

Minutes of the 3rd Aboveground Storage Tank (AST) Enhanced Vapor Recovery (EVR) Workgroup Meeting on April 17, 2002

Meeting Place - San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) in Modesto, California. SJVUAPCD offices in Fresno and Bakersfield also participated via video teleconference.

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>.

What's New in Vapor Recovery – The ARB rescheduled the Aboveground Storage Tank (AST) Enhanced Vapor Recovery (EVR) rulemaking from September, 2002 to early 2003.

The ARB issued two Executive Orders for AST vapor recovery systems. These included the Hirt VCS400-7 System and the Oldcastle FuelVaults. These Executive Orders can be viewed on ARB's vapor recovery website at <http://www.arb.ca.gov/vapor/above/above.htm>.

Defining ASTs – ARB has previously defined ASTs in its Interim Guidelines for Certifying Vapor Recovery Systems Using Aboveground Storage Tanks (11/30/01). ARB received comments regarding this definition stating that it is inconsistent with other Agency definitions, specifically the State Water Resources Control Board. In addition, ARB needs to clearly define what types of systems will be included in the upcoming AST EVR Rulemaking as opposed to what systems were already captured under the existing EVR regulations. In response to these concerns, ARB proposed a new nomenclature "Emergency Vented Tanks." This nomenclature would simplify identification of those systems that would be subject to the new AST EVR Rulemaking.

The workgroup participant's had concern regarding the new nomenclature. There are only two categories of storage tanks used in the industry, underground storage tanks (USTs) and ASTs. These two nomenclatures are well known and introducing a third nomenclature could create confusion. The workgroup's recommendation was to include the term "emergency vent" in ARB's definition stated in the Interim Guidelines.

Status of AST Monitoring Effort – Since the last workgroup meeting on December 7, 2001, ARB has monitored a 1,000-, 3,000-, 6,000-, and a multiple 10,000-gallon balance AST vapor recovery systems. Graphs of tank vapor pressure and ambient temperature were shown on the Powerpoint presentation. The 3,000 gallon tank had a canopy over it and was situated next to a metal building. The other tanks were situated under full sun. The 3,000-10,000 gallon manifolded tanks did not maintain vapor integrity at pressures above 0.1 inches H₂O. The lack of vapor integrity was verified through testing. Testing revealed that the emergency vents (long-bolt manhole covers with metal to metal seat) were leaking.

Status of Test Procedure Development – The ARB is researching a new vapor integrity test procedure for AST vapor recovery systems. It is anticipated that the new test procedure will be more specific to the number of vapor recovery components (with allowable leakages) installed at a given site and will be able to test ASTs with capacities as low as 250 gallons.

AST Inventory and Emission Data – The California Energy Commissions' database (extracted from the State Water Resources Control Board's database of registered ASTs) showed 3,161 ASTs in California (actual number could be twice since there are many ASTs not registered). Given that approximately 2/3 of the ASTs are used for diesel (statistics by the Steel Tank Institute), this would indicate that 1,053 ASTs are used for gasoline. The AST manufacturers present at the meeting believed that this number is really low. The workgroup suggested that ARB contact each AST manufacturer to get a more accurate inventory of ASTs in California.

ARB estimated, based on a vapor recovery system efficiency of 90%, the Phase I and Phase II AST baseline emissions as 0.4 tons/day. If efficiencies were increased to 95%, a reduction of 0.2 tons/day emissions would be achieved. This estimate does not include fugitive emissions due to positive pressures in the ASTs, hereafter referred to as pressure-related fugitive emissions.

Planned Activities - ARB will determine what the pressure-related fugitive emissions are from ASTs and will look at data from the AST monitoring activities and data from field testing. The pressure-related fugitive emissions would then be added to the Phase I and Phase II emissions to obtain a total baseline emissions for the AST EVR Rulemaking. ARB plans to conduct Phase I and Phase II efficiency tests on various types of AST vapor recovery systems to determine the actual in-use efficiencies of these systems. This information will be used to update the Phase I and Phase II AST baseline emissions. The AST monitoring activity will continue through summer on several sizes of tanks, with a focus on balance type systems.

Open Discussion and Schedule Next Meeting – The next AST EVR Workgroup meeting is tentatively scheduled for mid-June, 2002. When the meeting is confirmed, an announcement will be sent to ARB's vapor listserv and posted on ARB's vapor recovery website.

Summary of Workgroup Meetings– The minutes of the September 18, 2001 and December 7, 2001 meetings can be viewed on ARB's vapor recovery website at <http://www.arb.ca.gov/vapor/ast/archive.htm#minutes>.

Attendees:

SJVUAPCD in Modesto:

Pat Bennett, ARB
Joe Guerrero, ARB
Rich Erickson, DonLee Pump
John Ekhtiar, Convault
Paul McWhorter, Spill Prevention Compliance Corp.
Jim Swaney, San Joaquin Valley Unified APCD
Gary Reeves, San Joaquin Valley Unified APCD
Tom Busenbark, San Joaquin Valley Unified APCD
Kevin Tokunaga, Glenn County APCD
Julie Menack, Regional Water Quality Control Board Region 2
Sandra Duval, CIOMA
David Gambetta, Dave's Repair Service
Kingsley Macomber, Sierra Research, Inc.
Dan Gallegos, ACE Tank
John Lewis, Utility Vault (Convault)

SJVUAPCD in Fresno:

John Schroeder, San Joaquin Valley Unified APCD
Robert Vinson, San Joaquin Valley Unified APCD

SJVUAPCD in Bakersfield:

Catherine Riccomini, San Joaquin Valley Unified APCD
Amanda Noble, Eastern Municipal Water District
Jack Bergman, Franklin Fueling Systems
Frank Bessler, Pomeco