



Stage II Decommissioning Questions and Answers



Revised September 26, 2012

1) Is there a prior request, authorization, notification or permitting process before Stage II decommissioning work can begin?

There is a formal notification required to be submitted to DATCP immediately upon completion of the Stage II decommissioning [SPS 310.140(2)(d)2]. Link to form:

http://DATCP.wi.gov/er/pdf/bst/Forms_FM/ER-BST-Fm-DecommissionedStageIINotification.pdf

In addition, DNR is requesting a pre-decommissioning e-mail notification. Notification will help the agency to manage the workload associated with witnessing "final" decay tests. The requested e-mail notice should be e-mailed to Mr. Randy Reading, DNR Southeast Region, randy.reading@wisconsin.gov, 414 263-8572. Provide the date and set the time for either 8:00 AM, 9:00 AM, 10:00 AM 12:00 PM or 2:00 PM. The notice shall be at least 7 business days prior to the decommissioning and final testing. By providing this advance notice, the station owner will satisfy requirements in the applicable rules and limit the mismatch of state and federal requirements until a SIP revision is fully approved by EPA.

2a) A gasoline dispensing facility has been looking to upgrade dispensers at the site over a period of time. The dispensers currently are Stage II equipped. What is the policy on the switch out of dispensers?

As a general answer you cannot switch out part of a Stage II system. With that said, the type of Stage II vapor recovery system and the site specific configuration may allow a phase out of the decommissioning if the systems are entirely independent and separately tracked. DATCP and DNR would have to know the configuration specifics and the phase-out plan. DNR contact - randy.reading@wisconsin.gov;

2b) Since the Stage II nozzles are expensive, can they continue to be used after decommissioning until they wear out?

PEI 300-14.6.9 requires the replacement of Stage II hardware with conventional hardware. When a person tops off or the auto-shutoff fails, gas will run into the vapor holes in a Stage II nozzle and collect in the vapor tube. When that happens with a deactivated vacuum pump:

- 1) The vapor will not be voided from that vapor line, and
- 2) The "warning" in the form of the nozzle shutting off (because the vapor path would be blocked) is no longer in place.

This can easily lead to excess fugitive liquid &/or vapor loss from the nozzle during normal operations. Manufacturers of nozzles are concurring that PEI 300-14.6.9 must be followed.

3a) Many installations have used an impact valve to make the vapor pipe connection to the dispenser. If the piping above the impact valve is removed between the dispenser and the top of the impact valve, can the impact valve be left in place but plugged?

The sealing off point would not be below the base of the dispenser. PEI 300-09 reference 14.6.6 requires securely sealing off the below grade vapor piping at the height below the level of the base of the dispenser.

PEI 300 and equipment manufactures are both stating "disconnect the lower vapor line at

the base of the dispenser.”

We are having inquiries relating to what is acceptable for the PEI 300-6.6 section - Securely seal off the below grade vapor piping at the height below the base of the dispenser. Three scenarios have currently been proposed asking if it acceptable to:

1. Unbolt the shear, put a plug in the top of the shear and drop it into the sump so it is below the base of the dispenser.
2. Disconnect the flex connector from the shear valve, plug it and drop it into the sump.
3. Break the shear valve, remove the top half and bolt a plate on the top of the bottom half.

The three concepts above that have been proposed are not acceptable. We want a minimum number of leak points in any liquid or vapor system, which many of the proposals do not achieve. We believe the dispenser sump is not intended to become a storage area for excess equipment. We believe that there is a potential for system component functionality problems down the road that could be related to a flex or shear valve laying in the sump exposed to or collecting liquids or debris and possibly interfering with sump sensors, product line shear valves, etc. We believe that allowing excess equipment to be in the sump interferes with the required visual inspections of the sump and components.

Other than being a cheaper method to accomplish the disconnect, I do not believe these concepts are in the best interest of the system operator for sump inspection, sump or component maintenance or when future service is to be performed in the sump area.

Ideally, the disconnect and plug will be at the lowest point possible or at a point closest to where the vapor line enters the sump; however we do recognize the potential for damage to existing components and entry boots when attempting to accomplish this.

One contractor has asked if it is acceptable to disconnect and securely mount the vapor shear valve below the base of the dispenser with a Universal 521 mounting kit. This would be acceptable.

With this all written, there may be some very unusual situations that are justified in making an acceptance. We will require an e-mail with electronic photos and the reason an alternative should be considered. Sheldon.schall@wisconsin.gov

3b) When a product line is abandoned in the dispenser, the impact valve is left but just plugged, so why would the vapor line need to be treated any differently?

It is not acceptable to “abandon” a product line. Product lines are “In-use,” “Temporarily-Out of-Service” or “Closed.” Closure would entail removal or closure in-place. We expect that a product line closed in place will have the impact valve removed and the pipe capped.

4a) Which agency is going to be inspecting whether the vapor line has been sealed below the base of the dispenser?

At the present time neither agency has a formal inspection process relating to Stage II decommissioning. It is discretionary on the part of the agencies. DATCP Retail Petroleum Services inspectors may randomly inspect how the decommissioning was performed. The decommissioning technician completes and signs the notification form stating that the decommissioning complies with the code, PEI standard and policy. The final pressure decay test will demonstrate tightness.

DNR intends to witness the final pressure decay tests for decommissioned facilities on the same targeting basis used during program implementation. Because of this, as mentioned

in 1); DNR needs a 7 business day notice before the test is conducted.

4b) If a visual verification is required under PEI 300-14.6.13, why are the pressure/decay and tank-tie tests required under 14.6.12? It would appear that the tests are an unnecessary cost.

You can't see vapor leaks, so the 14.6.13 visual inspection can't replace a decay test. The visual 14.6.13 is intended to be a visual check that something wasn't left unattached or not tightened on the plug side of the system (dispenser), because it wouldn't be subjected to the 14.6.12 referenced test. 14.6.12 and 14.6.13 work together to ensure tightness and don't appear to be redundant.

4c) If a pressure decay test is required at decommissioning, does that test have to be witnessed by the DNR or DATCP?

DNR intends to witness the final pressure decay tests for decommissioned facilities on the same targeting basis used during program implementation.

***Note:** If the annual testing is 60 days past the anniversary date you cannot decommission until the testing is made current.*

4d) How should I perform and interpret the pressure/decay test once the Stage 2 equipment is fully decommissioned?

When conducting the pressure decay test in chapter 8 of PEI 300-09, a test result shall be based on Table A-1 using 1-6 affected nozzles and the applicable level of ullage rounding to the closest level of gallons represented in the chart. As an alternative to the pre-test under 8.4.3, a tester may introduce nitrogen using a single vapor adapter as long as a passing result is verified with no visible leaks by the soaping of the adapter.

5) Is the 14.6.12 testing required annually after decommissioning?

Annual testing is not required; the 14.6.12 testing is at final stage of decommissioning. Other testing may be required under 40 CFR part 63, subpart CCCCC. At this point, EPA requires that sources above a monthly 100,000 gal throughput actively maintain Stage 1 balance systems, utilize submerged fill techniques and undergo triennial pressure/decay tests of system functionality and integrity. The Wisconsin NR 420 Stage 1 threshold is based on storage tank size per federal VOC RACT requirements. Sources with much lower throughput than the federal program must maintain Stage 1 and p/v vent systems but aren't required to test for pressure/decay functionality unless required by the manufacturer.

6) Why should operators and owners hire a contractor to do the decommissioning?

A Stage II system involves flammable vapors and possibly flammable liquids. We would expect technicians trained and experienced in the various systems and configurations to have a better understanding of the risk factors and how they are tied in with overall fuel storage and dispensing systems. It is not likely that operators will have the test equipment necessary to perform the required testing or have the knowledge to reprogram dispensers. We are also requiring that the company performing the Stage II decommissioning be a credentialed SPS 305.82 Tank Specialty Firm.

At least one manufacturer of Stage II vapor recovery equipment requires that decommissioning of their equipment be performed by a company authorized service contractor.

7) Can the owner/operator of an existing Stage II facility stop operating and maintaining a Stage II system without decommissioning it?

No. DATCP interprets SPS 310 and the adopted PEI 300 as requiring the formal decommissioning when the use of the Stage II system is being discontinued. The owner/operator must either maintain the Stage II system in accordance with NR 420 and 445 (NR 445 may ultimately entail a full or partial system upgrade for the few very large and high through-put stations) or decommission the entire Stage II system if a throughput below NR 445 thresholds is certified as part of the decommissioning notification. EPA has not yet set an end date when maintained systems must be removed as part of its “widespread use” finding for Onboard Vehicle Vapor Recovery systems. Such a date may or may not be set by the State during the more formal regulatory revision to NR 420 and State Implementation Plan development that will remove the standing federal Stage II maintenance requirement after federal approval. Stage I facility and transport vapor balance/recovery system requirements are not being changed because those programs continue to prevent significant VOC emissions. The major rationale for the maintain or decommission policy regarding Stage II controls is to ensure continued Stage I control effectiveness at all facilities subject to the rules.

9) What are the post decommissioning roles of the DNR and DATCP in regards to the system that was decommissioned?

DATCP: The installation and subsequent decommissioning requirements are within the SPS 310 code. The decommissioning notification is required by SPS 310, and the state tank database will be updated accordingly. Complete decommissioning notifications will be processed and forwarded to the DNR. DATCP tank inspectors will likely continue to visually observe the in-place or decommissioned Stage II components during their system inspections, but with less scrutiny than an active system.

DNR: Once the decommissioning forms are entered in the respective databases and the NR 445 status of the facility is clarified, DNR will cease individual facility regulatory checks for NR 420.045 purposes beyond a simple status entry on its program tracking database for those facilities fully decommissioned.

10) What is the DNR requirement for keeping Stage II records after the Stage II vapor recovery system is decommissioned?

- ❖ Stage II related training records are required to be maintained until Wisconsin’s SIP is approved by the EPA.
- ❖ A copy of the decommissioning notification and a copy of the last pressure decay test conducted during the decommissioning should be maintained for the life of the storage tank system. **Note:** *The final test must be a “PASS” or the system is not considered properly decommissioned.*

11) Summary of November 14, 2012 decommissioning discussion with petroleum equipment company representatives:

The discussion centered on a lack of consistency in how contractors are performing the stage II decommissioning activities; primarily in regard to the shear valve disconnect and the disconnection or removal of pump or processing equipment. A subsequent point that was made is a need for more regulatory oversight to assure that contractors are following the PEI 300 standard and not cutting corners.

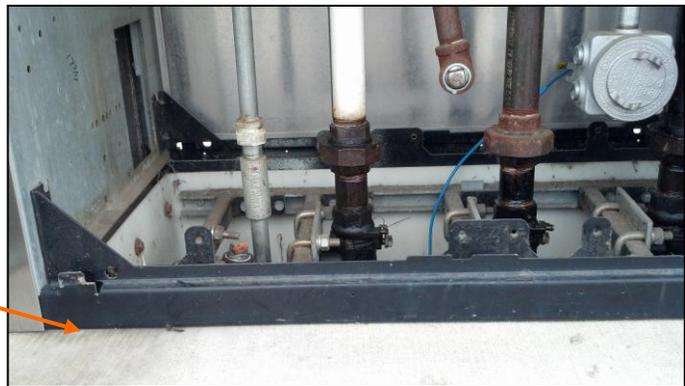
The DATCP interpretation of PEI 300 Chapter 14 is that the objective of proper stage II

decommissioning is to assure that the system is properly disconnected (electrical and mechanical), liquid is evacuated from the system and the potential for vapors or vapors remaining within the system are sealed-off from external migration.

- * The only time that the pipe connection at the tank can remain in place is if the disconnect and capping would require excavation (300-14.6.7).
- * Vacuum-assist systems with vapor pumps at each fueling position must be removed if they cannot be rendered liquid free (300-14.6.4).
- * Vacuum-assist systems with a centrally located vapor pump must be removed (300-14.6.5).
- * The SPS 310 requirement that equipment be maintained functional or be removed only applies to fire and leak prevention and detection components of the system (SPS 310.230(10) (d) & (e).

Considerable discussion related to the stage II piping disconnection from the dispenser, typically at the shear valve. What is acceptable, what is the dispenser base line of demarcation, etc.?

- * How the disconnection is made is up to the service contractor. The break must be below the base of the dispenser. The base of the dispenser is considered to be where the dispenser base rail frame meets the concrete.



- * If the top of the shear valve is above the baseline of the dispenser it must be lowered. This may involve fabricating a bracket to secure it to the original or new mounting support hardware. To accommodate field fabrication and maintain an inspection tolerance dimension the measurement tolerance is no more than 3/8" above the base.
- * The shear valve cannot be dropped into the dispenser sump creating the potential to become a collection point for debris or impeding a sump sensor.
- * The response to item 3a states: *"Ideally, the disconnect and plug will be at the lowest point possible or at a point closest to where the vapor line enters the sump . . ."* While this point of disconnect is not a requirement, it is still an ideal method because it removes an inactive component from the dispenser sump allowing better access for inspection, maintenance and service.

How are systems that were installed with the anticipation that the facility may be required to implement stage II at a future date, but was never functional, to be dealt with? Many of these are not in the defined stage II area.

- * There are likely numerous stages or configurations of installation that these systems remain at pending making them functional so a prescriptive answer is difficult. PEI 300 addresses several specific disconnect points and there is no reason that these systems should not have to follow the national standard. The fact that they may be outside the stage II area is not a factor in how we view the application of PEI 300.

How will DATCP address facilities where the decommissioning does not meet the DATCP / PEI 300 Chapter 14 decommissioning expectations?

- * Improper decommissioning will be considered a fire safety concern with a 7 calendar day non compliance order and the dispenser red-tagged if not corrected in that time period.