

**Agency of Natural Resources**  
**Department of Environmental Conservation**

**MEMORANDUM**

To: David K. Mears, DEC Commissioner

From: Richard A. Valentinetti, Director, Air Pollution Control Division  
George Desch, Director, Waste Management Division

Date: January 27, 2011

Subject: Procedure for Decommissioning Stage II Vapor Recovery Systems at Gasoline Dispensing Facilities

*Richard A. Valentinetti*  
2/22/11

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For your consideration, please find attached a revised procedure detailing the approved methods for the decommissioning of Stage II vapor recovery systems pursuant to 10 V.S.A. §583(a) or (b)(3)-(4). Since approval of the original procedure on August 18, 2010 our experience in implementing the procedure has resulted in our determination that the following minor changes will serve to clarify the requirements of the procedure:

1. Paragraph IV(d), Overfill protection: the revised wording is intended to make it clear that verification of the operation of the overfill protection device is required in situations where the Stage II vapor recovery piping will remain connected to the storage tank system.
2. Paragraph IV(e), Pressure decay test: the revised wording indicates that a pressure decay test is not required as part of the decommissioning procedure in situations where decommissioning is occurring at a facility where the gasoline tanks that were part of the Stage II system have been replaced with new storage tanks.

Minor wording changes have also been made to the checklist used to document completion of decommissioning at a given facility. These changes mainly involved the order in which the requirements are presented without actual changes to the wording. The exceptions to this are an addition to section C(g) clarifying when it is necessary to complete this section on overfill protection and the addition of the choice of "N/A" to C(h) regarding the pressure decay test.

In addition to the revised procedure and decommissioning checklist the following attachments are included as background information:

1. a marked up version of the revised procedure showing all changes made to this document
2. a copy of the original signed procedure
3. a copy of the cover memo for the original procedure

This revised procedure has been reviewed and agreed to by the relevant staff in both the Air Pollution Control Division and Waste Management Division. Since the revisions are minor in nature they have not received the full legal review that the original procedure received. Please do not hesitate to contact us if you have any questions or concerns.

**Attachments**

cc: Marc Roy  
Elaine O'Grady  
Matt Chapman

**State of Vermont  
Agency of Natural Resources  
Department of Environmental Conservation**

**Procedure for Decommissioning Stage II Vapor Recovery Systems at Gasoline  
Dispensing Facilities**

**I. Purpose**

The purpose of this procedure, which is being adopted in the manner provided in 3 V.S.A. § 835, is to set forth the approved methods for decommissioning Stage II vapor recovery systems.

**II. Background**

During 2009, Vermont enacted a law, codified at 10 V.S.A. §583, that repeals the rule requiring Stage II vapor recovery controls at gasoline dispensing facilities (GDFs) on January 1, 2013. Prior to that date, 10 V.S.A. §583(b) states that the Stage II vapor recovery rule, found in §5-253.7 of the Air Pollution Control Regulations, does not apply to:

- (1) Any newly constructed gasoline dispensing facility (GDF) that commences operation after May 1, 2009;
- (2) Any existing GDF that has an annual gasoline throughput of 400,000 gallons or more for the first time beginning with the 2009 calendar year;
- (3) Any existing GDF that, after May 1, 2009, commences excavation for the installation or repair of any below-ground component of the Stage II vapor recovery system, including gasoline storage tanks; or
- (4) Any existing GDF that, after May 1, 2009, replaces all of its existing gasoline dispensers with new gasoline dispensers that support triple data encryption standard (TDES) usage or replaces one or more of its gasoline dispensers pursuant to a plan to achieve full TDES compliance.

The latter two exemptions, (3) and (4) above, require verification and approval by the Department of Environmental Conservation (DEC) and the decommissioning of Stage II vapor recovery systems, including below-ground components, pursuant to methods approved by the DEC. More specifically, 10 V.S.A. § 583(c) provides:

Within two years of January 1, 2013, or of the secretary's verification and approval that such stage II vapor recovery rules do not apply to a gasoline dispensing facility pursuant to subdivision (b)(3) or (4) of this section, whichever is earlier, each gasoline dispensing facility shall decommission its stage II vapor recovery systems, including below-ground components, pursuant to methods approved by the secretary.

**III. Timing of Decommissioning**

According to 10 V.S.A. §583(c), GDFs are required to decommission their Stage II systems “[w]ithin two years of January 1, 2013, or of the [DEC’s] verification and approval that such

stage II vapor recovery rules do not apply to a gasoline dispensing facility pursuant to subdivision (b)(3) or (4) of this section, whichever is earlier . . . .”. Generally speaking, this means that a GDF that qualifies for an exemption – either under 10 V.S.A. §583(b)(3) due to excavation, or under 10 V.S.A. §583(b)(4) due to replacement of dispensers with TDES equipped dispensers – must complete decommissioning within two years of the date the DEC determines that the Stage II rule no longer applies to the GDF. GDFs that do not qualify for an exemption must wait until January 1, 2013 to discontinue use of their Stage II systems, and the decommissioning of those systems must be completed by January 1, 2015.

However, as an exception to the timeframes described above, if there is evidence of an underground vapor leak, such as a pressure decay test failure where the leak is suspected to be underground, the DEC requires immediate correction of the leak and investigation into any contamination resulting from the leak to mitigate any potential harm to the environment or public health.

Although the owner of a GDF (or the permittee of the UST system) has up to two years in which to decommission its Stage II system, the DEC encourages complete decommissioning of Stage II systems immediately after discontinuing use of the Stage II system. After a Stage II system is no longer in use, but before it is properly decommissioned, the vapor recovery piping could cause or contribute to problems with the underground storage tank system.

#### **IV. Approved Methods for Decommissioning Stage II Vapor Recovery Systems**

Pursuant to 10 V.S.A. § 583(c), each GDF must follow the “methods approved” by the DEC for the decommissioning of any Stage II vapor recovery system. The approved methods for decommissioning Stage II vapor recovery systems are as follows:

*(a) Vapor recovery piping:*

If the vapor recovery piping is to be temporarily left in place, the piping shall be disconnected at the base of each dispenser at a point at or below the level of the base of the dispenser. The vapor recovery piping shall be purged with nitrogen by attaching a fitting to allow nitrogen to be flowed into the dispenser end of the vapor recovery piping to force out any accumulated liquid at the tank end. If the point where the vapor recovery piping connects to the gasoline storage tank is accessible without excavation (e.g. inside a containment sump), the piping shall also be disconnected where it connects to the gasoline storage tank. The former connection point(s) of the vapor recovery piping at the dispenser(s) must be sealed with a vapor-tight cap or plug.

The vapor recovery piping shall be permanently disconnected at the storage tank end the first time excavation conducted for any reason exposes the point where the vapor recovery piping connects to a tank top fitting or a vapor manifold, most commonly at the vent extractor fitting. The vapor recovery piping shall be purged with nitrogen by attaching a fitting to allow nitrogen to be flowed into the dispenser end of the piping to force out any accumulated liquid at the tank end. Any liquid collected at the tank end shall be handled appropriately. If the liquid appears to be gasoline it can be returned to a gasoline storage tank, but if the liquid appears to be contaminated it must be handled as a hazardous waste in accordance with the Vermont Hazardous Waste Management Regulations. After purging, the disconnected pipe



and the point where it connected to the storage tank or vapor manifold shall be permanently sealed with a vapor-tight cap or plug.

NOTE: Disconnecting the vapor recovery piping on both the dispenser and tank ends will ensure that the piping is not a potential source of future underground gasoline liquid or vapor leaks that could lead to soil and groundwater contamination if the integrity of the piping should become compromised. It will also guarantee that the vapor recovery piping cannot act as a conduit for subsurface water to enter the gasoline storage tank.

*(b) Liquid drop-out tanks:*

At some GDFs where the slope between the dispensers and the gasoline storage tanks was not sufficient to allow any liquid that might have accumulated in the Stage II vapor recovery piping to drain to the tanks, the installation incorporated a liquid drop-out tank. If a liquid drop-out tank is present, it must either be removed or, if left in place, decommissioned. To decommission the liquid drop-out tank, any liquid in the tank must be evacuated and the siphon line (if present) must be disconnected at the submersible pump and capped in a vapor-tight manner or removed. If there is liquid present in the drop-out tank, it shall be handled in the same manner as discussed above for liquid recovered from the vapor recovery piping.

*(c) Dispenser internal vapor piping and hanging hardware:*

For any dispenser equipped with Stage II vapor recovery, cap the internal vapor piping in a vapor-tight manner or remove it and replace the Stage II hanging hardware with standard equipment. If the GDF is equipped with a vacuum-assist Stage II system, disable the vacuum motor immediately. Follow the manufacturer's instructions to properly disconnect the vacuum pump and perform any necessary reprogramming of the dispenser electronics.

*(d) Overfill protection:*

If the Stage II piping remains connected to the storage tank system and the overfill prevention device is not functioning properly, an overfill of the underground tank will likely result in liquid gasoline entering the Stage II pipe. This could cause or contribute to a release of gasoline to the environment. Therefore, at the time the Stage II vapor recovery piping is decommissioned, and if this piping will remain connected to the storage tank vent extractor or vent manifold, it is critical to verify the operation of the overfill prevention device. The technician conducting the decommissioning must verify the presence of the overfill device and that it is set to engage at the appropriate height (90 or 95% of the tank's capacity, depending on what type of device is used). The technician must also verify that the overfill prevention device is fully functional. If the device is found to be faulty it must be repaired or replaced. The overfill prevention device must be reinstalled in such a manner to ensure its continued operation.

*(e) Pressure decay test:*

Following decommissioning of a Stage II vapor recovery system and any replacement of concrete or pavement over the storage tank system components, a pressure decay test shall be performed to verify that the system is vapor-tight, according to a test procedure approved by the DEC. If decommissioning is being carried out at a GDF where the gasoline storage tanks that were part of the Stage II vapor recovery system have been replaced and the new tank(s) were never connected to the Stage II piping, it is not necessary to perform a pressure decay test. A federal regulation issued on January 10, 2008, the National Emission Standard for

Hazardous Air Pollutants (NESHAP) for GDFs (40 CFR Part 63 Subpart CCCCCC), will require periodic pressure decay and pressure/vacuum valve testing at all GDFs that dispense more than 100,000 gallons/month. Periodic retesting of GDFs that dispense less than 100,000 gallons/month will not generally be required by the DEC.

(f) *Dispenser labels*

Remove any labels or decals on the dispenser that include instructions on the proper use of a Stage II vapor recovery system.

(g) *Decommissioning Checklist*

As a final step of the decommissioning process, complete the DEC's decommissioning checklist documenting the actions completed at a given GDF, and submit the checklist to the DEC. The checklist is attached to this procedure.

## V. Additional Guidance

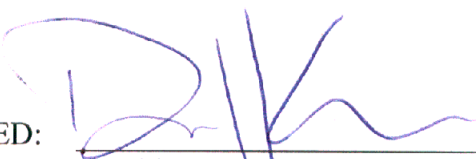
For additional guidance on decommissioning a Stage II system, particularly the dispenser internal vapor piping, vacuum pump and changing out the hanging hardware, the DEC recommends consulting the Petroleum Equipment Institute's (PEI) *Recommended Practices for Installation and Testing of Vapor-Recovery Systems at Vehicle-Fueling Sites PEI/RP300-09* or with the manufacturer of the Stage II system and the dispensers installed at the GDF. The PEI document has recently been amended to include a chapter on Stage II decommissioning. **To the extent there are any inconsistencies between the PEI document and this procedure, this procedure shall govern Stage II decommissioning by GDFs in Vermont.**

For technical questions regarding the decommissioning of Stage II vapor recovery systems, please contact the Air Pollution Control Division at (802) 241-3840 or the Waste Management Division at (802) 241-3888.

## VI. Effective Date

This procedure shall be effective upon the date of signature.

ADOPTED:

  
\_\_\_\_\_  
David K. Mears, Commissioner

2/24/11  
\_\_\_\_\_  
Date

Revision 1

Attachment: *Decommissioning Checklist*

**VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION**  
**Air Pollution Control Division**  
**Waste Management Division**

**STAGE II VAPOR RECOVERY DECOMMISSIONING CHECKLIST**

**A. Facility Information**

Facility Name: \_\_\_\_\_

Underground Storage Tank Program Identification #: \_\_\_\_\_

Facility Address (Street and City): \_\_\_\_\_

Owner: \_\_\_\_\_ Phone: \_\_\_\_\_

**B. Contractor Information**

Contractor performing Stage II decommissioning: \_\_\_\_\_

Contractor phone number - Office: \_\_\_\_\_ Cell: \_\_\_\_\_

**C. Decommissioning Actions**

(a) Vapor recovery piping:

- Piping removed?: Yes  No  [if "yes" go on to (b)]
- Piping purged of any liquid?: Yes  No
- Piping capped at dispenser end?: Yes  No
- Piping capped at tank end?: Yes  No

(b) Liquid drop-out tank:

- Liquid drop-out tank present?: Yes  No  [if "no" go on to (c)]
- If present, has liquid drop-out tank been removed?: Yes  No  [if "yes" go on to (c)]
- Liquid in tank removed?: Yes  No  NA
- Siphon line disconnected at submersible pump and capped?: Yes  No  Siphon not present

(c) Dispenser vapor piping:

- Existing dispenser replaced by a dispenser without Stage II vapor piping?: Yes  No  [if "yes" go on to (g)]
- All dispenser vapor piping removed?: Yes  No  [if "yes" go on to (g)]
- Dispenser vapor piping capped?: Yes  No

(d) Hanging hardware:

- Stage II hanging hardware replaced with non-Stage II equipment?: Yes  No

(e) Vacuum pump:

- Vacuum motor disabled or removed?: Yes  No  NA

(f) Do Not Top Off Decals:

- Decals with Stage II dispensing instructions removed?: Yes  No  NA

(g) Overfill protection (complete only if vapor return piping is still connected to the storage tank system):

- Overfill device present?: Yes  No
- Overfill device set to engage at appropriate height?: Yes  No
- Overfill device fully functional?: Yes  No

(h) Pressure decay test:

- Pressure decay test performed? Yes  No  N/A
- Test report attached?: Yes  No

**D. Comments (use this section if you need to provide additional information)**

**E. Certification of Information Accuracy**

The information presented herein is true and accurate to the best of my knowledge and I am authorized to make this statement on behalf of this facility.

\_\_\_\_\_  
Signature of Owner , Operator  or Authorized Agent

Date

Name : \_\_\_\_\_

Title : \_\_\_\_\_

Company: \_\_\_\_\_

Business Address : \_\_\_\_\_

Phone : (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

City, State : \_\_\_\_\_

ZIP : \_\_\_\_\_