

Stage II Vapor Recovery Rule Changes for Gasoline Dispensing Facilities

Until 2012, the U.S. Environmental Protection Agency (EPA) required Stage II vapor recovery systems on most gas dispensers in nine counties in southeastern Wisconsin. Due to changes to federal and state requirements, gasoline dispensing facilities may now voluntarily remove or decommission these systems. In addition, the Wisconsin Department of Natural Resources (DNR) is administering a grant program to help owners and operators of retail gas stations offset decommissioning costs. Review this factsheet for more information about the relevant federal and state actions that led to the change in regulations, Stage II system removal and decommissioning requirements, and the DNR grant program.

Background

Stage II vapor recovery involves capturing and controlling gasoline vapors when a vehicle is being fueled at the pump. The system uses special dispensing nozzles that collect the vapors and pump them back into the storage tank below ground. Without vapor recovery systems in place, volatile organic compounds (VOCs) and hazardous air pollutants (such as benzene) are released into the air as part of gasoline vapors.

For decades, Stage II vapor recovery systems were required in the following counties in southeastern Wisconsin: **Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington, and Waukesha counties.** These areas were not attaining federal ozone standards, and the Stage II requirements reduced the release of VOCs that contribute to ozone formation.

However, newer vehicles are equipped with their own vapor recovery systems, called onboard refueling vapor recovery or ORVR. The use of both ORVR and Stage II systems to control gasoline vapors is largely redundant. In May 2012, U.S. EPA determined that the use of ORVR is widespread, and that states no longer need to require Stage II vapor recovery systems in ozone nonattainment areas.

How have Stage II requirements changed?

As a result of federal and state actions, DNR is no longer enforcing the Stage II requirements contained in ch. NR 420 of the Wisconsin Administrative Code. Gas stations in the nine affected counties now have the option of removing their Stage II vapor recovery systems. However, the Stage I requirements contained in ch. NR 420 have not changed. Gas stations in Stage I counties must continue to operate and maintain Stage I systems. The regulatory actions that led to the change in Stage II requirements are described below.

U.S. EPA requires that each state develop its own plan, called a State Implementation Plan or SIP, for implementing federal Clean Air Act requirements. EPA sets national standards, requirements, or guidelines that the state then incorporates into state statute or administrative code. Once a requirement is established at the state level, the state incorporates it into its SIP. The revised SIP must be approved by EPA, a process which can take a year or more. When EPA approves a SIP revision, the incorporated state statutes and rules become federally enforceable.

In April, 2012, new state legislation authorized the DNR to begin the process of removing Stage II vapor recovery requirements for ozone nonattainment areas from the state administrative code when the U.S. EPA determined that ORVR was in widespread use. One month later, EPA issued a ruling that ORVR is in widespread use and that states no longer need to include Stage II requirements in their SIPs. Wisconsin submitted a SIP revision removing Stage II requirements, and EPA approved the revision in November, 2013.



What are the requirements for removing or decommissioning Stage II systems?

Gasoline dispensing facilities are able to remove or decommission their Stage II systems, but are not required to do so. However, the Department of Agriculture, Trade and Consumer Protection (DATCP) expects that facilities follow proper decommissioning procedures if they do decide to remove or decommission their systems. These procedures are outlined in PEI 300-09, Chapter 14.

Facilities should submit a **formal notification, completed decommissioning checklist, and final pressure decay test report** to DATCP within **15 business days** of decommissioning. The contractor completing the work must certify that the appropriate decommissioning procedure was followed by signing the notification form. The notification form and checklist are available online at <http://datcp.wi.gov/uploads/Consumer/pdf/10903%20Stage%20II%20Decommissioned%20Notification.pdf> (or visit datcp.wi.gov and search "ERS-10903"). For more information about decommissioning requirements, contact Greg Bareta, Storage Tank Regulation Section Chief, at (608) 224-5150 or greg.bareta@wisconsin.gov.

The DNR is no longer involved in the decommissioning process. Specifically, facilities are no longer required to notify the department of the date and time of the final decommissioning test, and the department no longer needs to witness the test.

Facilities that remove their Stage II systems should make sure they are continuing to meet state Stage I and vent cap requirements, and federal vapor recovery requirements. These requirements include:

- Operating and maintaining vapor balance and Stage I vapor recovery systems following best practices.
- Certifying use of only fuel suppliers that employ vapor balance or Stage I vapor recovery in their fuel distribution network.
- Maintaining use of "bottom filling" (submerged filling) for all on-site fuel storage tanks used for gasoline, as defined in ch. NR 420, Wis. Adm. Code and the federal NESHAP (40 CFR part 63, subpart CCCCCC).
- Monitoring all fuel deliveries to ensure proper vapor-return hose connection and proper resealing of all opened tank access points after the fuel has been delivered.
- Maintaining vent caps (pressure vacuum valves on vent pipes) as required. The vent caps substantially enhance the control efficiency of vapor balance and Stage I vapor recovery systems.
- Following procedures for proper closure of all vapor lines at the pump or at the Stage II control equipment such that a water-tight and VOC vapor-tight seal is maintained at all times, in accordance with PEI 300-09, Chapter 14.

Conducting formal maintenance and integrity and pressure testing of all critical vapor balance and Stage I vapor recovery system components, including cleaning and tuning the vent caps at regular intervals, preferably every six months.

In addition, the DNR recommends that facilities follow these vapor reduction **best practices**:

- As fuel nozzle technology evolves, use nozzles that eliminate or limit fugitive fuel loss (nozzle drips).
- Use low VOC permeation hoses.
- Install and maintain vent caps if they are not required.

For larger stations, consider the use of In-Station Diagnostic (ISD) technology. The use of ISD technology is standard in California for monitoring Stage I system operation.

What are the requirements for Stage II systems that are left in place?

Facilities that retain their Stage II systems must maintain and operate them in accordance with s. ATCP 93.230 (10), Wis. Adm. Code. Contact Greg Bareta, Storage Tank Regulation Section Chief, at (608) 224-5150 or greg.bareta@wisconsin.gov with any questions about these requirements.

The DNR no longer regulates the operation and maintenance of Stage II systems. However, the department recommends that facilities retaining their systems follow the former requirements contained in ch. NR 420, Wis. Adm. Code as best management practices.

What is the Stage II removal grant?

The DNR was allocated \$1 million under the state's biennial budget (2013 Wisconsin Act 20) for a grant program to support the removal or decommissioning of Stage II vapor recovery systems in southeastern Wisconsin.

The grants cover eligible costs of removing or decommissioning Stage II systems at retail stations in **Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha counties**. The grant amount is 50 percent of eligible costs of decommissioning or removing a Stage II system or \$8,000, whichever is less. The costs must have been incurred after April 15, 2012.

The grants are awarded on a first-come, first-serve basis, and interested parties are encouraged to apply now. Facilities should follow the appropriate procedures for decommissioning and submit the formal notification, completed decommissioning checklist, and final pressure decay test report to DATCP to ensure they are eligible for reimbursement. Copies of these documents must be attached to the grant application submitted to DNR. For more information about grant eligibility and how to apply, visit <http://dnr.wi.gov/aid/stage2vapor.html> (or visit dnr.wi.gov and search "Stage II grant").

Do other air pollution requirements apply?

Yes. Wisconsin gasoline dispensing facilities may be subject to a number of other requirements:

- **Stage I vapor recovery requirements** contained in s. NR 420.04 (3), Wis. Adm. Code. These requirements are administered by the DNR and affect gasoline dispensing facilities located in 20 Wisconsin counties. Non-exempt facilities in these counties must install and maintain Stage I vapor recovery systems.
- **Wisconsin regulations for the control of hazardous air pollutants** contained in ch. NR 445, Wis. Adm. Code (state HAPs or air toxics rule). This rule is administered by the DNR and requires very large gasoline dispensing facilities to control air toxics emissions.
- **Regulations for Flammable, Combustible and Hazardous Liquids** contained in ch. ATCP 93, Wis. Adm. Code. This rule is administered by DATCP and regulates gasoline storage tanks and associated piping.
- **National Emission Standards for Hazardous Air Pollutants for gasoline dispensing facilities** contained in 40 CFR part 63, subpart CCCCCC. This rule is administered by the U.S. EPA and regulates vapor control during the filling of gasoline storage tanks. Large facilities are required to install and operate vapor balance systems.

For more information, refer to the Small Business Environmental Assistance Program (SBEAP) gasoline dispensing web page (visit dnr.wi.gov and search "gasoline dispensing"). The web page provides links to relevant regulatory documents, forms, and a compliance calendar for gasoline dispensing facilities. The calendar contains factsheets summarizing the state and federal requirements listed above.

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