

From: Gao, Frank F. (DNREC)
Sent: Wednesday, July 30, 2014 10:07 AM
To: Ellen Valentino; mark@wilsonbaker.com;
Joshua.m.worth@wawa.com; truzin@royalfarms.com;
SStookey@twgi.net; Ed.kubinsky@crompco.com;
Bob.minissale@crompco.com; Jennifer.foster@crompco.com;
Ross.seth@gmail.com; jlceleste@sunocoinc.com;
mdevey@ustservicescorp.com; jimmckelvey@verizon.net;
Stephanie.herron@sierraclub.org; gpattersongallc@gmail.com;
david.petersen@7-11.com; jlaschke@husky.com;
sam@tr2corp.com; 'John Myers'; molina@franklinfueling.com;
grant@franklinfueling.com; sam@tr2corp.com; 'Reid, Kent'; 'Brown, Jake'
Cc: Snead, James (DNREC); Amirikian, Ronald A. (DNREC); Gomes, Colin (DNREC); Postell, Tom (DNREC); Rollo, Peter (DNREC); Sunkler, John F. (DNREC); Kirkland, Barbara (DNREC); Rittberg, Alex (DNREC); Coverdale, James (DNREC); 'Gary Patterson'; 'Julie Mirowenger'
Subject: FW: Reminder-Review Committee Meeting - Wednesday, June 25

Committee members,

Below is the comments from **Seth Ross on 06/29/2014**, on the draft language we presented in Meeting 5.

Thank you for your attention.

Frank

From: Seth Ross [<mailto:ross.seth@gmail.com>]
Sent: Wednesday, July 02, 2014 5:02 PM
To: Fees, David F. (DNREC)
Cc: Gao, Frank F. (DNREC); Amirikian, Ronald A. (DNREC)
Subject: Re: Reminder-Review Committee Meeting - Wednesday, June 25

Short answers, but good answers. Thank you.

I am re-assured on the CPM system and how it is to be used.

However, I am still perplexed by what appears to me to be a disconnect between 36.4.3 and 36.5.1.2.

The former requires pressure below cracking pressure 95% of the time.

But the latter allows one week to correct an over-pressure.

Compliance with 36.5.1.2 can easily over-ride 36.4.3 with no consequences, which leads to the question:

Is 36.4.3 even needed ?

Seth

On Wed, Jul 2, 2014 at 1:45 PM, Fees, David F. (DNREC) <David.Fees@state.de.us> wrote:

Seth,

Sorry that you missed the meeting; glad you had a great reason!

Really appreciate you thinking these details through. If you had attended the meeting you would have been the only one to raise such detailed questions. Once again we received little feedback on the detailed language. I'll attempt to answer your questions.

- 1) CPM downtime would be ignored. The 95% comes from CA's allowance.
- 2) Whatever happens with the tanks during the time the CPM is down would not be figured into the weekly leakage determination. Since the CPM is creating many pressure profiles (duration of about 10 minutes) over the course of a week, there are many data points to assess leakage, so that a leak or high pressure will be caught by the system. The system is relatively simple and I do not believe they are down anywhere near that time.
- 3) The leak rate assessment is based on all of the valid pressure profiles within a week. Even with a 5% downtime, there will be more than enough data points to make a valid determination of leakage.
- 4) The CARB certified systems are based on a weekly assessment. It provides for a robust number of pressure profile assessments to make a valid determination with a 95% confidence level of flagging a leaky system, with only a 1% chance of a false reading.
- 5) If the actual event started a day after the last weekly assessment, by the end of the week the pressure profile assessments for the week would be mostly bad and thus a warning should be given six days after the event occurred. The weekly assessment does not have to have 100% bad pressure readings, just a preponderance of them.
- 6) True, but the first order of business is to see that all identified leaks get fixed. Only then can pressure be assessed for the second standard which deals with high pressure that causes the p/v valve to crack.
- 7) The short answer is this is what CA allowed. We could be tighter in this regard. Got the sense from talking to the two manufacturers that the systems are operating well above 95% of the time. The systems are really simple and not much to go wrong.
- 8) Good question. I believe the manufacturers told us there are built-in operability tests that would flag crazy readings. The systems are self checking. Will get them to verify.

I know my answers are short; I can provide more details next time we talk.

Thanks,

Dave

David F. Fees, P.E.
Managing Engineer
Emission Inventory Development Program
Division of Air Quality, DNREC
tel. [\(302\) 739-9402](tel:3027399402), fax [\(302\) 739-3106](tel:3027393106)
e-mail: david.fees@state.de.us

Blue Skies Delaware; Clean Air for Life

From: Seth Ross [<mailto:ross.seth@gmail.com>]

Sent: Sunday, [June 29, 2014](#) 8:39 PM

To: Gao, Frank F. (DNREC)

Cc: Fees, David F. (DNREC)

Subject: Re: Reminder-Review Committee Meeting - Wednesday, June 25

Frank and David.

I am back from a week at Rehoboth Beach. Weather was wonderful and it was great to see our grandkids, their parents of course, and a few friends. And Rehoboth is a friendly place.

I just now finished reading the draft.

I am attempting to reconcile these three paragraphs:

36.4.3 system to be below cracking pressure 95% of the time

36.5.1.1 CPM operational a minimum of 95% of the time

36.5.1.3 Event: excessive pressure or leak rate

You can probably see where I am going with this.

1. Does CPM downtime count toward not meeting the requirement in 36.4.3 or is it ignored ?

2. Assuming it is ignored, which is how I interpret it, this means that CPM downtime is unregulated.

3. Therefore it might be helpful if 36.4.3 ended this way:

"...95% of the time that the CPM (see 36.5.1.1) is operational.

4. Going on to 36.5.1.3. Why is the pressure and leak rate evaluated on a weekly basis ? The CPM is a Continuous Pressure Monitoring system.
5. 36.5.1.3.2 is allowing one week to correct a high pressure or high leak rate. Actually the event may have started a day after the previous check, so the event could have a duration of up to about 13 days. Now 13 days is over 40% of a month, and even one week is 23 %. Contrast this to the limit of 5% stipulated in 36.4.3.
6. Also, a consequence of a leak is that it may contribute to an undesirable outcome by keeping the pressure below the crack pressure.
7. What is the rationale for the CPM minimum uptime of 95% ? This allows 5% downtime, or 36 hours per month, which seems generous.
If the system is taken down once per month for servicing, calibration, and routine maintenance 4 hours should be enough. Allow additional time for a second or third servicing or troubleshooting and allow 12 hours per month. 12 hours is 1.67 % per month. Round off to 2% (14+ hours), or 98% uptime.
8. Finally, what constitutes "operational" ? The CPM could be working improperly and still be operational (think of a car that needs a tuneup). Perhaps some language that says that by operational is meant that as designed and intended.
Lastly, as you recall I spoke up in the winter meeting and suggested that since most of the gasoline will be dispensed from high volume stations that will have a negative pressure

on their UST most of the time, an active control system would not be necessary.

My major concern is the complexity of an active control system and what all of that entails. The above issues that I raised are one aspect of that complexity, and there are more. From my own industrial experience I know how hard it is to keep control systems functioning properly. It requires diligence, a lot of effort, and it is expensive. My concern is that many of these systems will not work as intended, the gas station operators will be upset, and DNREC, already overworked, will be hard put to deal with it.

Sincerely, Seth

On Fri, Jun 20, 2014 at 3:31 PM, Gao, Frank F. (DNREC) <Frank.Gao@state.de.us> wrote:

Review Committee Members,

Attached are two PDF files:

1. Our **working draft** of Regulation 1124 Sec. 36. The added or revised language in the draft is for new/reconstructed GDFs which are assumed to operate without Stage II systems. Please review the draft for discussion in the meeting next Wednesday.
2. The current version of Reg. 1124 Sec. 36, for your convenience.

If you have questions, please let us know before Wed.'s meeting, or you can bring them to the meeting on Wed.

See you next Wednesday.

Frank

From: Fees, David F. (DNREC)

Sent: Friday, June 13, 2014 2:20 PM

To: Gao, Frank F. (DNREC); mark@wilsonbaker.com; Joshua.m.worth@wawa.com; truszyn@royalfarms.com; SStookey@twgi.net; Ed.kubinsky@cropco.com; Bob.minissale@cropco.com; Jennifer.foster@cropco.com; evalentino@ellenvalentino.com; Ross.seth@gmail.com; amywroe@gmail.com; jlceste@sunoco.com; mdevey@ustservicescorp.com; jimmckelvey@verizon.net; Stephanie.herron@sierraclub.org; gpattersongallc@gmail.com;

david.petersen@7-11.com; jaschke@husky.com; sam@tr2corp.com; John Myers (johnmyers@husky.com); molina@franklinfueling.com; grant@franklinfueling.com; sam@tr2corp.com; Reid, Kent (kreid@veeder.com)

Cc: Snead, James (DNREC); Amirikian, Ronald A. (DNREC); Gomes, Colin (DNREC); Postell, Tom (DNREC); Rollo, Peter (DNREC); Sunkler, John F. (DNREC); Kirkland, Barbara (DNREC); Rittberg, Alex (DNREC); Coverdale, James (DNREC)

Subject: Review Committee Meeting - Wednesday, June 25

Stage 2 Review Committee Members,

The Division of Air Quality will hold the next review committee meeting on Wednesday, June 25th at 9:30 am in Conference Room B of the Lukens Drive Office, New Castle.

Prior to the meeting, draft regulations for new GDFs will be circulated for your review. The bulk of the meeting will be to discuss the draft. Also, Veeder-Root will provide a short presentation on their continuous pressure monitoring system.

We look forward to your participation.

Regards,

Dave

David F. Fees, P.E.
Managing Engineer
Emission Inventory Development Program
Division of Air Quality, DNREC
tel. [\(302\) 739-9402](tel:3027399402), fax [\(302\) 739-3106](tel:3027393106)
e-mail: david.fees@state.de.us

Blue Skies Delaware; Clean Air for Life