ARC 7565B

ENVIRONMENTAL PROTECTION COMMISSION[567]

Adopted and Filed

Pursuant to the authority of Iowa Code section 455B.133, the Environmental Protection Commission hereby amends Chapter 22, "Controlling Pollution," and Chapter 23, "Emission Standards for Contaminants," Iowa Administrative Code.

The primary purpose of the rule making is to adopt new federal regulations affecting stationary internal combustion engines, gasoline distribution facilities and surface coating operations and also to amend the state air construction permitting requirements to better accommodate the new federal regulations. The amendments adopt by reference additional, minor amendments to federal regulations.

Notice of Intended Action was published in the Iowa Administrative Bulletin on November 5, 2008, as **ARC 7306B**. A public hearing was held on December 8, 2008. The Department did not receive any oral or written comments at the public hearing. The Department received two sets of written comments before the public comment period closed on December 9, 2008.

The public comments submitted pertain to Item 1 and Item 7 and are described below for the respective items. Additionally, the submitted comments and the Department's response to those comments are summarized in more detail in a responsiveness summary available from the Department. The Department did not make any changes to the amendments that were published under Notice.

Over the last year, the U.S. Environmental Protection Agency (EPA) finalized several new air quality regulations under two programs authorized by the federal Clean Air Act (CAA), the New Source Performance Standards (NSPS) program and the National Emission Standards for Hazardous Air Pollutants (NESHAP) program. These programs require new and existing facilities in a particular industry sector that construct and operate specific equipment to meet uniform standards for air pollutant emissions. The NSPS program typically addresses "criteria pollutants," such as fine particulate, sulfur dioxide (SO_2), or nitrogen oxides (NO_x), whereas the NESHAP program addresses hazardous air pollutants (HAP), sometimes called air toxics. NSPS and NESHAP requirements vary depending on the processes, activities or equipment being regulated, and whether the equipment, processes, or activities are considered to be new or existing.

This rule making includes adoption of new federal NSPS and NESHAP requirements potentially impacting facilities or businesses that previously had few, if any, air quality requirements. Because of the potential impacts to small businesses and previously unregulated facilities, the Department is developing implementation strategies in conjunction with the rule making. The strategies include cooperative efforts with the University of Northern Iowa – Iowa Air Emissions Assistance Program (UNI), the Iowa Department of Economic Development (IDED), the Linn and Polk County local air quality programs, and other interested associations and organizations to provide outreach, education and compliance assistance to stakeholders.

The Department's outreach efforts began earlier this year, continued during the rule-making process, and will go on after the new rules are adopted. The implementation strategies will depend on the specific rule requirements and on stakeholder needs and will include informational meetings, workshops, training, fact sheets, guides, and Web-based compliance tools.

It is hoped that this rule making, in conjunction with the Department's outreach efforts, will result in reductions in air toxic and other air pollutant emissions while minimizing the regulatory burden to small businesses and other affected facilities.

Item 1 amends paragraph 22.1(2)"r," the construction permit exemption for internal combustion engines with a brake horsepower rating of less than 400. The Department is amending this exemption because of the new NSPS and NESHAP requirements for stationary internal combustion engines. At the time this exemption was first adopted in the mid-1990s, there were no federal air quality requirements applicable to these smaller engines. The new NSPS and NESHAP regulations for engines are rather complex and lengthy and require all sizes of new, modified and reconstructed stationary internal combustion engines to meet certain emissions requirements. To address federal changes,

the Department is amending the construction permit exemption to require submittal of a registration certifying NSPS and NESHAP compliance prior to installation of the engine. The registration form will provide the owners and operators of affected facilities a series of questions to ensure that the engine they order and install complies with the NSPS and NESHAP, while still allowing the owner or operator to be exempt from the requirement to obtain a construction permit. The registration will also assist the Department air quality and field office staff in ensuring that affected facilities are in compliance.

The Department received written comments from John Deere Waterloo Works regarding this amendment. In summary, the commenter stated that requiring registration of these engines would not be a benefit to the regulated community and would not lead to better compliance with the NSPS or NESHAP requirements.

The Department disagrees with these comments. Although facilities such as John Deere may be well-versed in the NSPS and NESHAP requirements for engines and may easily be able to ensure purchase of manufacturer certified engines, this may not be the case with other facilities. Based on feedback received from stakeholders and the Department's small business assistance partners, the Department maintains that the registration forms will provide compliance assistance to many owners and operators of small engines, and that completion and submittal of the registration forms will result in better NSPS and NESHAP compliance.

Item 2 amends subrule 22.8(1), the permit by rule for spray booths (PBR). The Department is amending the PBR provisions to reflect new NESHAP requirements for surface coating operations. At the time the PBR was first adopted, small spray operations were not subject to any federal air quality regulations. Under new NESHAP requirements, the owner or operator of any size of facility that spray applies materials containing any of the "target HAP" specified under the NESHAP must comply with numerous requirements. Additionally, owners and operators that spray coat motor vehicles and mobile equipment and choose not to use materials containing the "target HAP" must still petition for an exemption from the NESHAP requirements.

Currently, owners and operators of facilities that spray apply three gallons or less of materials per day are eligible to use the PBR. The owners or operators of PBR-eligible facilities simply complete a notification letter certifying that they meet the PBR requirements. To accommodate the new federal requirements, the Department is amending the PBR requirements and the Department's accompanying form to require that an owner or operator certify that the facility is in compliance with or otherwise exempt from the NESHAP. The revised PBR form will provide owners and operators a series of questions that will assist them in complying with the NESHAP. Owners and operators of existing facilities that choose to continue using the target HAP will need to reapply for the PBR to certify compliance prior to the NESHAP compliance date. The amendment to subrule 22.8(1) will assist the Department air quality and field office staff in ensuring NESHAP compliance, while still allowing smaller spray operations to use a streamlined permit.

Item 3 amends the introductory paragraph of subrule 23.1(2), the provisions adopting by reference the federal New Source Performance Standards (NSPS) contained in 40 CFR Part 60. The specific NSPS requirements being adopted are described in Item 4. EPA also took final action regarding an existing NSPS for equipment leaks of volatile organic compounds (VOC) in the synthetic organic chemicals manufacturing industry (SOCMI) and at petroleum refineries. EPA extended the stay of certain compliance requirements in the federal regulations.

Item 4 amends subrule 23.1(2) by adding new paragraph "zzz" to adopt the new NSPS for stationary spark ignition internal combustion engines (SI engines). SI engines are typically gasoline fueled, but also include engines with spark plugs that burn other fuels. SI engines are used at power plants, industrial sources and other facilities to generate electricity and to power pumps and compressors.

The new standards for SI engines will limit emissions of NO_x, carbon monoxide (CO) and volatile organic compounds (VOC). The standards apply to larger SI engines (500 horsepower or greater) manufactured or ordered after July 1, 2007, to smaller SI engines manufactured or ordered after July 1, 2008, and to any size of SI engine modified or reconstructed after June 12, 2006. The NSPS phases in more stringent emissions requirements for engines with later manufacture dates. This NSPS is similar

to the NSPS for stationary compression ignition (CI) engines. CI engines are typically diesel fueled. The Department adopted the NSPS for CI engines in February 2007.

Item 5 amends subrule 23.1(4), the emission standards for hazardous air pollutants for source categories, also known as National Emission Standards for Hazardous Air Pollutants or NESHAP, to adopt recent amendments that EPA made to 40 CFR Part 63. The specific NESHAP requirements being newly adopted or amended are described in Items 6 and 7. EPA also issued final amendments to existing NESHAP as follows:

- EPA issued amendments to the NESHAP for dry cleaning facilities (Subpart M). These amendments add clarity to, and better explanations of, the types of equipment included in the standards, the testing and monitoring requirements, and the reporting and record-keeping requirements. The amendments also correct typographical errors.
- EPA issued amendments to the NESHAP for semiconductor manufacturing (Subpart BBBBB). The Department is not aware of any facilities in Iowa currently subject to this NESHAP. These amendments establish a new maximum achievable control technology floor level of control for existing and new combined process vent streams containing inorganic and organic HAP. The amendments also clarify the emission requirements for process vents by adding definitions for organic, inorganic, and combined process vent streams that contain both organic and inorganic HAP.
- EPA issued final amendments to the NESHAP for organic liquids distribution (non-gasoline) (Subpart EEEE). The amendments clarify, add flexibility to, and extend some of the compliance dates for storage tanks. The amendments also clarify the requirements for monitoring of storage tank pressure relief devices.

Item 6 amends paragraph 23.1(4)"cz," the NESHAP for stationary reciprocating internal combustion engines (RICE) (Subpart ZZZZ). The amendments include standards to limit HAP from new and reconstructed engines located at area sources. The amendments also include standards to regulate HAP from smaller-size engines located at major sources.

Area sources are usually smaller commercial or industrial operations that typically release less HAP. Specifically, area sources have potential emissions less than 10 tpy (tons per year) of any single HAP and less than 25 tpy of any combination of HAP. Facilities that have potential HAP emissions greater than or equal to these levels are classified as major sources for HAP.

Generally, the RICE NESHAP requires new and reconstructed engines to meet the NSPS requirements for CI or SI engines. Existing engines located at area sources are not covered under these new regulations. However, EPA has published a notice in the Federal Register stating that EPA plans to issue standards in the future for existing engines located at area sources.

Item 7 amends subrule 23.1(4) by adopting new paragraphs "eb," "ec," and "eh." This amendment adopts by reference three new NESHAP for new and existing area sources for the following source categories: (1) bulk gasoline facilities such as bulk plants, bulk terminals, and pipeline breakout stations (Subpart BBBBBB); (2) gasoline dispensing facilities (GDF) such as gas stations (Subpart CCCCCC); and (3) paint stripping and miscellaneous surface coating operations (Subpart HHHHHH).

The area source NESHAP for bulk gasoline distribution will reduce VOC and HAP from gasoline vapors, including benzene emissions. Bulk terminals and pipeline breakout stations typically have higher monthly gasoline throughputs, and the owners and operators are required to control emissions through submerged filling at tanks and loading racks and controls on gasoline storage tanks. Owners and operators of larger terminals must capture and control gasoline vapors at the loading rack. The Department has received initial notification from approximately 20 existing facilities that will be subject to the NESHAP. Existing facilities will need to comply with the NESHAP by January 2011.

Bulk gasoline plants have lower monthly gasoline throughputs than terminals or breakout stations. Owners and operators of bulk plants are required to control gasoline vapors by using submerged filling at tanks and loading racks. The Department estimates that there may be 100 to 200 bulk plants affected by the NESHAP. However, owners and operators of bulk plants are already required to use submerged filling at tanks under existing state rules for underground storage tanks (UST) and for flammable liquids. The Department is working with the Petroleum Marketers and Convenience Stores of Iowa (PMCI), EPA and industry consultants to assist affected facilities with the new NESHAP requirements. The Department

met with PMCI and other bulk plant stakeholders on August 21, 2008, and plans to continue working closely with stakeholders.

The second area source NESHAP being adopted by reference affects gasoline dispensing facilities (GDF) such as gas stations. Like the NESHAP for bulk facilities, this NESHAP will reduce VOC and HAP, including benzene emissions, from gasoline vapors. These standards apply to gasoline cargo tanks (trucks) and each storage tank. The NESHAP does not apply to equipment, such as gasoline pumps, used for refueling motor vehicles.

The gasoline dispensing NESHAP requirements are based on the actual, monthly throughput of gasoline at the facility. Under the NESHAP, owners and operators of smaller facilities are required to follow specified good management practices (GMP) to minimize gasoline evaporation. Owners and operators of medium-size facilities are required to follow GMP and use submerged filling of gasoline tanks. Owners and operators of large facilities (greater than or equal to 100,000 gallons/month gasoline throughput) must employ GMP, submerged fill, and a vapor balance system during storage tank loadings.

Owners and operators of GDF are already required to implement GMP and submerged fill under existing administrative rules for UST and for flammable liquids. Vapor balancing is not required under existing administrative rules. The Department estimates that the owners and operators of approximately 250 large GDF will need to implement vapor balancing. However, approximately 50 of these facilities already use vapor balancing, and nearly all of the remaining 200 facilities will have until January 2011 to comply with the NESHAP requirements.

On June 25, 2008, EPA amended the NESHAP provisions affecting new, large GDF. EPA amended the pressure and vacuum vent valve cracking pressure and leak rate requirements for vapor balance systems used to control emissions from gasoline storage tanks at gasoline dispensing facilities. Newly constructed or reconstructed gasoline dispensing facilities must comply with the requirements of these amendments by the effective date of the EPA amendments (September 23, 2008), or upon start-up, whichever is later.

The Department has been corresponding regularly with EPA, PMCI and a number of affected facilities regarding the new requirements. The Department met with PMCI and other stakeholders on August 21, 2008, to formulate an outreach and compliance assistance strategy, and plans to continue working closely with stakeholders.

At the August 21, 2008, meeting, the Department learned that a number of new, large GDF would be unable to retrofit their equipment with vapor balance systems in time to comply with the NESHAP compliance date. Originally, the Department believed that the federal rules allowed these facilities to request formal compliance extensions. Upon further review of the NESHAP regulations and discussions with EPA Region VII, the Department now realizes that formal compliance extensions are only available for facilities considered "existing" under the NESHAP, and not those considered "new" or "reconstructed." EPA Region VII submitted written comments requesting that the Department clarify this point in the preamble of the final rule making. The Department is making this clarification.

In the absence of providing formal compliance extensions, the Department is working with new GDF that have not met the NESHAP deadlines to ensure that these facilities install the required vapor balance systems as expeditiously as possible.

The third area source NESHAP being adopted by reference affects paint stripping and certain surface coating operations, including spray coating of motor vehicles and mobile equipment. Currently, the Department is aware of only one Iowa facility that may be affected by the paint stripping provisions of this NESHAP.

The requirements for miscellaneous surface coating, which includes spray application of coatings to motor vehicles or mobile equipment, require owners and operators of facilities that spray apply coatings containing certain "target HAP" to control HAP through a variety of means. In brief, affected facility owners and operators must enclose spray areas, use high efficiency paint guns, capture 98 percent of overspray, capture paint and solvent when cleaning, and train and certify paint operators. Owners and operators of existing facilities will have until January 2011 to either switch to coatings that do not contain the "target HAP" or to comply with the NESHAP requirements. The Department estimates that 1,000

minor source facilities may be subject to the NESHAP, but that many of the facility owners and operators will choose to stop using the "target HAP" prior to the NESHAP compliance date.

The Department, in cooperation with UNI, IDED, and Linn and Polk County local air quality programs, hosted the first stakeholder meeting on July 15, 2008. The 30 participants received a presentation on the NESHAP and air permitting requirements, a draft guide and other outreach materials. The participants provided valuable input at this initial meeting, and the Department will be offering additional meetings and compliance assistance tools over the next 18 months.

This NESHAP will also impact approximately 15 Title V facilities that are currently considered to be area sources for HAP. The Department will be working directly with owners and operators of these facilities regarding the new NESHAP requirements.

These amendments are intended to implement Iowa Code section 455B.133.

These amendments will become effective on March 18, 2009.

EDITOR'S NOTE: Pursuant to recommendation of the Administrative Rules Review Committee published in the Iowa Administrative Bulletin, September 10, 1986, the text of these amendments [22.1(2)"r," 22.8(1), 23.1] is being omitted. These amendments are identical to those published under Notice as **ARC 7306B**, IAB 11/5/08.

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