



Missouri
Department of
Natural Resources

**MEETING THREE MINUTES
VAPOR RECOVERY STAKEHOLDER WORKGROUP
OCTOBER 14, 2008
10:00 am to 3:00 pm
Bennett Springs Conference Room
1730 E. Elm Street
Jefferson City**

1. Opening comments/Introductions

Attendees at the meeting include the following:

Nicole Eby, Air Pollution Control Program

Bud Pratt, Air Pollution Control Program

Paul McConnell, Air Pollution Control Program

Tami Spears, Air Pollution Control Program

John Albert, MDOA Weights and Measures

Tracy Barth, MFA Oil

David Dunlap, MFA Oil

Bill Ruppel, St. Louis Regional Office

Ari Yarovinski, St. Louis County Department of Health

Mark Jordan, Wallis Companies

Todd Burkhardt, Neumayer Equipment

Darrell Eversole, J.D. Street and Company

Brian Adams, Springfield-Greene County Department of Health

Milo Daub, Kansas City Health Department's Air Quality Section

Ron Leone, Missouri Petroleum Marketers & Convenience Store Association

Mark Werthman (by conference call), Chrysler, LLC

Nicole opened the meeting by asking the group if anyone had any opening comments, to which no one in the group responded.

2. Summary of last meeting

- Discussion of minutes

Ron Leone mentioned his assignment from the last meeting was to check on the Stage I requirements for all U.S. retail gasoline outlets exceeding 100,000 gallons per month (gpm). Ron checked with his federal contacts and obtained the following information:

Stage I "Newer" Gas Stations – Stage I vapor recovery equipment is required by January 10, 2008, in newly constructed or reconstructed gasoline dispensing facilities (GDF) that started operations after November 9, 2006, and have gasoline throughputs of 100,000 or more gpm.

Stage I “Older” Gas Stations – Stage I vapor recovery equipment is required by January 10, 2011 on all other GDFs that started operations before November 9, 2006, and have gasoline throughputs of 100,000 or more gpm.

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2. Summary of last meeting

- Discussion of minutes (continued)

100,000 GPM – The Petroleum Marketers Association of America verified that the 100,000 gpm throughput is not averaged on a calendar year basis. If a facility has 100,000 gpm throughput only once, then vapor balancing equipment is required. No averaging is allowed. Once a facility reaches the 100,000 gpm mark, the facility is in for good, regardless of subsequent month throughputs.

Nicole stated this has also been the guidance the state received from U.S. Environmental Protection Agency (EPA) concerning the MACT regulations in general.

Tracy Barth explained some of their facilities have both a bulk component and a retail component, potentially making the same facility subject to both Subpart BBBBBB and CCCCCC. He would like clarification on how to determine when one of these types of facilities becomes subject to the rule.

John Albert stated the throughput limit that triggers the Stage I requirement for gasoline distribution facilities is 20,000 gallons/day while the throughput that triggers it for gasoline dispensing facilities is 100,000 gallons/month. So the issue is which of these to use when determining if a facility is required to install Stage I.

Nicole explained she had several questions she intended to present to the EPA for guidance and she would make sure she included this. John stated he felt like it was a definition problem that can be cleaned up. John also feels it should be either one or the other. Tracy asked John how many stations in Missouri have above-ground storage tanks (ASTs). John replied 5220 stations have ASTs, with approximately ten to 12 considered retail and bulk facilities combined.

Ari Yarovinski asked how to decide what is more stringent and the group discussed that it is not really possible to determine.

John stated not all possibilities were taken into consideration when the rule was written.

David Dunlap stated it could possibly be required when either condition was met. Tracy asked how the throughput information would be verified. Mark Jordan stated possibly through tax records, or some other means of inventory for each facility. Mark asked John how many of those 5220 ASTs he thought would be at the 100,000 gpm throughput. John believes the total would be over 50% of those stations do have 100,000 gpm of throughput.

David asked if most ASTs were gasoline or diesel. John stated both but the majority are gasoline.

Brian asked if any of those stations with ASTs currently have Stage I. John stated yes, those in Kansas City are set up for vapor recovery. Tracy asked how long these stations have had Stage I. John stated approximately ten years or more.

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2. Summary of last meeting

- Discussion of minutes (continued)

The group spent some time discussing the various issues regarding vapor recovery and AST's. Some of these issues were venting requirements for emergency settings and P/V valve settings that conflict with each other. MOPETP P/V valves designed for underground storage tanks (USTs) actually causing more fugitive emissions than non-approved ones that are designed for ASTs and other safety issues that may be presented by vapor controls. The group also discussed the lack of available equipment for ASTs and wondered how other states are dealing with the issue.

Nicole asked the group if there are any other questions concerning Subpart BBBBBB or Subpart CCCCCC. Mark asked how many of the initial notifications had been received.

Nicole stated she has not been keeping those numbers but believes Bob Randolph, an Environmental Engineer with the Missouri Department of Natural Resources' Air Pollution Control Program (APCP), has them. Nicole believes the majority of notifications have not been sent in yet.

Bud Pratt stated he believes at this time the department will not take action on specific cases where facilities have failed to notify. The department is trying to figure out who/how many facilities fall under the new regulations

John believes it is a big hill to climb in order to make sure ASTs are appropriately addressed in vapor recovery rules. He also felt it is very important to make sure the group does not try to implement mandates without finding out if the equipment manufacturers will make the appropriate equipment. Someone asked if the group is receiving any guidance from the federal level and if so, who from. Bud stated no one really knows much anymore as the EPA stopped dealing very much with vapor recovery after Onboard Refueling Vapor Recovery (ORVR) was mandated. The group agreed that it is important to get guidance from the department management and the APCP on how to deal with ASTs.

The group discussed coaxial drop tubes and if existing stations are allowed to continue using them.

Nicole stated the guidance she received from the EPA is that existing stations are allowed to use them as long as they do not do anything that meets the definition of reconstruction.

Todd said the rule states that existing facilities must comply by 2011.

Nicole stated her EPA contact did not clarify whether existing facilities have to switch to a two-point system by 2011, they just don't have to do it when performing construction. Someone pointed out the EPA does require some type

of swivel adapter and there are none made for coaxial drop tubes. Nicole said she realized this information conflicts with the guidance she was given and intends to get further clarification.

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2. Summary of last meeting

- Discussion of minutes (continued)

Nicole then asked the group if they had anything further to discuss concerning the meeting minutes from the last meeting.

- Review and continued discussion of incorporation of Enhanced Vapor Recovery requirements

Ron noted Missouri is looking at implementing enhanced vapor recovery (EVR) for current and soon-to-be designated non-attainment areas, which include the St. Louis metro area, the Kansas City metro area, and in the near future the Springfield metro area. Stage I and Stage II are already required in the St. Louis metro area. The department is considering the following:

Stage I – Stage I in the St. Louis metropolitan area is already supposed to achieve 98% efficiency. Therefore, the department is not looking at any modifications to the efficiency requirements for Stage I in the St. Louis metropolitan area.

Stage II – Stage II in the St. Louis metro area is already supposed to achieve 95% efficiency. The department is considering requiring EVR and increasing the Stage II efficiency to 98%, which is estimated to decrease Volatile Organic Compounds (VOCs) by 202 to 268 tons per year.

Stage I only is required in the Kansas City metro area. The department is considering the following:

Stage I – Stage I in the Kansas City metro area is already supposed to achieve 90% efficiency. The department is looking to add EVR and increase Stage I efficiency to 98%, which is estimated to decrease VOCs by 138 tons per year.

It appears with the new ozone standards the Springfield metro area will also be designated as a non-attainment area. No Stage I is currently required in the Springfield metro area. The department is considering the following:

Stage I – The department plans to require Stage I EVR at 98% efficiency in the Springfield metro area.

Break for Lunch

Upon returning from lunch, Ron recapped the discussion before the break. Nicole asked the group if they wanted to start discussing initial fueling or if they wanted to continue the discussion from earlier. John voted in favor of initial fueling and the rest of the group agreed.

3. New topics for discussion

- Initial fueling, E-85 and other 100% ORVR fleets

Nicole stated the guidance the department is going with is any facility with 100% ORVR fleets will be exempt from Stage II vapor recovery requirements.

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3. New topics for discussion

- Initial fueling, E-85 and other 100% ORVR fleets (Continued)

Brian asked how many of these fleets there are in Missouri.

Nicole replied she's not sure but it could include auto manufacturers, rental fleets and E-85 fleets for example.

Mark Jordan asked if E-30 would be exempt.

Nicole stated she didn't know and asked if it would have to be a flex fuel vehicle to use E-30. Nicole said she would make a note to check on that.

John asked if flexible fuel should be referred to as alternative fuel instead.

Nicole asked what the difference between the two is. She asked if a flexible fuel vehicle is one that can use propane instead of gasoline.

John replied that it is not, that would be an alternative fuel vehicle.

Nicole stated the group only needs to discuss anything that is a gasoline blend.

Ari asked what is currently being regulated in regard to vapor recovery concerning ethanol blends.

Nicole stated this is what the group is discussing it and she will have to get clarification.

Ari believes if the group does not grade E-85 now, it will be exempt.

Nicole stated all gas sold is a ten percent ethanol blend, so all gas has some level of ethanol in it and with more variation in blends becoming common it is important to establish at what percentage ethanol blends would become exempt from Stage II requirements. Nicole also stated nothing is exempt from Stage I.

Bill stated a flex fuel vehicle is a vehicle that can use either gasoline or ethanol in any combination and an alternative fuel vehicle is one that is equipped so the operator can alternate between two different types of fuel. For example, the St. Louis Regional Office has a van that can run on either propane or gasoline.

Nicole asked what percentage of ethanol can be used in a regular vehicle and when it would have to be a flex fuel vehicle to use the blend.

Ron mentioned any fuel blend above E-10 should not be used in a regular vehicle. He said using anything above E-10 in a vehicle that is not a flex fuel one can void the warranty.

Brian asked what boats currently use.

Mark Jordan replied boats typically use the same blend as anything else.

Bud stated over the lunch break he checked the CARB website. In California all of the ASTs have processors and California is still struggling with how to address ASTs. Also, California does not have a standardized AST equipment list. Bud also looked at Subpart CCCCCC, which does not say anything about ASTs either having to meet the requirements or being exempt from them.

Ron asked what exactly ORVR stands for.

Bud stated Onboard Refueling Vapor Recovery.

Bud briefly explained the setup for an initial fueling operation.

Ron asked Bud to please explain his comment concerning a robotic arm.

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3. New topics for discussion

- Initial fueling, E-85 and other 100% ORVR fleets (Continued)

Bud replied the robotic arm replaces the human function of returning the hose/nozzle to the start initial fueling position, as well as traveling along the assembly line with the vehicle as it moves through the initial fueling zone. Bud stated there should be some testing on the robotic arm because there is some spit back and splash back during the process.

Mark Werthman believes this could be taken care of through work practices.

Nicole said as far as she knows this is still up for discussion and this is part of the reason for adding the next item for discussion to the agenda. Nicole then asked the group if there needed to be any continued discussion on this guidance.

Bill replied he still has concerns with stations that have both regular and E-85 fuel tanks that may have their vapor lines manifolded together.

Nicole stated if any of the above systems were manifolded in with the gasoline tanks, then they are part of the vapor recovery system and they will be treated as such. The inspector will know if this is the case when they test it.

Bill asked how the inspector keeps this from happening on new stations. He is not sure if it will affect anything as far as contamination.

Nicole asked if there is any difference between the possible contamination from allowing manifolded tanks with different grades of gasoline and from having an E-85 tank manifolded into the rest of the system.

John stated he isn't positive but does not think it would be significant.

Bill replied he is afraid if it is not addressed this is something that would be missed later.

Nicole asked Todd if he sees future stations with E-85 tanks manifolded into the system as a problem.

Todd replied he does not see it as a problem.

Nicole believes it is the department's intent to address this issue in the rule so it is clear.

Ari asked about aviation gas.

Bud mentioned aviation gas is included in Stage I.

Nicole said she knows very little about the requirements for aviation gasoline and refueling.

Bill stated some do not have Stage I and believes what Nicole is saying is that it will stay that way.

Nicole said she really did not know but no one had discussed changes in the requirements for aviation gasoline.

Bud pointed out that aircraft do not have vapor recovery capability.

Ari stated they do put aviation gasoline in a cargo carrier. Ari said what is good about MOPETP is the individual is not required to remember a lot of items. A nozzle may need to be replaced every other week or upon every other site visit but it is easy to tell if equipment is approved or not. He feels the group needs to come up with something to increase the amount of equipment tested and asked if the group has any chance of fixing this.

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3. New topics for discussion

- Initial fueling, E-85 and other 100% ORVR fleets (Continued)

Bud stated he is not in control of the companies that come to Missouri to test equipment. He explained many do not because they can't meet our requirements. Nicole mentioned this is not the only reason they do not come to Missouri to test. It is also because the companies have to feel like they will have enough of a market to make testing worth while.

Ari asked if it is necessary to put equipment under the testing or can the group just make the approval through a Technical Review Committee (TRC) meeting.

Bud stated he doesn't like doing that but will sometimes as long as it is a minor modification and the specifications are the same.

Nicole noted some of the past testing has shown that it is worth the time spent.

John used a drawing to describe problems with adding additional vents to ASTs. Approximately 75% have a design that allows the lid on the tank to blow straight up if pressure increases too much. If they have to do a hot cut on it to add a vent pipe then the tank is no longer UL certified. Once you start modifying ASTs, you begin having several problems and safety issues, some of which can result in serious injuries or death.

Bud reminded the group that all tanks in California have to meet this criteria. It appears as though ASTs are systematically being phased out because of the tighter regulations. The group discussed that this is an unlikely scenario for Missouri with the large number of ASTs here.

The group also discussed the lack of certified equipment for ASTs and how to proceed with safely incorporating Stage I on them.

Nicole thought with the new federal regulations affecting ASTs this will create a whole new market for equipment manufacturers and she believes someone will want to tap that market.

Tracy explained safety is the most important issue. This is why he believes a manufacturer needs to be present at the workgroup meetings.

The group then discussed the idea that facilities may be forced to remove their ASTs if they can not make them compliant.

Brian used the perc drycleaners as an example. He stated eventually the EPA went after those facilities and eventually they had to shut down if they couldn't comply.

The group discussed the idea of possibly phasing out ASTs in the non-attainment areas only as had already been done in St. Louis. Ari stated eventually whatever changes are made; Kansas City and Springfield will have to get used to.

- Defining Stage I and Stage II

Nicole asked Bud to use the board to draw an example of an initial fueling system.

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3. New topics for discussion

- Defining Stage I and Stage II (Continued)

Bud described the drawing and explained the p/v valve is a problem area and pointed out other problem areas. Bud also stated the entire system is all part of providing 98% efficiency.

Mark Jordan asked if the fueling is all done indoors.

Bud replied yes, it is.

Nicole asked Bud to draw a normal GDF.

Bud drew a normal GDF for Stage I and Stage II and described the process.

Nicole pointed out the rule has a definition of Stage I and Stage II, but she would like to clearly define, using the pictures on the board as examples, where Stage I ends and Stage II begins.

Bud showed on the board that he believes Stage I should include the vapor and product lines running from the tank to the dispenser.

Bill stated once the vapor line is connected to the dispenser from the tank, it is a Stage II system.

Mark Werthman stated he thought the Stage I system ended at the tank.

Paul McConnell replied he will have to see where the current rule stands.

Mark Werthman stated the definition for Stage I that the EPA uses in several instances is “control of vapors during the transfer of gasoline from the cargo tank to the gasoline dispensing facility.” Todd also read the definition from Petroleum Engineering Institute’s (PEI)’s Recommended Practices for Installation and testing of Vapor-Recovery Systems at Vehicle-Fueling Sites (RP-300), which was very similar.

Paul stated thetherefore, it is dead ended.

Bud stated not necessarily.....

Mark Werthman stated all of the rules he has read.....

Nicole noted if there is a standard definition that we are not currently using then the definition should be what we use. The real issue she has is defining the exact physical point in the system where Stage I ends and Stage II begins. She feels that if we are going to have one Stage I rule that applies to all areas in the state then we need to clearly show what portions of the system would be regulated under Stage I and what would be regulated under Stage II.

There was discussion about this with some varying opinions. Using the drawing as an example Bud suggested Stage I should include the piping between the storage tank and dispenser (or robotic arm). Others said it ended at the tank and did not include the piping. Reasoning for this idea was that if there is no Stage II there are no vapor lines in between the tank and dispenser, only product. Another part of this argument included the PEI's definition of Stage II, which is "a system for exchanging gasoline vapors between a vehicle fuel tank and a fuel storage tank during the vehicle fueling process." Bud felt like there should be some regulation of the product lines in between the tank and dispenser in areas where

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3. New topics for discussion

- Defining Stage I and Stage II (Continued)

there is no Stage II. Others pointed out that the piping is already regulated under UST or AST regulations.

Mark Werthman mentioned the State of New Jersey has a website with good information for a definition, etc. He will send what he has to Nicole.

Ari asked how the group will handle the differences between areas that have been regulated differently than St. Louis in the past.

Nicole asked Ari if he is referring to Stage I alone.

Ari replied that he was only referring to Stage I.

Nicole noted it is something the group will need to take into consideration.

Ari asked if (in regard to Stage I) the group is making the same requirements for Kansas City, St. Louis and Springfield.

Nicole agreed.

Bill stated some things will have to be changed.

Nicole agreed that there may be some changes to the requirements in St. Louis as well. For example, the group may have to change the permitting requirements to reflect compliance with Subpart CCCCCC.

John found a good diagram of an underground storage tank that showed both Stage I and Stage II.

Nicole asked if John can scan a copy of the diagram and email it to the group.

Ari suggested providing a diagram in the rule.

Members of the group suggested making the diagram an attachment.

Nicole asked Paul if the diagram can be included in the rule.

Paul stated he would check.

Nicole asked for ideas for dealing with MOPETP equipment issues. She explained if the group does not address the mandate for "currently CARB certified" equipment then we are setting ourselves up for a reoccurrence of the problem we are currently having with a limited number of the MOPETP approved components also being currently CARB approved.

Bud replied it wouldn't be a problem in the future. Nicole asked Bud if he thought there would ever be a time when CARB decertified all Vapor Recovery systems that did not have a vapor processor or in-station diagnostics and Bud

agreed that their probably would. Nicole explained that if the group doesn't come up with a way to address this situation then eventually we would be forced to do exactly what CARB does.

4. Wrap Up/To do's/Next Meeting

Nicole stated before the group adjourned she would like help defining what is needed for the next meeting.

Darrell stated he would like it if the group could stay on one topic.

Ari suggested starting with Stage I, going through the new rule piece by piece.

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4. Wrap Up/To do's/Next Meeting (Continued)

Ari and Darrell believe it would actually be easier to start with Stage II.

Brian believes the definitions are set but need clarification.

Nicole asked if there is any information she will need to obtain before the next meeting.

Mark Werthman asked of the 5220 ASTs, how many will be becoming in a non-attainment area.

Tracy noted that John brought up a good idea of having a manufacturer review the information to see if it is even possible.

Tracy would like clarification on defining which is bulk and which is dispensing.

Nicole stated she will obtain definite clarification.

Ari asked for clarification of the font colors included in the Attachments one and two from the previous meeting.

Paul stated the Red is from the St. Louis regulation (5.220), the blue is from the Kansas City regulation (2.260), the green is for areas where the two are identical, and the light blue is for definitions.

Nicole stated she will try to get information from equipment manufacturers regarding equipment designed for AST's.

John suggested PEI for obtaining this information.

Ari asked about newly approved components.

Ron suggested we try to be consistent throughout the state as much as possible.

Bud stated he will update the approved components list.

Adjourned.