices.

### Proposed AST Definition

There were no comments on the proposed AST definition.

### Monitoring Activities

One comment on Slide 7 (graph of tank vapor pressure and ambient temperature on a 1,000 gallon non-insulated AST). It appears that the tank vapor pressure is decreasing before the ambient temperature begins to decrease. The ARB offered two possible explanations why this might occur:

- The amount of tank surface area exposed to sunlight is decreased as the sun begins to set in the west (the tank is cylindrical and is positioned in a east-west direction); and
- The afternoon winds are providing a cooling effect on the tank.

### Efficiency Testing

ARB is conducting Phase I and Phase II efficiency testing on ASTs located in or near Sacramento. The purpose for efficiency testing is to establish in-use information on existing AST vapor recovery systems. Phase II tests conducted on a 1,000 gallon and a 12,000 gallon balance system showed efficiencies greater than 95%. Phase I test conducted on the 1,000 gallon balance system showed efficiency greater than 95%. ARB is conducting more Phase I and II testing on other AST systems.

### Component Evaluation

At the July 23, 2002 meeting, the AST EVR Workgroup suggested that a subcommittee be established to evaluate vapor integrity issues with existing emergency vents and to

research the viability of using rupture disks as alternative emergency venting devices. Workshop attendees were asked if they would be interested in participating in the emergency vent subcommittee. ARB will contact interested participants and coordinate the subcommittee meeting.

### Emissions Inventory

On July 12<sup>th</sup>, ARB sent letters to AST manufacturers to provide statistics of ASTs in California. ARB presented preliminary results of the responses, however, there are a handful of major AST manufacturers who have not responded. ARB will conduct follow up calls to obtain the information.

ARB estimates that increasing the vapor recovery efficiency to 95% will reduce emissions by 0.2 tons/day. There was a comment that a 0.2 tons/day emissions reduction does not appear worth the effort. ARB replied that the 0.2 tons/day is based on Phase I and Phase II efficiency increases and does not include emission reductions from minimizing AST fugitive emissions. AST fugitive emissions could be much greater than existing Phase I and Phase II efficiency emissions.

### Upcoming Activities

ARB will continue conducting Phase I and Phase II efficiency testing on two additional AST sites, one site using a processor and one site using a single-wall steel tank.

### Rulemaking Schedule

The ARB hearing on the AST EVR rulemaking is tentatively scheduled for April, 2003.

### Proposed Next Workgroup Meeting

The next AST EVR Workgroup meeting is tentatively scheduled for late October, 2002.

Presentation and Minutes of Past Workgroup Meetings– Presentations and minutes of previous workgroup meetings can be viewed on ARB's vapor recovery website at <http://www.arb.ca.gov/vapor/ast/archive.htm#minutes>.

Attendees:

Pat Bennett, ARB  
Cindy Castronovo, ARB  
Joe Guerrero, ARB  
LaMar Mitchell, ARB  
Paul Thalken, ARB  
Jim Swaney, San Joaquin Valley Unified APCD  
Teresa Sewell, Monterey Bay Unified APCD  
Marilyn Sarantis, CIOMA  
Sandra Duval, CIOMA  
John Ekhtiar, Convault  
Paul McWhorter, EcoVault / SPC Corp.  
Rich Stevens, Morrison Bros. Co.  
Lori Williams, Sierra Research  
John Lewis, Utility Vault / Oldcastle Precast

Via Teleconference:

Bud Pratt, Missouri Department of Natural Resources  
John Schroeder, San Joaquin Valley Unified APCD  
Lance Ericksen, Monterey Bay Unified APCD  
Robin Zimmerman, Santa Barbara County APCD