

RULES AND REGULATIONS

Title 25—ENVIRONMENTAL PROTECTION

ENVIRONMENTAL QUALITY BOARD

[25 PA. CODE CHS. 121 AND 123]

Outdoor Wood-Fired Boilers

[40 Pa.B. 5571]

[Saturday, October 2, 2010]

The Environmental Quality Board (Board) amends Chapters 121 and 123 (relating to general provisions; and standards for contaminants) to read as set forth in Annex A.

This order is adopted by the Board at its meeting of July 13, 2010.

A. Effective Date

This final-form rulemaking will be effective upon publication in the *Pennsylvania Bulletin*.

These amendments will be submitted to the United States Environmental Protection Agency (EPA) as a revision to the Pennsylvania State Implementation Plan upon promulgation of this final-form rulemaking.

B. Contact Persons

For further information, contact Ron Gray, Chief, Division of Compliance and Enforcement, Bureau of Air Quality, 12th Floor, Rachel Carson State Office Building, P. O. Box 8468, Harrisburg, PA 17105-8468, (717) 772-3369; or Robert "Bo" Reiley, Assistant Counsel, Bureau of Regulatory Counsel, 9th Floor, Rachel Carson State Office Building, P. O. Box 8464, Harrisburg, PA 17105-8464, (717) 787-7060. Persons with a disability may use the Pennsylvania AT&T Relay Service, (800) 654-5984 (TDD users) or (800) 654-5988 (voice users).

C. Statutory Authority

This final-form rulemaking is adopted under the authority of section 5(a)(1) of the Air Pollution Control Act (APCA) (35 P. S. § 4005(a)(1)), which grants to the Board the authority to adopt regulations for the prevention, control, reduction and abatement of air pollution.

D. Background and Summary

On July 18, 1997, the EPA amended the National Ambient Air Quality Standard (NAAQS) for particulate matter (PM) to add a new standard for fine particles, using fine particulates equal to and less than 2.5 micrometers in diameter (PM_{2.5}) as the indicator. The EPA set the health-based (primary) and welfare-based (secondary) PM_{2.5} annual standard at a level of 15 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) and the 24-hour standard at a level of 65 $\mu\text{g}/\text{m}^3$. See 62 FR 38652 (July 18, 1997). The health-based primary standard is designed to protect human health from elevated levels

of PM_{2.5}, which have been linked to premature mortality and other important health effects. The secondary standard is designed to protect against major environmental effects of PM_{2.5} such as visibility impairment, soiling and materials damage. The following counties in this Commonwealth have been designated nonattainment for the 1997 fine particulate NAAQS: Allegheny (Liberty-Clairton), Allegheny (remainder), Armstrong, Beaver, Berks, Bucks, Butler, Cambria, Chester, Cumberland, Dauphin, Delaware, Greene, Indiana, Lancaster, Lawrence, Lebanon, Montgomery, Philadelphia, Washington, Westmoreland and York.

Subsequently, on October 17, 2006, the EPA revised the primary and secondary 24-hour NAAQS for PM_{2.5} to 35 µg/m³ from 65 µg/m³. See 71 FR 61236 (October 17, 2006). On December 18, 2008, all or portions of the following counties in this Commonwealth were designated by the EPA as nonattainment for the 2006 24-hour fine particulate NAAQS: Allegheny (Liberty-Clairton), Allegheny (remainder), Armstrong (partial), Beaver, Bucks, Butler, Cambria, Chester, Cumberland, Dauphin, Delaware, Greene (partial), Indiana (partial), Lancaster, Lawrence (partial), Lebanon, Lehigh, Montgomery, Northampton, Philadelphia, Washington, Westmoreland and York.

The health effects associated with exposure to PM_{2.5} are significant. Epidemiological studies have shown a significant correlation between elevated PM_{2.5} levels and premature mortality. Other important health effects associated with PM_{2.5} exposure include aggravation of respiratory and cardiovascular disease (as indicated by increased hospital admissions, emergency room visits, absences from school or work and restricted activity days), lung disease, decreased lung function, asthma attacks and certain cardiovascular problems. Individuals particularly sensitive to PM_{2.5} exposure include older adults, people with heart and lung disease and children.

A significant and growing source of PM_{2.5} emissions in this Commonwealth is from outdoor wood-fired boilers (OWBs). OWBs, also referred to as outdoor wood-fired furnaces, outdoor wood-burning appliances or outdoor hydronic heaters, are free-standing fuel-burning devices designed: (1) to burn clean wood or other approved solid fuels; (2) specifically for outdoor installation or installation in structures not normally intended for habitation by humans or domestic animals, such as garages; and (3) to heat building space or water by means of distribution, typically through pipes, of a fluid heated in the device, typically water or a water and antifreeze mixture. OWBs are being sold to heat homes and buildings and to produce domestic hot water.

The emissions, health effects and the nuisance factor created by the use of OWBs are a major concern to the Department of Environmental Protection (Department). The Northeast States for Coordinated Air Use Management has conducted stack tests on OWBs. Based on the test results, the average PM_{2.5} emissions from 1 OWB are equivalent to the emissions from 205 oil furnaces or as many as 8,000 natural gas furnaces. Cumulatively, the smallest OWB has the potential to emit almost 1 1/2 tons of PM every year. Of the estimated 155,000 OWBs sold Nationwide, 95% have been sold in 19 states, of which this Commonwealth is one.

Unlike indoor wood stoves that are regulated by the EPA, Federal standards do not exist for OWBs and the majority of them are not equipped with pollution controls. The EPA initiated a voluntary program that encourages manufacturers of OWBs to improve air quality through developing and distributing cleaner-burning, more efficient OWBs. Phase 1 of the program was in place from January 2007 through October 15, 2008. To qualify for Phase 1, manufacturers were required to develop an OWB model that was 70% cleaner-burning than unqualified models by meeting the EPA air emission standard of 0.6 pound PM per million Btu heat input as tested by an independent accredited laboratory. Phase 1 Partnership Agreements ended when the Phase 2 Partnership Agreements were initiated on October 16, 2008. To qualify for Phase 2, manufacturers must develop an OWB model that is 90% cleaner-burning than preprogram, unqualified OWBs and meet the EPA air emissions standard of 0.32 pound PM per million Btu heat output as tested by an independent accredited laboratory. The emission standard established in the final-form rulemaking is the Phase 2 emission standard described in the EPA voluntary program.

The final-form rulemaking would help assure that the citizens of this Commonwealth will benefit from reduced emissions of PM_{2.5} from OWBs. Attaining and maintaining levels of PM_{2.5} below the health-based NAAQS is important to reduce premature mortality and other health effects associated with PM_{2.5} exposure. There are many citizen complaints regarding the operation of OWBs. This final-form rulemaking reduces the problems associated with the operation of OWBs, including smoke, odors and burning prohibited fuels including garbage, tires, hazardous waste and the like. Reductions in ambient levels of PM_{2.5} would promote improved human and animal health and welfare, improved visibility, decreased soiling and materials damage and decreased damage to plants and trees.

A review of the Department's complaint tracking system reveals a significant amount of activity regarding OWB complaints in this Commonwealth. Since 2005, the Department has logged 200 complaints. In the Northeast Regional Office, complaints were received from 8 of 11 counties; 11 of 14 counties in the Northcentral Regional Office; 10 of 12 counties in the Northwest Regional Office; 2 of 4 counties in the Southeast Regional Office; 13 of 15 counties in the Southcentral Regional Office; and 9 of 9 counties in the Southwest Regional Office. Complaints are being received across this Commonwealth, but most frequently from the northern tier counties.

While there are no Federal limits for the OWBs that would be subject to regulation under this final-form rulemaking, section 4.2 of the APCA (35 P. S. § 4004.2) authorizes the Board to adopt regulations more stringent than Federal requirements when the control measures are reasonably necessary to achieve and maintain the ambient air quality standards. These measures are reasonably necessary to attain and maintain the primary and secondary 24-hour NAAQS for PM_{2.5} in this Commonwealth.

E. Summary of Comments and Responses

The Board received over 2,000 comments regarding the proposed OWB regulations during the public hearings and public comment period. Of those, 538 were in full support of the proposed rulemaking, 723 were in support contingent upon revisions being made to the proposed rulemaking and 745 were opposed to the proposed rulemaking.

Several commentators noted that PM_{2.5} pollution from OWBs is associated with heart disease, lung disease and premature deaths and have severe effects on neighbors' quality of life. The health effects associated with exposure to PM_{2.5} are significant. Epidemiological studies have shown a significant correlation between elevated PM_{2.5} levels and premature mortality. The final-form rulemaking helps assure that the citizens of this Commonwealth will benefit from reduced emissions of PM_{2.5} and air toxics from OWBs. Attaining and maintaining levels of PM_{2.5} below the health-based NAAQS is important to reduce premature mortality and other health effects associated with PM_{2.5} exposure.

Other commentators are concerned about the odors and pollutants caused by burning garbage and trash in OWBs. The final-form rulemaking, in § 123.14(f) and (g) (relating to outdoor wood-fired boilers), prohibits the burning of trash or garbage in new or existing OWBs.

Several commentators suggested a ban on the operation of OWBs. The intention is not to ban the use of OWBs, but to control some aspects of the operation of OWBs to reduce future health impacts and air emissions and nuisances. The Board recognizes the value of heating with OWBs, including providing a lower cost fuel option which is particularly important in the present economy, use of a renewable and plentiful fuel and reduction of the country's dependency on fossil fuel.

Many commentators complained about the smoke odors. The Board recognizes that ground-level smoke is one of the problems with the operation of conventional model OWBs. The final-form rulemaking should provide some relief from the impact of smoke odors due to the Phase 2 emission standards.

Several commentators complained about having to deal with the smoke and odors year-round since the neighboring OWB is used throughout the year for hot water or to heat swimming pools. The Board appreciates these concerns, but decided not to impose a seasonal prohibition. The Board believes that a better approach is to educate owners of OWBs on more efficient operation of the units to reduce complaints.

A few commentators stated that OWB operation can only be adequately controlled at the State level. The Board believes that the final-form rulemaking will consistently regulate OWBs across this Commonwealth, instead of the piecemeal, inconsistent way OWBs are currently regulated. This would be particularly appropriate for establishing emission standards for new OWBs installed in this Commonwealth.

A few commentators stated that using coal as a fuel creates problems. The regulation is targeted for OWBs. Coal-fired units are not covered by the EPA Phase 2 certification program and, therefore, are beyond the scope of this regulation.

A commentator stated that penalties should be included in the regulation. The Board does not include penalties in specific regulations. Penalties for violations of regulations are calculated by way of penalty assessment policies developed by the Department. However, the first steps in dealing with OWB noncompliance would be education and voluntary compliance by the owner.

Several commentators stated that minimum stack height requirements should be greater. Based upon the comments received and further investigation, the Department determined that the proposed stack heights would be problematic for stack stability and the proper operation of the OWB. The Board has proposed a minimum stack height of 10 feet for new Phase 2 OWBs; additionally, these stacks shall be installed according to manufacturer's specifications.

A commentator stated that stringent standards should be included for commercial units. Currently, the Department routinely addresses commercial units through existing regulations. However, the EPA is developing new source performance standards requirements that will regulate the emission rate of the commercial units.

A commentator stated that existing OWB owners and operators should apply for a permit within 30 days and comply within 60 days. The Department is prohibited from requiring permits for home heating devices at private residences by section 6.1 of the APCA (35 P. S. § 4006.1).

Several commentators had general concerns about stack height requirements for existing and new OWBs. The stack height requirements for existing OWBs have been eliminated in the final-form regulation. The stack height requirements for new OWBs established in the final-form regulation provide that new OWBs must have a permanent stack that extends at least 10 feet above the ground and be installed according to the manufacturer's specifications.

Some commentators believe opacity requirements for residential-sized OWBs are unreasonable because opacity is based on a subjective, visual observation. The opacity regulation, as defined in § 123.41 (relating to limitations), is an existing Statewide regulation limiting the visual emissions emanating from stacks. The Department's field staff is certified annually to determine the percent opacity from stacks. Opacity is not a subjective visual observation for these certified individuals. The opacity regulation would be used when there is a complaint submitted to the Department about the operation of an OWB. The ability to use an objective visual test to determine if there is an actual nuisance could be helpful both to the complainant and the OWB owner.

Several commentators believe that existing OWBs should be grandfathered. The Board eliminated the stack height requirements for existing OWBs. Existing units need to comply with existing laws and the final-form regulation's fuel requirements.

Other commentators are concerned about the incremental cost of new Phase 2 units. According to the EPA, OWBs fueled by wood, pellets and other biomass cost between \$8,000 and \$18,000, depending on the size of the unit. The cleaner Phase 2 units may cost between \$9,200 to \$20,700, or about 15% more. Because of the changes made to improve the efficiency of these units and reduce their emissions, most of these new models are significantly more efficient. The cleaner Phase 2 units use less wood to produce the same amount of heat, reducing the cost of wood purchases.

Commentators believe that the regulation of OWBs is a local issue and disagree with a one-size-fits-all approach. The Board believes the final-form rulemaking sets Statewide minimum criteria for new Phase 2 units as well as the basic criteria for cleaner fuel. Local municipalities can still enact ordinances that are stricter.

One commentator asked whether municipalities would need to pass their own ordinances referencing this final-form rulemaking before they could require compliance. A municipality may enact an ordinance that adopts a Department regulation by reference, but would then enforce it as its own ordinance. If a municipality does not have an ordinance that includes the Department's regulatory requirements, it could not enforce the Department's regulation directly. Further, in accordance with section 12 of the APCA (35 P. S. § 4012), local municipalities may enact ordinances more stringent than the final-form regulation.

One commentator believes that the proposed regulation may be considered a government "taking," placing the Commonwealth at risk for numerous lawsuits from those using OWBs. The Board disagrees that the regulation is a regulatory taking. The final-form regulation merely establishes a number of environmental and public health requirements that property owners shall abide by if they install an OWB on their property.

Other commentators believe that a regulatory issue like OWBs should go through the Legislature and be voted on by elected officials. The Board believes that it has legal authority from the General Assembly to enact the regulation. Statutory authority for the Board to enact an OWB regulation comes from section 5(a)(1) of the APCA, which grants the Board the authority to adopt rules and regulations for the prevention, control, reduction and abatement of air pollution in this Commonwealth.

One commentator suggested the regulation of OWBs on a Statewide scale is a policy decision of such a substantial nature that it requires legislative review. Section 5(a)(1) of the APCA gives the Board the authority to adopt regulations to prevent, control, reduce and abate air pollution. The final-form regulation is adopted to prevent, control, reduce, and abate air pollution. The Department undertook additional discussions with the legislative members subsequent to receipt of their comments. The Department also provided the draft final-form rulemaking to the legislative members for review.

One commentator wondered why the Board believes that it is now more appropriate for a State agency to regulate OWBs when the model ordinance that was developed by the Department stated that "it believes that local municipalities can respond to and resolve issues more effectively and swiftly than a state agency." The Board believes that local governments can still respond to home heating issues. The final-form rulemaking only sets the Statewide minimum criteria for new Phase 2 units as well as the basic criteria for cleaner fuel. Local municipalities can still enact ordinances that are stricter.

A commentator pondered the need for this final-form rulemaking and questioned why enforcement of the existing regulatory and statutory requirements cannot provide adequate protection of the public health, safety and welfare. The intent of the final-form regulation is to ensure that only the cleanest OWB units are sold in this Commonwealth.

The commentator asked the Board to allow the requirements of the final-form regulation to be phased-in over time so that the three manufacturers in this Commonwealth will not be negatively affected by the final-form rulemaking. A sell-through exemption has been established in the final-form regulation. The sell-through exemption specifies that a person may not sell, offer for sale, distribute or lease a non-Phase 2 OWB in this Commonwealth unless the OWB was manufactured, distributed, purchased or leased and received in this Commonwealth before May 31, 2011. This exemption shall remain in effect through May 31, 2011.

The commentator noted that the setback and stack height provisions in § 123.14(c) and (d), respectively, have been cited by many commentators as problematic. The Board made the following changes to those subsections, renumbered as subsections (d) and (e). For subsection (d), setback requirements for new Phase 2 OWBs, a person may not install a Phase 2 OWB in this Commonwealth unless the boiler is installed a minimum of 50 feet from the nearest property line. For subsection (e), stack height requirements for new Phase 2 OWBs, the requirements are a permanent stack that extends a minimum of 10 feet above the ground and is installed according to the manufacturer's specifications. These changes are in line with the Hearth, Patio & Barbecue Association's Outdoor Hydronic Heater Caucus recommendations.

The commentator urged the Board to include specific language in the final-form regulation that would exempt individuals involved with real estate transactions from these regulations. The Board added language to the final-form rulemaking.

The commentator noted that since Phase 2 OWBs are cleaner burning devices than non-Phase 2 OWBs, what is the need for the significant setback requirement for them (150 feet from the nearest property line) in the proposed regulation. The commentator suggested that the setback be a function of distance to the nearest residence, not property line. The setback requirement has been revised from 150 feet to the nearest property line to 50 feet from the nearest property line. The Board believes that setbacks should be based on a property line. The use of property lines will minimize the emission impact from a new Phase 2 unit.

A few commentators opposed the proposed OWB regulation because it will limit the use of OWBs for agricultural purposes. The Board appreciates the comments regarding the use of OWBs for agricultural purposes. Under section 4.1 of the APCA (35 P. S. § 4004.1), the Board does not have the authority to adopt rules and regulations relating to air pollution arising from the production of agricultural commodities, unless the regulations are required by the Clean Air Act (42 U.S.C.A. §§ 7401—7671q). However, if the OWB is being used exclusively to heat or provide hot water, or both, for a residence located on agricultural property, then the final-form regulation would apply.

Some commentators opposed the proposed OWB regulation because it would hinder or ban the ability to use wood for home heating. The final-form regulation does not ban the use of OWBs. Instead, it sets minimum controls for the use of OWBs to reduce health impacts, air emissions and nuisances. The Board also recognizes the value of heating with OWBs, including providing a lower cost fuel option which is particularly important in the present economy, use of a renewable and plentiful fuel and reduction of the country's dependency on fossil fuel.

The commentator opposed the proposed OWB regulation because it would promote increased use of oil and natural gas, which results in greater fuel dependency. The Board agrees that it is important to encourage the use of renewable fuels, such as wind, solar, geothermal and wood, and thereby reduce the country's dependency on fossil fuels. The OWB regulation does not ban or hinder the use of OWBs. Instead, the final-form regulation intends to regulate some aspects of the operation of OWBs to reduce health impacts, air emissions and nuisances.

The commentator opposed the proposed OWB regulation because it is a government intrusion that infringes on personal freedom. The intent of the proposed regulation is to find a balance between the rights of the OWB owner and the rights of the neighbors that are affected by smoke and

odors from the OWB operation. The intent of the proposed OWB regulation is not to ban OWBs, but rather to set minimum standards for the operation of OWBs to reduce health impacts, air emissions and nuisances.

A few commentators opposed the proposed OWB regulation because there are already enough Department, Federal, or both, regulations that cover OWBs. The intent of the final-form regulation is to ensure that only the cleanest OWB units are sold in this Commonwealth.

A commentator opposed the proposed OWB regulation because the notification and paperwork requirements are burdensome for small business distributors. The written notice and recordkeeping requirements in the proposed regulation have been eliminated in the final-form regulation.

Several commentators stated that over time OWB manufacturers will produce more efficient boilers, which will be phased in as old OWBs are replaced and the problem will take care of itself. As of August 30, 2010, there are 19 EPA-qualified Phase 2 OWB models. As more states adopt regulations and laws that establish emission requirements, more qualifying models will be developed and consumers will have more choices.

F. Summary of Final-form Regulation and Changes from Proposed to Final-Form Rulemaking

Summary of final-form regulation

The final-form amendments add definitions to § 121.1 (relating to definitions) for the following six new terms: "Btu—British thermal unit," "clean wood," "new Phase 2 outdoor wood-fired boiler," "non-Phase 2 outdoor wood-fired boiler," "outdoor wood-fired boiler" and "Phase 2 outdoor wood-fired boiler."

The final-form rulemaking adds § 123.14. In general, under final-form subsection (a), regarding applicability, beginning October 2, 2010, the requirements of the regulation apply to a person, manufacturer, supplier or distributor who sells, offers for sale, leases or distributes an OWB for use in this Commonwealth; a person who installs an OWB in this Commonwealth; and a person who purchases, receives, leases, owns, uses or operates an OWB in this Commonwealth.

Final-form subsection (b)(1), regarding exemptions, provides that this section does not apply if the following is applicable: the OWB is intended for shipment and use outside of this Commonwealth.

Under final-form subsection (b)(2), subsections (c), (d) and (e) do not apply to a permanently installed OWB that was installed prior to October 2, 2010, and is transferred to a new owner as a result of a real estate transaction.

Under final-form subsection (b)(3), a person may not sell, offer for sale, distribute or lease a non-Phase 2 OWB unless it was manufactured, distributed, purchased or leased and received in this Commonwealth before May 31, 2011. This exemption will remain in effect through May 31, 2011. A non-Phase 2 OWB installed during the sell-through period shall meet the following requirements: the non-Phase 2 OWB shall be installed a minimum of 150 feet from the nearest property line; and it shall have a permanently attached stack that extends a minimum of 10 feet above the ground and is installed according to the manufacturer's specifications.

Under final-form subsection (c), regarding Phase 2 outdoor wood-fired boilers, except as provided under subsection (b), a person may not sell, offer for sale, distribute or install an OWB unless it is a Phase 2 OWB.

Under final-form subsection (d), regarding setback requirements for new Phase 2 outdoor wood-fired boilers, a person may not install, use or operate a new Phase 2 OWB unless the boiler is

installed a minimum of 50 feet from the nearest property line.

Under final-form subsection (e), regarding stack height requirements for new Phase 2 outdoor wood-fired boilers, a person may not install, use or operate a new Phase 2 OWB in this Commonwealth unless the boiler has a permanently attached stack. The stack must meet both of the following requirements: extend a minimum of 10 feet above the ground; and be installed according to the manufacturer's specifications.

Under final-form subsection (f), regarding allowed fuels, a person that owns, leases, uses or operates an OWB in this Commonwealth shall use only one or more of the following fuels: clean wood; wood pellets made from clean wood; certain home heating oil, natural gas or propane fuels; or other fuel approved in writing by the Department.

Under final-form subsection (g), regarding prohibited fuels, a person who owns, leases, uses or operates an OWB in this Commonwealth may not burn a fuel or material in that OWB other than those fuels listed under subsection (f).

Under final-form subsection (h), regarding applicable laws and regulatory requirements, a person may not use or operate an OWB in this Commonwealth unless it complies with applicable Commonwealth, county and local laws.

Changes from proposed to final-form rulemaking

In addition to the revisions for definitions previously discussed in this section, changes from the proposed rulemaking to final-form rulemaking are summarized as follows:

Final-form § 123.14(b)(2) was added and states that subsections (c), (d) and (e) do not apply to a permanently installed OWB that was installed prior to October 2, 2010, and is transferred to a new owner as a result of a real estate transaction.

Final-form subsection (b)(3) was added and provides that a person may not sell, offer for sale, distribute or lease a non-Phase 2 OWB unless it was manufactured, distributed, purchased or leased and received in this Commonwealth before May 31, 2011. This exemption will remain in effect through May 31, 2011. A non-Phase 2 OWB installed during the sell-through period shall meet the following requirements: the non-Phase 2 OWB shall be installed a minimum of 150 feet from the nearest property line; and it must have a permanently attached stack that extends a minimum of 10 feet above the ground and is installed according to the manufacturer's specifications.

Final-form § 123.14(c) (relating to Phase 2 outdoor wood-fired boilers) was modified for clarification.

Final-form § 123.14(d) reduces the minimum setback requirements from 150 feet to 50 feet for new Phase 2 OWBs installed in this Commonwealth. It was also revised to delete the requirement that a person may not use or operate a Phase 2 OWB unless the boiler has a stack that extends at least 2 feet above the highest peak of the highest residence located within 150 feet of the OWB.

Final-form § 123.14(e) was revised to state that a person may not install, use or operate a new Phase 2 OWB in this Commonwealth unless the boiler has a permanently attached stack that extends a minimum of 10 feet above the ground and is installed according to the manufacturer's specifications. This final-form subsection also deleted the 150 feet stack height requirement.

Proposed subsection (e) was deleted in its entirety.

Final-form subsection (f) clarifies that it relates to a person that owns, leases, uses or operates an OWB in this Commonwealth.

Final-form subsection (g) was not revised between the proposed and final-form rulemakings.

Final-form subsection (h) clarifies that a person may not use or operate an OWB in this Commonwealth unless it complies with Commonwealth, county and local laws and regulations. In addition, specific references to Department regulations were deleted.

The final-form rulemaking deletes proposed subsection (i).

The final-form rulemaking deletes proposed subsection (j).

G. Benefits, Costs and Compliance

Benefits

The citizens of this Commonwealth will benefit from this final-form rulemaking because it will help to reduce emissions of PM_{2.5} from OWBs. Attaining and maintaining levels of PM_{2.5} below the health-based NAAQS is important to reduce premature mortality and other health effects associated with PM_{2.5} exposure. There are also many citizen complaints regarding the operation of OWBs. Reductions in ambient levels of PM_{2.5} would promote improved human and animal health and welfare, improved visibility, decreased soiling and materials damage and decreased damage to plants and trees.

Compliance Costs

The cost of complying with the new requirements includes the cost of designing, manufacturing and distributing an OWB model that meets the EPA Phase 2 emission limit. Currently, there are 19 models available Nationally that meet the EPA Phase 2 emission limit. Nonqualifying OWB models cost between \$8,000 and \$18,000, depending on the size of the unit. It is estimated that the cleaner units may be approximately 15% more expensive because of the changes made to improve the efficiency of these units and reduce their emissions. However, most of these qualifying models are significantly more efficient which means they will burn less wood to produce the same amount of heat, reducing the cost of wood purchases.

The final-form rulemaking is not expected to impose additional direct regulatory costs or savings on local governments.

The final-form rulemaking is not expected to impose additional direct regulatory costs or savings on State government, except that nominal costs will be experienced by the Commonwealth to assist in providing training, outreach and assistance to the regulated community. New staff resources are not anticipated to be necessary.

Compliance Assistance Plan

The Department plans to educate and assist the public and regulated community in understanding the newly added requirements and how to comply with them. This will be accomplished through the Department's ongoing compliance assistance program.

Paperwork Requirements

There are no additional paperwork requirements associated with this final-form rulemaking.

H. Advisory Committee Recommendation

The Department worked with the Air Quality Technical Advisory Committee (AQTAC) in the development of this final-form rulemaking. At its April 29, 2010, meeting, the AQTAC recommended adoption of the final-form rulemaking with the following concerns: all OWBs shall

have a minimum 10 feet stack height requirement; all new Phase 2 OWBs shall have a 150 feet setback requirement from the nearest residence and not 50 feet from the nearest property line; all non-Phase 2 OWBs not used as the primary source of heat and hot water shall not be operated between May 15 and September 30; retailers of OWBs shall report to the Department the model of boilers sold and the zip codes of the buyers.

The Department also consulted with the Citizens Advisory Council on March 16, 2010, and May 6, 2010, the Agricultural Advisory Board on April 21, 2010, and the Small Business Compliance Advisory Committee (SBCAC) on April 28, 2010. The SBCAC recommended adoption of the final-form rulemaking with the following concerns: the written notice and recordkeeping provisions should be reinstated in the final-form rulemaking; and supported providing grant moneys for the purchase and installation of Phase 2 units to replace old, conventional OWBs.

I. Pollution Prevention

The Pollution Prevention Act of 1990 (42 U.S.C.A. §§ 13101—13109) established a National policy that promotes pollution prevention as the preferred means for achieving state environmental protection goals. The Department encourages pollution prevention, which is the reduction or elimination of pollution at its source, through the substitution of environmentally friendly materials, more efficient use of raw materials and the incorporation of energy efficiency strategies. Pollution prevention practices can provide greater environmental protection with greater efficiency because they can result in significant cost savings to facilities that permanently achieve or move beyond compliance. The final-form rulemaking does not directly promote a multimedia approach. The reduced levels of PM_{2.5}, however, will benefit water quality through reduced soiling and quantities of sediment that may run off into waterways. Reduced levels of PM_{2.5} would therefore promote improved aquatic life and biodiversity, as well as improved human, animal and plant life on land.

J. Sunset Review

This final-form rulemaking will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulations effectively fulfill the goals for which they were intended.

K. Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), on October 6, 2009, the Department submitted a copy of the notice of proposed rulemaking, published at 39 Pa.B. 6068 (October 17, 2009), to the Independent Regulatory Review Commission (IRRC) and the House and Senate Environmental Resources and Energy Committees (Committees) for review and comment.

Under section 5(c) of the Regulatory Review Act, IRRC and the Committees were provided with copies of the comments received during the public comment period, as well as other documents when requested. In preparing the final-form rulemaking, the Department has considered all comments from IRRC, the Committees and the public.

Under section 5.1(j.2) of the Regulatory Review Act (71 P. S. § 745.5a(j.2)), on August 18, 2010, the final-form rulemaking was deemed approved by the Committees. Under section 5.1(e) of the Regulatory Review Act, IRRC met on August 19, 2010, and approved the final-form rulemaking.

L. Findings

The Board finds that:

(1) Public notice of proposed rulemaking was given under sections 201 and 202 of the act of July 31, 1968 (P. L. 769, No. 240) (45 P. S. §§ 1201 and 1202) and regulations promulgated thereunder,

1 Pa. Code §§ 7.1 and 7.2.

(2) At least a 60-day public comment period was provided as required by law and all comments were considered.

(3) This final-form rulemaking does not enlarge the purpose of the proposed rulemaking published at 39 Pa.B. 6068.

(4) This final-form rulemaking is necessary and appropriate for administration and enforcement of the authorizing acts identified in Section C of this order.

(5) This final-form rulemaking is reasonably necessary to achieve and maintain the PM2.5 NAAQS.

M. *Order*

The Board, acting under the authorizing statutes, orders that:

(a) The regulations of the Department, 25 Pa. Code Chapters 121 and 123, are amended by amending §§ 121.1 and 123.14 to read as set forth in Annex A, with ellipses referring to the existing text of the regulations.

(b) The Chairperson of the Board shall submit this order and Annex A to the Office of General Counsel and the Office of Attorney General for review and approval as to legality and form, as required by law.

(c) The Chairperson of the Board shall submit this order and Annex A to IRRC and the Committees as required by the Regulatory Review Act.

(d) The Chairperson of the Board shall certify this order and Annex A and deposit them with the Legislative Reference Bureau, as required by law.

(e) This final-form rulemaking will be submitted to the EPA as an amendment to the Pennsylvania State Implementation Plan.

(f) This order shall take effect immediately upon publication in the *Pennsylvania Bulletin*.

JOHN HANGER,
Chairperson

(Editor's Note: For the text of the order of the Independent Regulatory Review Commission relating to this document, see 40 Pa.B. 5424 (September 18, 2010).)

Fiscal Note: Fiscal Note 7-444 remains valid for the final adoption of the subject regulations.

Annex A

TITLE 25. ENVIRONMENTAL PROTECTION

PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION

Subpart C. PROTECTION OF NATURAL RESOURCES

ARTICLE III. AIR RESOURCES

CHAPTER 121. GENERAL PROVISIONS

§ 121.1. Definitions.

The definitions in section 3 of the act (35 P. S. § 4003) apply to this article. In addition, the following words and terms, when used in this article, have the following meanings, unless the context clearly indicates otherwise:

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Btu—British thermal unit—The amount of thermal energy necessary to raise the temperature of 1 pound of pure liquid water by 1° F at the temperature at which water has its greatest density (39° F).

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Clean wood—The term includes the following:

- (i) Wood that contains no paint, stains or other types of coatings.
- (ii) Wood that has not been treated with preservatives or chemicals, including copper, chromium arsenate, creosote and pentachlorophenol.

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New Phase 2 outdoor wood-fired boiler—A Phase 2 outdoor wood-fired boiler that is installed on or after October 2, 2010.

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Non-Phase 2 outdoor wood-fired boiler—An outdoor wood-fired boiler that has not been certified or qualified by the EPA as meeting a particulate matter emission limit of 0.32 pounds per million Btu output or lower and is labeled accordingly.

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Outdoor wood-fired boiler—

- (i) A fuel-burning device that:
 - (A) Is designed to burn, or is capable of burning, clean wood or other fuels listed under § 123.14(f) (relating to outdoor wood-fired boilers).
 - (B) Has a rated thermal output of less than 350,000 Btu per hour.
 - (C) The manufacturer designs or specifies for outdoor installation or installation in structures not normally intended for habitation by humans or domestic animals, including structures like garages and sheds.
 - (D) Heats building space or fluid, or both, through the distribution, typically through pipes, of a fluid heated in the device, typically water or a mixture of water and antifreeze.
- (ii) The fuel-burning device may also be known as an:
 - (A) Outdoor wood-fired furnace.
 - (B) Outdoor wood-burning appliance.

(C) Outdoor hydronic heater.

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Phase 2 outdoor wood-fired boiler—An outdoor wood-fired boiler that has been certified or qualified by the EPA as meeting a particulate matter emission limit of 0.32 pounds per million Btu output or lower and is labeled accordingly.

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CHAPTER 123. STANDARDS FOR CONTAMINANTS

PARTICULATE MATTER EMISSIONS

§ 123.14. Outdoor wood-fired boilers.

(a) *Applicability.* Beginning on October 2, 2010, this section applies to the following:

(1) A person, manufacturer, supplier or distributor who sells, offers for sale, leases or distributes an outdoor wood-fired boiler for use in this Commonwealth.

(2) A person who installs an outdoor wood-fired boiler in this Commonwealth.

(3) A person who purchases, receives, leases, owns, uses or operates an outdoor wood-fired boiler in this Commonwealth.

(b) *Exemptions.*

(1) This section does not apply to a person, manufacturer, supplier or distributor who sells, offers for sale, leases or distributes in this Commonwealth a non-Phase 2 outdoor wood-fired boiler if the person, manufacturer, supplier or distributor demonstrates the non-Phase 2 outdoor wood-fired boiler is intended for shipment and use outside of this Commonwealth.

(2) Subsections (c), (d) and (e) do not apply to a permanently installed outdoor wood-fired boiler that was installed prior to October 2, 2010, and is transferred to a new owner as a result of a real estate transaction.

(3) A person may not sell, offer for sale, distribute or lease a non-Phase 2 outdoor wood-fired boiler in this Commonwealth unless the outdoor wood-fired boiler was manufactured, distributed, purchased or leased and received in this Commonwealth before May 31, 2011.

(i) This exemption shall remain in effect until May 31, 2011.

(ii) A non-Phase 2 outdoor wood-fired boiler purchased during the sell-through period must meet the following requirements:

(A) Be installed a minimum of 150 feet from the nearest property line.

(B) Have a permanently attached stack that meets the following requirements:

(I) Extends a minimum of 10 feet above the ground.

(II) Is installed according to the manufacturer's specifications.

(c) *Phase 2 outdoor wood-fired boiler.* Except as provided under subsection (b):

(1) A person may not sell, offer for sale, distribute or install an outdoor wood-fired boiler for use in this Commonwealth unless it is a Phase 2 outdoor wood-fired boiler.

(2) A person may not purchase, lease or receive an outdoor wood-fired boiler for use in this Commonwealth unless it is a Phase 2 outdoor wood-fired boiler.

(d) *Setback requirements for new Phase 2 outdoor wood-fired boilers.* A person may not install a new Phase 2 outdoor wood-fired boiler in this Commonwealth unless the boiler is installed a minimum of 50 feet from the nearest property line.

(e) *Stack height requirements for new Phase 2 outdoor wood-fired boilers.* A person may not install, use or operate a new Phase 2 outdoor wood-fired boiler in this Commonwealth unless the boiler has a permanently attached stack. The stack must meet both of the following requirements:

(1) Extend a minimum of 10 feet above the ground.

(2) Be installed according to the manufacturer's specifications.

(f) *Allowed fuels.* A person that owns, leases, uses or operates an outdoor wood-fired boiler in this Commonwealth shall use only one or more of the following fuels:

(1) Clean wood.

(2) Wood pellets made from clean wood.

(3) Home heating oil, natural gas or propane that:

(i) Complies with all applicable sulfur limits.

(ii) Is used as a starter or supplemental fuel for dual-fired outdoor wood-fired boilers.

(4) Other types of fuel approved in writing by the Department upon receipt of a written request.

(g) *Prohibited fuels.* A person who owns, leases, uses or operates an outdoor wood-fired boiler in this Commonwealth may not burn a fuel or material in that outdoor wood-fired boiler other than those fuels listed under subsection (f).

(h) *Applicable laws and regulatory requirements.* A person may not use or operate an outdoor wood-fired boiler in this Commonwealth unless it complies with applicable Commonwealth, county and local laws and regulations adopted thereunder.

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