RULES AND REGULATIONS

Title 25—ENVIRONMENTAL PROTECTION

ENVIRONMENTAL QUALITY BOARD

[25 PA. CODE CH. 129]

Control of Volatile Organic Compound Emissions from Fiberglass Boat Manufacturing Materials

The Environmental Quality Board (Board) amends Chapter 129 (relating to standards for sources) to read as set forth in Annex A. This final-form rulemaking adds § 129.74 (relating to control of VOC emissions from fiberglass boat manufacturing materials) to adopt reasonably available control technology (RACT) requirements and RACT emission limitations for stationary sources of volatile organic compound (VOC) emissions from fiberglass boat manufacturing materials including open molding resins, gel coats and cleaning materials. This final-form rulemaking also adds terms and definitions to § 129.74 to support the interpretation of the measures.

This final-form rulemaking will be submitted to the United States Environmental Protection Agency (EPA) for approval as a revision to the Commonwealth's State Implementation Plan (SIP) following promulgation of this final-form rulemaking.

This order was adopted by the Board at its meeting of May 20, 2015.

A. *Effective Date*

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

B. *Contact Persons*

For further information, contact Kirit Dalal, Chief, Division of Air Resource Management, Bureau of Air Quality, Rachel Carson State Office Building, P. O. Box 8468, Harrisburg, PA 17105-8468, (717) 772-3436; or Kristen Furlan, Assistant Director, Bureau of Regulatory Counsel, 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). This final-form rulemaking is available on the Department of Environmental Protection's (Department) web site at www.dep.pa.gov (select "Public Participation," then select "Environmental Quality Board (EQB)").

C. *Statutory Authority*

This final-form rulemaking is authorized under section 5(a)(1) of the Air Pollution Control Act (APCA) (35 P. S. § 4005(a)(1)), which grants the Board the authority to adopt rules and regulations for the prevention, control, reduction and abatement of air pollution in this Commonwealth. Section 5(a)(8) of the APCA also grants the Board the authority to adopt rules and regulations designed to implement the provisions of the Clean Air Act (CAA) (42 U.S.C.A. §§ 7401—7671q).

D. *Background and Summary*

The purpose of this final-form rulemaking is to implement control measures to reduce VOC emissions from fiberglass boat manufacturing materials including open molding resin, gel coat and cleaning materials. VOCs are precursors for ground-level ozone formation. Ground-level ozone, a public health and welfare hazard, is not emitted directly to the atmosphere by fiberglass boat manufacturing materials including open molding resin, gel coat and cleaning materials, but is formed by a photochemical reaction between VOCs and nitrogen oxides (NO_x) in the presence of sunlight. In accordance with sections 172(c)(1), 182(b)(2)(A) and 184(b)(1)(B) of the CAA (42 U.S.C.A. §§ 7502(c)(1), 7511a(b)(2)(A) and 7511c(b)(1)(B)), the final-form rulemaking establishes VOC emission limitations and other requirements consistent with the recommendations of the EPA 2008 Fiberglass Boat Manufacturing Materials Control Techniques Guidelines (CTG) for these sources in this Commonwealth. See Consumer and Commercial Products, Group IV: Control Techniques Guidelines in Lieu of Regulations for Miscellaneous Metal Products Coatings, Plastic Parts Coatings, Auto and Light-Duty Truck Assembly Coatings, Fiberglass Boat Manufacturing Materials, and Miscellaneous Industrial Adhesives, 73 FR 58481, 58483 (October 7, 2008).

The EPA is responsible for establishing National Ambient Air Quality Standards (NAAQS) for six criteria pollutants considered harmful to public health and the environment: ground-level ozone; particulate matter; NO_x; carbon monoxide; sulfur dioxide; and lead. The CAA established two types of NAAQS: primary standards, which are limits set to protect public health; and secondary standards, which are limits set to protect public welfare and the environment, including protection against visibility impairment and from damage to animals, crops, vegetation and buildings. The EPA established primary and secondary ground-level ozone NAAQS to protect public health and welfare.

Ground-level ozone is a highly reactive gas, which at sufficiently high concentrations can produce a wide variety of harmful effects. At elevated concentrations, ground-level ozone can adversely affect human health, animal health, vegetation, materials, economic values, and personal comfort and well-being. It can cause damage to important food crops, forests, livestock and wildlife. Repeated exposure to ozone pollution may cause a variety of adverse health effects for both healthy people and those with existing conditions, including difficulty in breathing, chest pains, coughing, nausea, throat irritation and congestion. It can worsen bronchitis, heart disease, emphysema and asthma, and reduce lung capacity. Asthma is a significant and growing threat to children and adults. High levels of ground-level ozone affect animals in ways similar to humans. High levels of ground-level ozone can also cause damage to buildings and synthetic fibers, including nylon, and reduced visibility on roadways and in natural areas. The implementation of additional measures to address ozone air quality nonattainment in this Commonwealth is necessary to protect the public health and welfare, animal and plant health and welfare, and the environment.

In July 1997, the EPA promulgated primary and secondary ozone standards at a level of 0.08 part per million (ppm) (84 parts per billion (ppb)) averaged over 8 hours. See 62 FR 38856 (July 18, 1997). In 2004, the EPA designated 37 counties in this Commonwealth as 8-hour ozone nonattainment areas for the 1997 8-hour ozone NAAQS. See 69 FR 23858, 23931 (April 30, 2004). Based on the ambient air monitoring data for the 2014 ozone

season as well as the preliminary 2015 ozone season data, all monitored areas of this Commonwealth are attaining the 1997 8-hour ozone NAAQS. Maintenance plans have been submitted to the EPA and approved for the 1997 ozone standard. In accordance with the CAA, the maintenance plans include permanent and enforceable control measures that will provide for the maintenance of the ozone NAAQS for at least 10 years following the EPA's redesignation of the areas to attainment. Eight years after the EPA redesignates an area to attainment, additional maintenance plans approved by the EPA must also provide for the maintenance of the ozone standard for another 10 years following the expiration of the initial 10-year period.

In March 2008, the EPA lowered the ozone standard to 0.075 ppm (75 ppb) averaged over 8 hours to provide even greater protection for children, other at-risk populations and the environment against the array of ozone-induced adverse health and welfare effects. See 73 FR 16436 (March 27, 2008). In April 2012, the EPA designated five areas in this Commonwealth as nonattainment for the 2008 ozone NAAQS. See 77 FR 30088, 30143 (May 21, 2012). These areas include all or a portion of Allegheny, Armstrong, Berks, Beaver, Bucks, Butler, Carbon, Chester, Delaware, Fayette, Lancaster, Lehigh, Montgomery, Northampton, Philadelphia, Washington and Westmoreland Counties. With regard to the 2008 ozone standard, the Department's analysis of 2014 ambient air ozone concentrations showed that all ozone samplers in this Commonwealth, except the Harrison sampler in Allegheny County, were monitoring attainment. The 2015 ambient ozone air monitoring data for Allegheny County has been certified and shows that the Harrison sampler is monitoring attainment of the 2008 ozone NAAQS. Review of the preliminary 2015 ozone season data indicates that all other areas of this Commonwealth are monitoring attainment of the 2008 ozone standard as well. As with the 1997 ozone standard, the Department must ensure that the 2008 ozone standard is attained and maintained by implementing permanent and enforceable control measures. At the Department's request, the EPA granted 1-year attainment date extensions for the 2008 ozone NAAQS in the Philadelphia and Pittsburgh-Beaver Valley Areas due to violating monitors in New Jersey and Maryland.

On October 1, 2015, the EPA again lowered the ozone standard, this time to 70 ppb averaged over 8 hours. See 80 FR 65292 (October 26, 2015). Based on preliminary ambient air monitoring data for the 2013-2015 ozone seasons, eight monitors in this Commonwealth have design values that violate the 2015 standard. The samplers are located in Allegheny, Armstrong, Bucks, Delaware, Indiana, Lebanon, Montgomery and Philadelphia Counties. The Commonwealth must submit designation recommendations for the 2015 ozone NAAQS to the EPA by October 2016. The EPA's final designations for attainment and nonattainment areas for the 2015 ozone standards are expected to take effect in December 2017.

Reductions in VOC emissions that are achieved following the adoption and implementation of VOC RACT emission control measures for source categories covered by CTGs, including fiberglass boats manufacturing materials, will allow the Commonwealth to make substantial progress in achieving and maintaining the 1997 and 2008 8-hour ozone NAAQS; these reductions will also be necessary for the attainment and maintenance of the new ozone NAAQS promulgated by the EPA in October 2015.

This final-form rulemaking, which is consistent with the RACT recommendations in the EPA's 2008 Fiberglass Boat Manufacturing Materials CTG, will reduce VOC emissions from the fiberglass boats manufacturing materials category in ozone nonattainment and maintenance areas in this Commonwealth for those affected sources that do not already comply with the control measures. These final-form VOC emission reduction control measures will assist the Commonwealth in achieving and maintaining the ozone standards Statewide.

There are not Federal statutory or regulatory RACT limits for VOC emissions from fiberglass boat manufacturing materials. In 2001, however, the EPA promulgated 40 CFR Part 63, Subpart VVVV (relating to National emission standards for hazardous air pollutants for boat manufacturing) (2001 NESHAP). The 2001 NESHAP established organic hazardous air pollutant (HAP) emissions limits based on low HAP-content resins and gel coats and low-emitting resin application technology. Many HAPs are also VOCs, but not all VOCs are HAPs. The 2001 NESHAP data, however, indicate that styrene and methyl methacrylate, which are both organic HAP and VOC, account for nearly all the VOC emissions, as well as HAP emissions, from fiberglass boat manufacturing facilities. Therefore, total HAP and VOC emissions from fiberglass boat manufacturing facilities are nearly equal.

When developing the recommendations for the VOC emission reduction RACT measures included in its Fiberglass Boat Manufacturing Materials CTG, the EPA took into account the HAP emission reduction measures of the 2001 NESHAP for the boat manufacturing industry. The requirements of the 2001 NESHAP apply to "major sources" of HAP from boat manufacturing operations. For the purpose of regulating HAPs, a "major source" is considered to be a stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year (tpy) or more of any single listed HAP or 25 tpy or more of any combination of HAPs. See section 112(a)(1) of the CAA (42 U.S.C.A. § 7412(a)(1)). See 66 FR 44218, 44219 (August 22, 2001).

State regulations to control VOC emissions from fiberglass boat manufacturing materials are required under Federal law and will be reviewed and approved by the EPA as an amendment to the Commonwealth's SIP if the provisions meet the RACT requirements of the CAA and its implementing regulations. See 73 FR 58481, 58483. The EPA defines RACT as "the lowest emission limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility." See State Implementation Plans; General Preamble for Proposed Rulemaking on Approval of Plan Revisions for Nonattainment Areas—Supplement (on Control Techniques Guidelines), 44 FR 53761 (September 17, 1979).

Section 172(c)(1) of the CAA provides that SIPs for nonattainment areas must include "reasonably available control measures," including RACT, for sources of emissions of VOC and NO_x. Section 182(b)(2) of the CAA provides that for moderate ozone nonattainment areas, states must revise their SIPs to include RACT for sources of VOC emissions covered by a CTG document issued by the EPA prior to the area's date of attainment. More importantly, section 184(b)(1)(B) of the CAA requires that states in the Ozone Transport Region (OTR), including the Commonwealth, submit a SIP revision requiring implementation of RACT for all sources of VOC emissions in the state covered by a specific CTG.

Section 183(e) of the CAA (42 U.S.C.A. § 7511b(e)) directs the EPA to list for regulation those categories of products that account for at least 80% of the VOC emissions from consumer and commercial products in ozone nonattainment areas. Section 183(e)(3)(C) of the CAA further provides that the EPA may issue a CTG document in place of a National regulation for a product category when the EPA determines that the CTG will be "substantially as effective as regulations" in reducing emissions of VOC in ozone nonattainment areas. In 1995, the EPA listed fiberglass boat manufacturing materials on its section 183(e) list and, in 2008, the EPA issued a CTG for this product category. See 60 FR 15264, 15267 (March 23, 1995) and 73 FR 58481. See Control Techniques Guidelines for Fiberglass Boat Manufacturing Materials, EPA 453/R-08-004, Office of Air Quality Planning and Standards, EPA, September 2008. The Fiberglass Boat Manufacturing Materials CTG is available on the EPA web site at www.epa.gov/airquality/ozonepollution/SIPToolkit/ctgs.html.

In the 2008 notice of final determination and availability of final CTGs, the EPA determined that the recommendations of the Fiberglass Boat Manufacturing Materials CTG would be substantially as effective as National regulations in reducing VOC emissions from the fiberglass boat manufacturing materials product category in ozone nonattainment areas. See 73 FR 58481. The CTG provides states with the EPA's recommendation of what constitutes RACT for the covered category. States can use the Federal recommendations provided in the CTG to inform their own determination as to what constitutes RACT for VOC emissions from the covered category. State air pollution control agencies may implement other technically-sound approaches that are consistent with the CAA requirements and the EPA's implementing regulations or guidelines. The Department reviewed the RACT recommendations included in the 2008 Fiberglass Boat Manufacturing Materials CTG for their applicability to the ground-level ozone reduction measures necessary for this Commonwealth. The Bureau of Air Quality determined that the measures provided in the Fiberglass Boat Manufacturing Materials CTG are appropriate to be implemented in this Commonwealth as RACT for this category.

At this time, this final-form rulemaking affects no known permitted facility owners and operators in this Commonwealth. The Department's assessment of how many owners and operators of facilities would be subject to this final-form rulemaking revealed the owner and operator of one facility in this Commonwealth as having a Title V permit issued by the Department that included provisions for the control of HAP emissions from fiberglass boat manufacturing. That facility, VEC Technology, LLC, has since ceased operations. It is possible that the final-form rulemaking may affect owners and operators of fiberglass boat manufacturing facilities that have not yet been identified, as the 2001 NESHAP does not apply to area sources (that is, sources that emit or have the potential to emit, considering controls, less than 10 tpy of any single listed HAP or less than 25 tpy of any combination of HAPs). Owners and operators of lower-HAP-emitting area source fiberglass boat manufacturing facilities are, therefore, not currently required to implement the HAP emission-reduction measures provided in the 2001 NESHAP. These HAP emission-reduction measures are also included in the 2008 Fiberglass Boat Manufacturing Materials CTG as measures for reducing emissions of VOCs from sources that meet the applicability threshold recommended by the EPA in the CTG. This final-form rulemaking VOC emission applicability threshold of 15 pounds per day or 2.7 tons per 12-month rolling period of total actual VOC emissions is lower than the major source 2001 NESHAP potential to emit applicability thresholds of 10 tpy of any single listed HAP or 25 tpy of any combination of HAPs. Owners and operators of lower-HAP-emitting area source fiberglass boat manufacturing facilities, would, therefore, not have been issued a permit by the Department incorporating the 2001 NESHAP measures as applicable requirements and would not show up in a search of the permit databases for fiberglass boat manufacturing-permitted facilities. These owners and operators of lower-HAP-emitting area source facilities may, however, have sufficient actual emissions of VOCs to be subject to the requirements of this final-form rulemaking.

The ground-level ozone reduction measures included in this final-form rulemaking may achieve VOC emission reductions locally and may also reduce the transport of VOC emissions and ground-level ozone to downwind states if implemented for potentially unidentified existing sources of VOC emissions from fiberglass boat manufacturing operations including open molding resin and gel coat materials that are not currently controlled in this Commonwealth. Adoption of VOC emission requirements for fiberglass boat manufacturing materials is part of the Commonwealth's strategy, in concert with other OTR jurisdictions, to further reduce transport of VOC ozone precursors and ground-level ozone throughout the OTR to attain and maintain the 8-hour ozone NAAQS.

The final-form rulemaking is required under the CAA and, in accordance with section 4.2(a) of the APCA (35 P. S. § 4004.2(a)), is reasonably necessary to attain and maintain the health-based and welfare-based 8-hour ozone NAAQS and to satisfy related CAA requirements in this Commonwealth. Once published as a final-form rulemaking in the *Pennsylvania Bulletin*, this final-form rulemaking will be submitted to the EPA as a revision to the Commonwealth's SIP.

The final-form rulemaking was discussed with the Air Quality Technical Advisory Committee (AQTAC) on November 7, 2014. The AQTAC voted 13-0-1 (yes; no; abstain) to concur with the Department's recommendation to forward the final-form rulemaking to the Board for consideration. The final-form rulemaking was discussed with the Small Business Compliance Advisory Committee (SBCAC) on January 28, 2015. The SBCAC voted 8-0-0 to concur with the Department's recommendation to forward the final-form rulemaking to the Board. The final-form rulemaking was discussed with the Citizens Advisory Council's (CAC) Policy and Regulatory Oversight (PRO) Committee on February 20, 2015. Upon the recommendation of the PRO Committee, on March 17, 2015, the CAC concurred with the Department's recommendation to forward the final-form rulemaking to the Board. The AQTAC, SBCAC and CAC meetings are advertised and open to the public.

E. *Summary of Final-Form Rulemaking and Changes from Proposed to Final-Form Rulemaking*

§ 129.74. Control of VOC emissions from fiberglass boat manufacturing materials

Under subsection (a)(1), the final-form rulemaking applies Statewide to the owner and operator of a facility

that manufactures a hull or a deck of a boat or a related part from fiberglass, builds a mold or plug to make a fiberglass boat hull or deck or related part, or makes polyester resin putties for assembling fiberglass boat parts when the total actual VOC emissions from fiberglass boat manufacturing operations identified in Table I are equal to or greater than 15 pounds (6.8 kilograms) per day or 2.7 tons per 12-month rolling period, before consideration of controls. The total actual VOC emissions include the actual VOC emissions from the manufacture of hulls or decks from fiberglass, fiberglass boat parts (including small parts such as hatches, seats and lockers), molds or plugs for fiberglass hulls, decks or boat parts, resin and gel coat mixing operations, resin and gel coat application equipment and related cleaning activities at the facility. As with all RACT regulations, an owner or operator remains subject to the regulation even if the throughput or VOC emissions fall below the applicability threshold.

Subsection (a)(2) specifies that the final-form rulemaking does not apply to the owner and operator of a facility that manufactures boat trailers or parts of boats, such as hatches, seats and lockers, but does not manufacture hulls or decks of boats from fiberglass or build molds to make fiberglass boat hulls or decks. Subsection (a) also establishes monomer VOC content limits for open molding resin and gel coat materials.

Subsection (b) establishes 39 definitions to support this final-form rulemaking.

Subsection (c) establishes exceptions for certain operating circumstances: when a resin application is used in a closed molding operation; when a surface coating is applied to a fiberglass boat; and when a surface coating is applied to a fiberglass and metal recreational boat.

Subsection (d) specifies that the requirements of § 129.74 supersede the requirements of a RACT permit issued under §§ 129.91—129.95 (relating to stationary sources of NO_x and VOCs) prior to December 19, 2015, to the owner or operator of a source subject to § 129.74, except to the extent the RACT permit contains more stringent requirements.

Subsection (e) establishes a compliance deadline of December 19, 2015.

Subsection (f) establishes that the owner and operator of a facility subject to this section may not cause or permit the emission into the outdoor atmosphere of monomer VOCs from an open molding resin or gel coat fiberglass boat manufacturing operation, a resin or gel coat mixing operation, or a resin or gel coat application equipment cleaning operation unless one or more of the specified limitations is met. The subsection also provides three options for meeting the emission limits: use of compliant materials as listed in Table I; monomer VOC emissions averaging; or installation of a VOC emissions capture system and add-on air pollution control device.

There are no changes to subsections (a)—(f) from the proposed rulemaking.

Subsection (g) specifies that the owner and operator of a facility subject to this section opting to install a VOC emissions capture system and add-on air pollution control device must obtain a plan approval prior to installation and operation of the VOC emissions capture system and add-on air pollution control device. To improve clarity, final-form subsection (g) specifies that the owner or operator shall submit an application for a plan approval to the appropriate regional office instead of submitting a plan approval.

Subsection (h) specifies that the owner and operator of a facility subject to this section may use an adjusted monomer VOC emission rate for filled production resins and filled tooling resins in each of the options specified in subsection (f).

Subsection (i) establishes that the monomer VOC content of an open molding resin, gel coat, filled production resin or filled tooling resin material not included in an emissions averaging option in subsection (f)(2) must meet the monomer VOC content requirements of subsection (f)(1) or the add-on air pollution control requirements of subsection (f)(3).

Subsection (j) establishes alternative requirements for control of monomer VOC content for certain resin and gel coat materials.

Subsection (k) establishes work practices for resin and gel coat materials.

Subsection (l) establishes VOC content limits and work practices for cleaning materials.

There are no changes to subsections (h)—(l) from the proposed rulemaking.

Subsection (m) establishes compliance and monitoring requirements. Subsection (m)(2) is added to specify that the owner and operator of a facility subject to this section shall demonstrate compliance of the monomer VOC content of the resin and gel coat material within 90 days of receipt of a written request from the Department in accordance with subsection (n). Proposed subsection (m)(2) is renumbered as final-form subsection (m)(3). Subsection (m)(4) is added to specify that the owner and operator of a facility subject to this section shall conduct testing of a VOC emissions capture system and add-on air pollution control device installed in accordance with subsection (f)(3) one time every 5 years starting from completion of the initial testing specified in the plan approval application required under subsection (g).

Subsection (n) establishes sampling and testing standards.

Subsection (o) establishes recordkeeping requirements.

Subsection (p) establishes reporting requirements.

There are no changes to subsections (n)—(p) from the proposed rulemaking.

F. *Summary of Major Comments and Responses*

The Board approved publication of the proposed rulemaking at its meeting on May 21, 2014. The proposed rulemaking was published at 44 Pa.B. 4502 (July 19, 2014). Three public hearings were held on August 19, 20 and 21, 2014, in Pittsburgh, Norristown and Harrisburg, PA, respectively. The public comment period closed on September 22, 2014, for a 66-day public comment period. The Board did not receive any comments from the general public on the proposed rulemaking. The Independent Regulatory Review Commission (IRRC) forwarded to the Board a comment it received from the Pennsylvania State Association of Township Supervisors (PSATS). PSATS stated that the proposed rulemaking would benefit PSATS members by controlling and limiting VOC emissions from the air, but further stated it would not take a position on the proposed rulemaking as it did not impact its members. No changes were made to this final-form rulemaking in response to this comment.

IRRC also submitted comments on the proposed rulemaking. IRRC recommended that the Board clarify the requirements in subsection (n) to provide for how often sampling and testing are to be conducted. The Board agreed with the comment. Language clarifying the timing and frequency of testing or sampling was added to final-form subsection (m) to address IRRC's comment. Compliance of the monomer VOC content of the resin and gel coat materials must be demonstrated within 90 days of receipt of the Department's written request. Testing of a VOC emissions capture system and add-on air pollution control device must be conducted one time every 5 years starting from completion of the initial testing specified in the plan approval application.

Comments received on the proposed rulemaking and related issues have been addressed in this final-form rulemaking.

G. *Benefits, Costs and Compliance*

Benefits

Implementation of the VOC emission control measures in the final-form rulemaking will benefit the health and welfare of the approximately 12.7 million residents and the numerous animals, crops, vegetation and natural areas of this Commonwealth by reducing emissions of VOCs, which are precursors to the formation of ground-level ozone air pollution. Exposure to high concentrations of ground-level ozone is a serious human and animal health and welfare threat, causing respiratory illnesses and decreased lung function, agricultural crop loss, visible foliar injury to sensitive plant species, and damage to forests, ecosystems and infrastructure. Reduced ambient concentrations of ground-level ozone may reduce the incidences of hospital admissions for respiratory ailments including asthma and improve the quality of life for citizens overall. While children, the elderly and those with respiratory problems are most at risk, even healthy individuals may experience increased respiratory ailments and other symptoms when they are exposed to high levels of ambient ground-level ozone while engaged in activities that involve physical exertion.

This final-form rulemaking is designed to adopt standards and requirements consistent with the recommendations in the 2008 Fiberglass Boat Manufacturing Materials CTG to meet the requirements of sections 172(c)(1), 182(b)(2) and 184(b)(1)(B) of the CAA. The final-form rulemaking applies the standards and requirements across this Commonwealth, as required under section 184(b)(1)(B) of the CAA. In accordance with section 4.2 of the APCA, the measures in this final-form rulemaking are reasonably necessary to attain and maintain the health-based and welfare-based 8-hour ozone NAAQS in this Commonwealth.

The Statewide implementation of the final-form rulemaking control measures will assist the Department in reducing VOC emissions from fiberglass boat manufacturing operations locally, and reducing the resultant local formation of ground-level ozone and transport of VOC emissions and ground-level ozone to downwind states and will facilitate implementation and enforcement of the final-form rulemaking in this Commonwealth.

No known permitted facility owners and operators will be affected by this final-form rulemaking. This final-form rulemaking may affect owners and operators of fiberglass boat manufacturing facilities that have not yet been identified, which meet the low VOC emission applicability threshold of at least 15 pounds (6.8 kilograms) per day or 2.7 tons per 12-month rolling period, of actual VOC emissions, before consideration of controls. If there are owners and operators affected by this final-form rulemaking, they may already be using complying materials, which are readily available to the owners and operators of facilities of all sizes, and no further VOC emission reductions would be achieved.

The final-form rulemaking may create economic opportunities for VOC emission control technology innovators, manufacturers and distributors through an increased demand for new or improved equipment. In addition, the owners and operators of affected facilities may elect to install and operate an emissions monitoring system or equipment necessary for an emissions monitoring method to comply with the final-form rulemaking, thereby creating an economic opportunity for the emissions monitoring industry.

Although this final-form rulemaking is designed primarily to reduce ozone precursor emissions, the reformulation of noncomplying open molding resin, gel coat and cleaning materials or substitution of complying open molding resin, gel coat and cleaning materials to meet the VOC content limits applicable to users may also result in reduction of indoor and outdoor HAP emissions, which are also a serious health threat.

Compliance costs

As there are no known permitted facility owners and operators to which this final-form rulemaking currently applies, there are no anticipated compliance costs associated with this final-form rulemaking for any owners and operators of major facilities. It is possible that this final-form rulemaking may affect owners and operators of fiberglass boat manufacturing facilities that have not yet been identified.

The owner and operator of a facility subject to this final-form rulemaking is expected to incur little, if any, cost to implement the requirements of the final-form rulemaking. The final-form rulemaking provides as one compliance option the use of individually-compliant resin and gel coat materials in subsection (f)(1), and requires the use of compliant cleaning solvents in subsection (l). Open molding resin, gel coat and cleaning materials that are compliant with the HAP content limits in the 2001 NESHAP and with the final-form rulemaking VOC content limits in subsection (a) are readily available to the owners and operators of all sizes of facilities. Further, the industry has experienced a shift to non-atomizing resin application methods that are required to comply with the HAP emission reduction requirements in the 2001 NESHAP and which are included in the final-form rulemaking. This shift has occurred at all sizes of facilities across the United States because of the productivity and economic benefits of using non-atomizing methods over conventional atomizing methods. Therefore, the EPA expects that most, if not all, facility owners and operators that are not subject to the 2001 NESHAP would already be using the materials and methods recommended in the 2008 Fiberglass Boat Manufacturing Materials CTG.

This final-form rulemaking provides flexibility by allowing compliance through averaging the VOC emission rates of open molding resin and gel coat materials in subsection (f)(2) in addition to choice of application technology. A third compliance option, the use of a VOC emissions capture system and add-on air pollution control device, is provided in subsection (f)(3). However, because of the wide availability and lower cost (compared to add-on controls) of compliant VOC content materials and

alternative application methods, compliant materials and methods are generally used to reduce VOC emissions from fiberglass boat manufacturing facilities.

Emission limitations established by this final-form rulemaking do not require the submission of applications for amendments to existing operating permits. These requirements will be incorporated as applicable requirements at the time of permit renewal, if less than 3 years remain in the permit term, as specified under § 127.463(c) (relating to operating permit revisions to incorporate applicable standards). If 3 years or more remain in the permit term, the requirements will be incorporated as applicable requirements in the permit within 18 months of the promulgation of this final-form rulemaking, as required under § 127.463(b). Importantly, § 127.463(e) specifies that "[r]egardless of whether a revision is required under this section, the permittee shall meet the applicable standards or regulations promulgated under the Clean Air Act within the time frame required by standards or regulations." Consequently, upon promulgation as a final-form rulemaking, the requirements will apply to affected owners and operators irrespective of a modification to the operating permit.

New legal, accounting or consulting procedures are not required.

Compliance assistance plan

The Department plans to educate and assist the public and regulated community in understanding the final-form rulemaking requirements and how to comply with them. This will be accomplished through the Department's ongoing compliance assistance program. The Department will also work with the Pennsylvania Small Business Development Center's Environmental Management Assistance Program to aid the owners and operators of facilities less able to handle permitting matters with in-house staff.

Paperwork requirements

The owner and operator of an affected fiberglass boat manufacturing source is required to keep records of information for open molding resin and gel coat materials and cleaning materials, as applicable, sufficient to demonstrate compliance with the requirements of this section. The final-form rulemaking requires monthly records of certain VOC content information or composite vapor pressure, as applicable. Records of calculations performed for each applicable requirement under subsections (f), (h) and (j) are required, as well as records of the sampling and testing performed in accordance with subsection (n). The owner and operator of an affected fiberglass boat manufacturing source shall demonstrate compliance of the monomer VOC content of resin and gel coat material within 90 days of receipt of a written request from the Department. The records required in this final-form rulemaking must be maintained for 2 years unless a longer period is specified by a plan approval or operating permit issued under Chapter 127 (relating to construction, modification, reactivation and operation of sources) and submitted to the Department in an acceptable format upon receipt of a written request.

H. *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.

This final-form rulemaking will help ensure that the citizens and the environment of this Commonwealth experience the benefits of reduced emissions of VOCs and HAPs from fiberglass boat manufacturing open molding resin, gel coat and cleaning materials. Although the final-form rulemaking is designed primarily to address ozone air quality, the reformulation or substitution of low VOC-content open molding resin and gel coat materials, and low VOC-content or low vapor pressure cleaning materials, to meet the VOC content limits applicable to users may also result in reduction of HAP emissions, which are also a serious health threat. The reduced levels of high VOC-content and HAP-content solvents will also benefit water quality through reduced loading on water treatment plants and in reduced quantities of high VOC-content and HAP-content solvents leaching into the ground.

The final-form rulemaking provides as one compliance option that open molding resin and gel coat materials used in fiberglass boat manufacturing processes in this Commonwealth meet specified limits for VOC content, usually through substitution of low VOC-content solvents or water for the high VOC-content solvents, and that they be applied using specified application methods. Further, the final-form rulemaking requires the owner and operator of a source subject to this section to ensure that resin and gel coat containers with a capacity equal to or greater than 55 gallons (208 liters), including those used for onsite mixing of putties and polyputties, have a cover in place at all times with no visible gaps, except when materials are being manually added or removed from a container or when mixing equipment is being placed in or removed from a container.

The final-form rulemaking additionally requires the use of low VOC-content or low vapor pressure cleaning materials, and work practice standards for the storage and handling of cleaning materials. The final-form rulemaking requires the owner and operator of a source subject to this section to ensure that the VOC content of cleaning materials used for routine application equipment cleaning is equal to or less than 5% by weight or has a composite vapor pressure equal to or less than 0.50 mmHg at 68°F and use only non-VOC-containing solvent to remove cured resin or gel coat residue from application equipment.

I. *Sunset Review*

This final-form rulemaking will be reviewed in accordance with the sunset review schedule published by the Department to determine whether it effectively fulfills the goals for which it was intended.

J. *Regulatory Review*

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), on July 8, 2014, the Department submitted a copy of the notice of proposed rulemaking, published at 44 Pa.B. 4502, to IRRC and the Chairpersons of the House and Senate Environmental Resources and Energy Committees for review and comment.

Under section 5(c) of the Regulatory Review Act, the Department shall submit to IRRC and the House and Senate Committees copies of 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 House and Senate Committees and the public.

Under section 5.1(j.2) of the Regulatory Review Act (71 P. S. § 745.5a(j.2)), on November 10, 2015, the final-form rulemaking was deemed approved by the House and Senate Committees. Under section 5.1(e) of the Regulatory Review Act, IRRC met on November 12, 2015, and approved the final-form rulemaking.

K. *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 44 Pa.B. 4502.

(4) These regulations are necessary and appropriate for administration and enforcement of the authorizing acts identified in Section C of this preamble.

(5) These regulations are reasonably necessary to attain and maintain the ozone NAAQS and to satisfy related CAA requirements.

L. *Order*

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

(a) The regulations of the Department, 25 Pa. Code Chapter 129, are amended by adding § 129.74 to read as set forth in Annex A.

(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 SIP.

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

JOHN QUIGLEY,
Chairperson

(*Editor's Note*: For the text of the order of the Independent Regulatory Review Commission relating to this document, see 45 Pa.B. 6862 (November 28, 2015).)

Fiscal Note: Fiscal Note 7-487 remains valid for the final adoption of the subject regulation.

Annex A

TITLE 25. ENVIRONMENTAL PROTECTION

PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION

Subpart C. PROTECTION OF NATURAL RESOURCES

ARTICLE III. AIR RESOURCES

CHAPTER 129. STANDARDS FOR SOURCES

SOURCES OF VOCs

§ 129.74. Control of VOC emissions from fiberglass boat manufacturing materials.

(a) *Applicability.*

(1) This section applies to the owner and operator of a facility that manufactures a hull or a deck of a boat or a related part from fiberglass, builds a mold or plug to make a fiberglass boat hull or deck or related part, or makes polyester resin putties for assembling fiberglass boat parts, when the total actual VOC emissions from fiberglass boat manufacturing operations identified in Table I are equal to or greater than 15 pounds (6.8 kilograms) per day or 2.7 tons per 12-month rolling period, before consideration of controls. The total actual VOC emissions include the actual VOC emissions from the manufacture of hulls or decks from fiberglass, fiberglass boat parts (including small parts such as hatches, seats and lockers), molds or plugs for fiberglass hulls, decks or boat parts, resin and gel coat mixing operations, resin and gel coat application equipment and related cleaning activities at the facility.

(2) This section does not apply to the owner and operator of a facility that manufactures boat trailers or parts of boats, such as hatches, seats and lockers, but does not manufacture hulls or decks of boats from fiberglass or build molds to make fiberglass boat hulls or decks.

Table I: Compliant Monomer VOC Content Limit for Open Molding Resin and Gel Coat Materials

Open Molding Resin or Gel Coat Material	*Application Method*	*Individual Monomer VOC Content or Weighted Average Monomer VOC Content (weight percent)*
Production Resin	Atomized Spray	28
Production Resin	Non-atomized	35
Pigmented Gel Coat	Any Method	33
Clear Gel Coat	Any Method	48
Tooling Resin	Atomized Spray	30
Tooling Resin	Non-atomized	39
Tooling Gel Coat	Any Method	40

(b) *Definitions.* The following words and terms, when used in this section, have the following meanings, unless the context clearly indicates otherwise:

Application equipment cleaning—The process of flushing or removing resin or gel coat material, or both, from the interior or exterior of equipment that is used to apply resins or gel coats in the manufacture of fiberglass parts.

Assembly adhesives—A chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means.

Atomized application method—

(i) A resin application technology in which the resin leaves the application equipment and breaks into droplets or an aerosol as it travels from the application equipment to the surface of the part.

(ii) The term includes resin spray guns and resin chopper spray guns.

Boat—A vessel, other than a seaplane, that can be used for transportation on the water.

Clear gel coat—

(i) A polyester resin material that is clear or translucent so that underlying colors are visible. These materials are used to manufacture parts for sale.

(ii) The term does not include tooling gel coats used to build or repair molds.

Closed molding—

(i) A process in which pressure is used to distribute resin through the reinforcing fabric placed between two mold surfaces to either saturate the fabric or fill the mold cavity. The pressure may be clamping pressure, fluid pressure, atmospheric pressure or vacuum pressure used either alone or in combination. The mold surfaces may be rigid or flexible.

(ii) The term includes compression molding with sheet molding compound, infusion molding, resin injection molding, vacuum assisted resin transfer molding, resin transfer molding and vacuum assisted compression molding.

(iii) The term does not include:

(A) A process in which a closed mold is used only to compact saturated fabric or remove air or excess resin from the fabric, such as in vacuum bagging.

(B) Open molding steps, such as application of a gel coat or skin coat layer by conventional open molding.

Cured resin—A thermosetting plastic material containing styrene or methyl methacrylate or gel coat that has changed irreversibly from a liquid to a solid.

Fiberglass—A material consisting of glass fibers made in the form of cloth, mat or roving.

Fiberglass boat—A vessel in which either the hull or deck, or both, is built from a composite material consisting of a thermosetting resin matrix reinforced with fibers of glass, carbon, aramid or other material.

Filled resin—A thermosetting plastic material to which an inert material has been added to change viscosity, density, shrinkage or other physical properties, particularly for building molds.

Flowcoater—A non-atomizing application method of applying resins and gel coats to an open mold with a fluid nozzle in a fan pattern with no air supplied to the nozzle.

Gel coat—

(i) A clear or pigmented polyester resin material that does not contain reinforcing fibers and becomes the outer or inner surface of a finished boat product or mold.

(ii) The term includes a clear or pigmented polyester resin mixed with metal flakes.

Glass cloth—A fabric made of woven yarns of glass fibers.

Glass mat—A prepared material consisting of short glass fibers that are fixed to each other in a random pattern by a chemical binder or are mechanically stitched to a lightweight fabric.

Glass roving—A bundle of continuous glass fibers that is fed from a spool to a specialized gun that chops the bundle into short fibers, mixes the fibers with catalyzed resin and deposits the mixture on the mold surface in a random pattern.

Mixing—An operation in which resin or gel coat, including the mixing of putties or polyester resin putties, is combined with additives that include fillers, promoters or catalysts.

Mold—

(i) The cavity or surface into or on which gel coat, resin and fibers are placed and from which finished fiberglass parts take their form.

(ii) The term is also known as a tool.

Monomer VOC—A VOC that partially combines with itself or other similar compounds by a cross-linking reaction to become a part of the cured resin.

Monomer VOC content—The weight of the monomer divided by the weight of the polymer.

Non-atomized application method—

(i) A resin application technology in which the resin is not broken into droplets or into an aerosol as the resin travels from the application equipment to the surface of the part.

(ii) The term includes flowcoaters, chopper flowcoaters, pressure-fed resin rollers, resin impregnators and hand application (for example, paint brush or paint roller).

Open molding—

(i) A process in which the reinforcing fibers and resin are placed in the mold and are open to the surrounding air while the reinforcing fibers are saturated with resin.

(ii) The term includes:

(A) An operation in which a vacuum bag or similar cover is used to compress an uncured laminate to remove air bubbles or excess resin or to achieve a bond between a core material and a laminate.

(B) Application of a gel coat or skin coat layer prior to a closed molding process.

(C) A process in which a closed mold is used only to compact saturated fabric or to remove air or excess resin from the fabric (such as in vacuum bagging).

Pigmented gel coat—

(i) An opaque polyester resin material used to manufacture parts for sale.

(ii) The term does not include tooling gel coats used to build or repair molds.

Plug—

(i) A full-size model of the part to be manufactured. The mold is built over the finished model.

(ii) The term is also known as a prototype.

Polyester resin material—An unsaturated thermosetting plastic material, such as an isophthalic, orthophthalic, halogenated, bisphenol A, vinylester or furan resin, a cross-linking agent, a catalyst, a gel coat, an inhibitor, an accelerator, a promoter or other material containing VOC used in polyester resin operations.

Polyester resin operation—A process in which an unsaturated polyester resin material is used to fabricate, rework, repair or touch-up a product for commercial, military or industrial use by mixing, pouring, hand laying-up, impregnating, injecting, forming, winding, spraying or curing.

Polyputty or *putty*—A polyester or vinylester resin mixed with inert fillers or fibers. The mixture is used to assemble fiberglass parts and to fill gaps between parts. The applied material becomes part of the composite structure. These materials are not considered industrial adhesives.

Production resin—

(i) A thermosetting plastic material used to manufacture parts for sale.

(ii) The term does not include tooling resins used to build or repair molds and assembly adhesives.

Repair—The addition of polyester resin material to a portion of a previously fabricated product to mend damage.

Resin—A thermosetting plastic material containing styrene or methyl methacrylate, with or without pigment, used to encapsulate and bind together reinforcement fibers in the construction of fiberglass parts.

Resin impregnator—A mechanical non-atomizing composite material application method in which fiber reinforcement is saturated with one or more resins in a controlled ratio for each specific composite product.

Roll-out—The process of using rollers, squeegees or similar tools to compact reinforcing materials saturated with resin to remove trapped air or excess resin.

Skin coat—A layer of resin and fibers applied over the gel coat to protect the gel coat from being deformed by the next laminate layer.

Tooling gel coat—A polyester resin material containing styrene or methyl methacrylate, or both, that becomes the interior surface of a mold, supported by resin and fiberglass, or the exterior surface of a plug used to create a mold or is used to repair a mold.

Tooling resin—A thermosetting plastic material, hardened by a catalyst, used to construct or repair a mold or a plug for a mold for the manufacture of a fiberglass boat hull, deck or other part.

Touch-up—The application of material to cover minor imperfections.

Vacuum bagging—

(i) A molding technique in which the reinforcing fabric is saturated with resin, covered with a flexible sheet that is sealed to the edge of the mold and a vacuum is applied under the sheet to compress the laminate, remove excess resin or remove trapped air from the laminate during curing.

(ii) The term does not include a process that meets the definition of "closed molding."

Vacuum bagging with roll-out—A partially closed molding technology that rolls the resin and fabric before the application of vacuum bagging materials.

Vacuum bagging without roll-out—A partially closed molding technology that applies vacuum bagging materials to the mold immediately after resin application without rolling the resin and fabric.

Vinylester resin—A thermosetting plastic material containing one or more esters of acrylic or methacrylic acids and having double-bond and ester linkage sites only at the ends of the resin molecules.

(c) *Exceptions.* The requirements of this section do not apply to the following circumstances:

(1) A resin application process in a closed molding operation as defined in subsection (b).

(2) A surface coating applied to a fiberglass boat.

(3) A surface coating for a fiberglass and metal recreational boat.

(4) An industrial adhesive used in the assembly of a fiberglass boat. Industrial adhesives used in fiberglass boat assembly are regulated under § 129.77 or Chapter 130, Subchapter D (relating to control of emissions from the use or application of adhesives, sealants, primers and solvents; and adhesives, sealants, primers and solvents).

(d) *Existing RACT permit.* The requirements of this section supersede the requirements of a RACT permit issued to the owner and operator of a source subject to subsection (a) prior to December 19, 2015, under §§ 129.91—129.95 (relating to stationary sources of NO_x and VOCs) to control, reduce or minimize VOCs from a fiberglass boat manufacturing process, except to the extent the RACT permit contains more stringent requirements.

(e) *Compliance deadline.* The owner and operator of a facility subject to this section shall comply with the applicable requirements beginning December 19, 2015.

(f) *Emission limits.* Except as specified in subsection (h) or (j), the owner and operator of a facility subject to this section may not cause or permit the emission into the outdoor atmosphere of monomer VOCs from an open molding resin or gel coat fiberglass boat manufacturing operation, a resin or gel coat mixing operation, or a resin or gel coat application equipment cleaning operation unless one or more of the following limitations is met:

(1) *Compliant materials option.* The individual monomer VOC content limit is achieved through the use of low-monomer VOC content open molding resin and gel coat materials by one or more of the following methods:

(i) Using only low-monomer VOC content resin and gel coat materials within a covered operation listed in Table I.

(A) The monomer VOC content of each resin or gel coat material is equal to or less than the limit specified in Table I.

(B) The monomer VOC content of each resin or gel coat material includes the amount of non-monomer VOC content that exceeds 5% by weight of the resin or gel coat material.

(ii) Averaging the monomer VOC contents for the open molding resin and gel coat materials used within a covered operation listed in Table I on a weight-adjusted basis.

(A) The combined total monomer VOC content of resin or gel coat materials of a certain type must meet the applicable monomer VOC content limit for a specific application method on a 12-month rolling weighted-average basis, calculated using the equation in clause (C).

(B) The monomer VOC content of each resin or gel coat material included in the weighted average specified in clause (A) includes the amount of non-monomer VOC content that exceeds 5% by weight of the resin or gel coat material.

(C) The weighted-average monomer VOC content on a 12-month rolling-average basis shall be calculated as follows:

$$\text{Weighted Average Monomer VOC Content} = \frac{\sum_{i=1}^{n} (M_i VOC_i)}{\sum_{i=1}^{n} (M_i)}$$

Where:

M_i = Mass of open molding resin or gel coat i used in the past 12 months in an operation, in megagrams.

VOC_i = Monomer VOC content, by weight percent, of open molding resin or gel coat i used in the past 12 months in an operation.

n = Number of different open molding resins or gel coats used in the past 12 months in an operation.

(2) *Emissions averaging option.* The numerical monomer VOC emission rate limit is achieved through averaging emissions among different open molding resin and gel coat operations. The equations in subparagraphs (iii)—(v) shall be used to estimate the monomer VOC emission rates from each operation included in the emissions averaging option based on the material and application method.

(i) The monomer VOC content of each open molding resin or gel coat material included in the emissions averaging option includes the amount of non-monomer VOC content that exceeds 5% by weight of the resin or gel coat material.

(ii) The 12-month rolling emissions average shall be determined at the end of each calendar month.

(iii) The facility-specific monomer VOC mass emission limit on a 12-month rolling-average basis shall be calculated as follows:

$$\text{Monomer VOC Limit} = 46(M_R) + 159(M_{PG}) + 291(M_{CG}) + 54(M_{TR}) + 214(M_{TG})$$

Where:

Monomer VOC Limit = Total allowable monomer VOC that can be emitted from the open molding operations included in the emissions averaging program, in kilograms per 12-month period.

M_R = Mass of production resin used in the past 12 months, excluding exempt VOC materials, in megagrams.

M_{PG} = Mass of pigmented gel coat used in the past 12 months, excluding exempt VOC materials, in megagrams.

M_{CG} = Mass of clear gel coat used in the past 12 months, excluding exempt VOC materials, in megagrams.

M_{TR} = Mass of tooling resin used in the past 12 months, excluding exempt VOC materials, in megagrams.

M_{TG} = Mass of tooling gel coat used in the past 12 months, excluding exempt VOC materials, in megagrams.

Numerical coefficients = The allowable monomer VOC emission rate for that particular material, in units of kg/Mg of material used.

(iv) At the end of the first 12-month rolling-average emissions period and at the end of each subsequent calendar month, the owner or operator of the facility shall demonstrate that the monomer VOC emissions from the operations and materials included in the emissions averaging option do not exceed the emission limit calculated under subparagraph (iii) for the same 12-month period as follows:

$$\text{Monomer VOC emissions} = (PV_R)(M_R) + (PV_{PG})(M_{PG}) + (PV_{CG})(M_{CG}) + (PV_{TR})(M_{TR}) + (PV_{TG})(M_{TG})$$

Where:

Monomer VOC emissions = Monomer VOC emissions calculated using the monomer VOC mission equation for each operation included in the emissions averaging program, in kilograms.

PV_R = Weighted-average monomer VOC emission rate for production resin used in the past 12 months, in kilograms per megagram.

M_R = Mass of production resin used in the past 12 months, in megagrams.

PV_{PG} = Weighted-average monomer VOC emission rate for pigmented gel coat used in the past 12 months, in kilograms per megagram.

M_{PG} = Mass of pigmented gel coat used in the past 12 months, in megagrams.

PV_{CG} = Weighted-average monomer VOC emission rate for clear gel coat used in the past 12 months, in kilograms per megagram.

M_{CG} = Mass of clear gel coat used in the past 12 months, in megagrams.

PV_{TR} = Weighted-average monomer VOC emission rate for tooling resin used in the past 12 months, in kilograms per megagram.

M_{TR} = Mass of tooling resin used in the past 12 months, in megagrams.

PV_{TG} = Weighted-average monomer VOC emission rate for tooling gel coat used in the past 12 months, in kilograms per megagram.

M_{TG} = Mass of tooling gel coat used in the past 12 months, in megagrams.

(v) For purposes of subparagraph (iv), the owner or operator of the facility shall determine the weighted-average monomer VOC emission rate for the previous 12 months for each open molding resin and gel coat operation included in the emissions averaging option as follows:

$$PV_{OP} = \frac{\sum_{i=1}^{n} (M_i PV_i)}{\sum_{i=1}^{n} (M_i)}$$

Where:

PV_{OP} = Weighted-average monomer VOC emission rate for each open molding operation (PV_R, PV_{PG}, PV_{CG}, PV_{TR}, PV_{TG}) included in the emissions averaging program, in kilograms of monomer VOC per megagram of material applied.

M_i = Mass of resin or gel coat used within an operation in the past 12 months, in megagrams.

n = Number of different open molding resins and gel coats used within an operation within the past 12 months.

PV_i = The monomer VOC emission rate for resin or gel coat used within an operation in the past 12 months, in kilograms of monomer VOC per megagram of material applied. PV_i shall be calculated using the applicable emission rate formula specified in Table II.

Table II: Monomer VOC Emission Rate Formulas for Open Molding Resin and Gel Coat Materials

Open Molding Resin or Gel Coat Material	*Application Method*	*Emission Rate Formula*
Production Resin, Tooling Resin	Atomized	0.014 x (Resin VOC%)$^{2.425}$
Production Resin, Tooling Resin	Atomized, plus vacuum bagging with roll-out	0.01185 x (Resin VOC%)$^{2.425}$
Production Resin, Tooling Resin	Atomized, plus vacuum bagging without roll-out	0.00945 x (Resin VOC%)$^{2.425}$
Production Resin, Tooling Resin	Non-atomized	0.014 x (Resin VOC%)$^{2.275}$
Production Resin, Tooling Resin	Non-atomized, plus vacuum bagging with roll-out	0.0110 x (Resin VOC%)$^{2.275}$
Production Resin, Tooling Resin	Non-atomized, plus vacuum bagging without roll-out	0.0076 x (Resin VOC%)$^{2.275}$
Pigmented Gel Coat	All methods	0.445 x (Resin VOC%)$^{1.675}$
Clear Gel Coat	All methods	0.445 x (Resin VOC%)$^{1.675}$
Tooling Gel Coat	All methods	0.445 x (Resin VOC%)$^{1.675}$

(3) *VOC emissions capture system and add-on air pollution control device option.* A numerical monomer VOC emission rate, determined for a facility based on the mix of application methods and materials used at the facility, is achieved through the use of a VOC emissions capture system and add-on air pollution control device.

(i) The equation in paragraph (2)(iii) must be used to determine the emission limit to be achieved by the add-on air pollution control device, but modified as specified in this subparagraph. The mass of each open molding monomer VOC-containing material used during the control device performance test must be used in the equation in paragraph (2)(iii), instead of the mass of each material used over the past 12 months, to determine the emission limit, in kilograms of monomer VOC, that is applicable during the control device test.

(ii) The measured emissions at the outlet of the control device, in kilograms of monomer VOC, must be less than the emission limit calculated as specified in subparagraph (i).

(iii) The relevant control device and emission capture system operating parameters must be monitored and recorded during the test.

(iv) The values of the parameters recorded in subparagraph (iii) must be used to establish the operating limits for those parameters.

(v) The operating parameters must be maintained within the established operating limits.

(g) *VOC emissions capture system and add-on air pollution control device requirements.* The owner or operator of a facility subject to this section may elect to comply with the applicable emission limitations of this section through the installation of a VOC emissions capture system and add-on air pollution control device in accordance with subsection (f)(3). The owner or operator shall submit an application for a plan approval to the appropriate regional office. The application for a plan approval must be approved, in writing, by the Department prior to installation and operation of the emissions capture system and add-on air pollution control device. The application for a plan approval must include the following information:

(1) A description, including location, of each affected source or operation to be controlled with the emissions capture system and add-on air pollution control device.

(2) A description of the proposed emissions capture system and add-on air pollution control device to be installed.

(3) A description of the proposed compliance monitoring equipment to be installed.

(4) A description of the parameters to be monitored to demonstrate continuing compliance.

(5) A description of the records to be kept that will document the continuing compliance.

(6) A schedule containing proposed interim dates for completing each phase of the required work to install and test the emissions capture system and add-on air pollution control device described in paragraph (2) and the compliance monitoring equipment described in paragraph (3).

(7) A proposed interim emission limitation that will be imposed on the affected source or operation until compliance is achieved with the applicable emission limitation.

(8) A proposed final compliance date that is as soon as possible but not later than 1 year after the start of installation of the approved emissions capture system and add-on air pollution control device and the compliance monitoring equipment.

(h) *Emission limits for filled production resins and filled tooling resins.* The owner or operator may use an open molding filled production resin or filled tooling resin in each of the emission limit options specified in subsection (f).

(1) If fillers are added to the resin material, the adjusted monomer VOC emission rate of the filled material must be calculated on an as-applied basis as follows:

$$PV_F = PV_U \times \frac{(100 - \% \text{ Filler})}{100}$$

Where:

PV_F = The as-applied monomer VOC emission rate for the filled production resin or tooling resin, in kilograms per megagram of filled material.

PV_U = The monomer VOC emission rate for the neat (unfilled) resin, before filler is added, calculated using the applicable emission rate formula in Table II.

% Filler = The weight-percent of filler in the as applied resin system.

(2) The value of PV_F of a compliant material used in subsection (f)(1), calculated as specified in paragraph (1), for a filled resin used as a:

(i) Production resin shall not exceed 46 kilograms of monomer VOC per megagram of filled resin applied.

(ii) Tooling resin shall not exceed 54 kilograms of monomer VOC per megagram of filled resin applied.

(3) The value of PV_F, calculated as specified in paragraph (1), must be used in place of the value of PV_i for a filled resin included in the emissions averaging option equation in subsection (f)(2)(v).

(4) The monomer VOC content of each as applied filled resin includes the amount of non-monomer VOC content that exceeds 5% by weight of the unfilled resin material.

(i) *Monomer VOC control requirement for an open molding resin, gel coat, filled production resin or filled tooling resin not included in an emissions averaging option.* The monomer VOC content of an open molding resin, gel coat, filled production resin or filled tooling resin material not included in an emissions averaging option in subsection (f)(2) shall meet the monomer VOC content requirements of subsection (f)(1) or the add-on air pollution control requirements of subsection (f)(3).

(j) *Alternative requirements for control of monomer VOC content for certain resin and gel coat materials.* The monomer VOC content limits in Table I do not apply to a tooling or production material used for the following purposes:

(1) A production resin, including a skin coat resin, that must meet a specification for use in a military vessel or must be approved by the United States Coast Guard for use in the construction of a lifeboat, rescue boat or life-saving appliance approved under 46 CFR Chapter 1, Subchapter Q (relating to equipment, construction, and materials: specifications and approval) or the construction of a small passenger vessel regulated under 46 CFR Chapter 1, Subchapter T (relating to small passenger vessels (under 100 gross tons)). A production resin that meets one or more of these criteria shall be applied with non-atomizing resin application equipment.

(2) A production or tooling resin or a pigmented, clear or tooling gel coat used for repair and touch up of a part or a mold, if the weight used of resin and gel coat materials that meet one or more of these criteria does not exceed 1% by weight of the total resin and gel coat material used at a facility on a 12-month rolling-average basis.

(3) Pure 100% vinylester resin used for a skin coat, if the pure 100% vinylester resin used for the skin coat is applied with non-atomizing resin application equipment, and the weight used of resin materials meeting this criterion does not exceed 5% by weight of the total resin used at a facility on a 12-month rolling-average basis.

(k) *Work practices for resin and gel coat materials.* The owner or operator of a facility subject to this section shall ensure that resin and gel coat containers with a capacity equal to or greater than 55 gallons (208 liters), including those used for onsite mixing of putties and polyputties, have a cover in place at all times with no visible gaps, except when materials are being manually added or removed from a container or when mixing equipment is being placed in or removed from a container.

(l) *VOC content limits and work practices for cleaning materials.* The owner or operator of a facility subject to this section shall comply with the following VOC content limits and work practices for VOC-containing cleaning materials:

(1) Ensure that the VOC content of cleaning solvents used for routine application equipment cleaning is equal

to or less than 5% by weight or has a composite vapor pressure equal to or less than 0.50 mmHg at 68°F.

(2) Use only non-VOC-containing solvent to remove cured resin or gel coat from application equipment.

(m) *Compliance and monitoring requirements.* The owner or operator of a facility subject to this section shall:

(1) Use the test methods and procedures in subsection (n) to determine the monomer VOC content of resin and gel coat material.

(2) Demonstrate compliance of the monomer VOC content of the resin and gel coat material within 90 days of receipt of a written request from the Department in accordance with subsection (n).

(3) Equip add-on air pollution control devices with the applicable monitoring equipment. The monitoring equipment shall be installed, calibrated, operated and maintained according to manufacturer's specifications at all times that the add-on air pollution control device is in use.

(4) Conduct testing of a VOC emissions capture system and add-on air pollution control device installed in accordance with subsection (f)(3) one time every 5 years starting from completion of the initial testing specified in the plan approval application required in subsection (g).

(n) *Sampling and testing.* The owner or operator of a facility subject to this section shall perform sampling and testing as follows:

(1) Use one or more of the following methods to determine the monomer VOC content of a resin or gel coat.

(i) SCAQMD Method 312-91, *Determination of Percent Monomer in Polyester Resins.*

(ii) Manufacturer's formulation data.

(iii) Other test methods or data demonstrated to provide results that are acceptable for purposes of determining compliance with this section if prior approval is obtained in writing from the Department and the United States Environmental Protection Agency.

(2) Use the test methods and procedures specified in Chapter 139 (relating to sampling and testing) for sampling and testing of add-on air pollution control devices.

(o) *Recordkeeping requirements.* The owner or operator of a facility subject to this section shall maintain monthly records sufficient to demonstrate compliance with this section. The records must include the following information:

(1) The name and identification number of each resin and gel coat.

(2) The total quantity of atomized molding production resin, non-atomized production resin, pigmented gel coat, clear gel coat, atomized tooling resin, non-atomized tooling resin and tooling gel coat used per month.

(3) The monomer VOC content for each resin and gel coat.

(4) The non-monomer VOC content for each resin and gel coat.

(5) The calculations performed for each applicable requirement under subsections (f), (h) and (j).

(6) The name and identification number only for each resin used in accordance with subsection (j)(1). The records specified in paragraphs (1)—(5) do not apply to resins used in accordance with subsection (j)(1).

(7) The name, identification number and VOC content or composite vapor pressure for each cleaning solvent used for routine application equipment cleaning.

(8) The information required by the plan approval issued under subsection (g), as applicable.

(9) The results of sampling and testing performed in accordance with subsection (n).

(p) *Reporting requirements.* The records shall be maintained for 2 years unless a longer period is required by an order issued by the Department or a plan approval or operating permit issued under Chapter 127 (relating to construction, modification, reactivation and operation of sources). The records shall be submitted to the Department in an acceptable format upon receipt of a written request.

[Pa.B. Doc. No. 15-2215. Filed for public inspection December 18, 2015, 9:00 a.m.]

BOARD OF COAL MINE SAFETY
[25 PA. CODE CH. 208]
Standards for Surface Facilities

The Board of Coal Mine Safety (Board) amends Chapter 208 (relating to underground coal mine safety) to read as set forth in Annex A. This final-form rulemaking implements existing Federal regulations, thereby making them independently enforceable by the Commonwealth.

Sections 106 and 106.1 of the Bituminous Coal Mine Safety Act (BCMSA) (52 P. S. §§ 690-106 and 690-106.1) authorize the adoption of regulations for its implementation including additional safety standards. The BCMSA further authorizes the Board to promulgate necessary or appropriate regulations to implement the requirements of the BCMSA and to protect the health, safety and welfare of miners and other individuals in and about mines.

This final-form rulemaking is given under Board order at its meeting of June 23, 2015.

A. *Effective Date*

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

B. *Contact Persons*

For further information, contact Colvin Carson, Acting Director, Bureau of Mine Safety, 131 Broadview Road, New Stanton, PA 15672, (724) 404-3154, cocarson@pa.gov; or Joseph Iole, Assistant Counsel, Bureau of Regulatory Counsel, Rachel Carson State Office Building, P. O. Box 8464, Harrisburg, PA 17105-8464, (717) 787-9376, jiole@pa.gov.

C. *Statutory Authority*

This final-form rulemaking is authorized under sections 106 and 106.1 of the BCMSA, which grant the Board the authority to adopt regulations to implement the BCMSA including additional safety standards. The Board is further authorized to promulgate regulations that are

necessary or appropriate to protect the health, safety and welfare of miners and other individuals in and about mines.

D. *Background and Purpose*

On July 7, 2008, the General Assembly enacted the BCMSA, which was the first significant update of the Commonwealth's underground bituminous coal mine safety laws since 1961. See section 103(a) of the BCMSA (52 P. S. § 690-103(a)). The BCMSA provides broad authority to promulgate regulations that are necessary or appropriate to implement the BCMSA and to protect the health, safety and welfare of miners and other individuals in and about mines. See section 106.1(a) of the BCMSA. Final regulations consistent with Federal standards may also be promulgated under section 106.1(c) of the BCMSA. Under section 106 of the BCMSA, the Board consists of three members representing mine workers, three members representing underground bituminous coal mine operators and the Secretary of the Department of Environmental Protection (Department) who serves as the Board's chairperson.

This final-form rulemaking implements existing Federal regulations that broadly relate to the surface work areas of underground coal mines and govern surface installations, thermal dryers, safeguards for mechanical equipment, electrical equipment, trailing cables, grounding, surface high-voltage distribution, low-voltage and medium-voltage alternating currents, ground control, fire protection, maps, personnel hoisting, wire ropes, trolley wires and trolley feeder wires, and slope and shaft sinking. As a result, the existing Federal regulations will become independently enforceable in this Commonwealth.

At the outset, this final-form rulemaking implements the Federal regulations regarding qualified or certified persons. The Federal regulations require certain types of work and certain tests—electrical work and tests for methane, for example—to be conducted by qualified or certified persons. Requiring persons to be qualified or certified ensures that the examinations and tests they conduct and the duties they carry out will be done in a professional manner, thus enhancing the safety of persons in and around mine sites.

Another component of this final-form rulemaking implements the Federal regulations governing surface installations. These rules ensure that underground bituminous coal mine structures, enclosures and other facilities located on the surface are maintained in good repair to prevent accidents and injuries. Accordingly, the rules mandate proper illumination, safe storage of materials, and suitable slings and hitches for hoisting materials, among other requirements.

Additionally, this final-form rulemaking implements the Federal mine safety regulations for thermal dryers. Thermal dryers are an integral part of coal processing and are used to dry coal at high temperatures. The Federal regulations governing thermal dryers are intended to ensure that thermal dryers are properly used and located on the site and mandate certain safeguards to minimize the risks associated with the use of thermal dryers.

This final-form rulemaking also implements the Federal regulations mandating safeguards for mechanical equipment. These Federal regulations ensure that various machines and other types of mechanical equipment are maintained, located, operated and handled in a safe and proper manner. Similarly, this final-form rulemaking adopts the Federal requirements regarding electrical equipment at the surface operations of underground bituminous coal mines. These requirements ensure that electrical equipment is adequately maintained, insulated and used.

Another component of the Federal regulations implemented by this final-form rulemaking regards trailing cables. Generally, trailing cables are the cords that connect portable or mobile equipment and devices to power sources. Ensuring that trailing cables on mine sites are properly handled, spliced and protected enhances safety at a mine site.

This final-form rulemaking also implements the Federal regulations regarding the grounding of electricity-conducting materials. Included in these Federal regulations are requirements for grounding wires, equipment receiving power from underground alternating power current systems and enclosures of electric equipment.

In addition, this final-form rulemaking implements the Federal regulations governing surface high-voltage distribution. These Federal regulations promote safety at a mine site by ensuring high-voltage power supplies and transmission are properly maintained, connected, grounded and tested. This final-form rulemaking likewise implements the Federal requirements relative to low-voltage and medium-voltage alternating current at the surface areas of underground bituminous coal mine sites which ensure the proper usage, maintenance, grounding, connecting and testing of low-voltage and medium-voltage currents.

The Federal ground control mine safety regulations are also implemented by this final-form rulemaking. These Federal requirements require operators to establish certain plans and procedures and take certain precautions when conducting activities relative to stripping, box cuts, highwalls and drilling.

This final-form rulemaking adopts Federal regulations relative to fire protection at the surface operations of underground bituminous coal mine sites. These requirements ensure that proper plans, warning signs and firefighting equipment are maintained on the mine site. They also ensure that flammable materials and fire-prone units like battery-charging stations are properly maintained.

The Federal requirements relative to personnel hoisting and wire ropes are also included in this final-form rulemaking. These requirements are intended to ensure that workers and cargo at mine sites may be safely elevated or lowered by structurally sound hoisting equipment. The wire-rope components of this equipment shall be examined and measured and must meet minimum strength requirements.

There are loading and haulage requirements in the Federal regulations that are adopted by this final-form rulemaking. These Federal regulations ensure that loading and haulage equipment will be properly installed, inspected, maintained and operated.

In addition, this final-form rulemaking adopts some miscellaneous safety provisions including requirements for workers to have access to adequate means of communication and first aid equipment, and wear protective clothing. This final-form rulemaking adopts the Federal regulations governing mine maps.

This final-form rulemaking adopts Federal requirements regulating trolley wires and trolley feeder wires. These requirements ensure that trolley wires and trolley feeder wires are maintained in a way to reduce the risk of overcurrent.

This final-form rulemaking implements Federal mine safety regulations relative to slope and shaft sinking. These Federal regulations ensure that the operations associated with slopes and shafts are conducted in a safe manner.

Also included in this final-form rulemaking are definitions for "barricaded," "berm," "certified or registered," "flash point," "qualified person," "roll protection," "safety can" and "trailing cable." These definitions improve the clarity of the regulations and facilitate compliance with its requirements.

Adopting these regulations ensures that surface operations at underground bituminous coal mine sites are safely conducted and maintained. Although underground bituminous coal mine operators are already required to comply with these Federal regulations, implementing them in Chapter 208 provides the Department with the independent authority to enforce the Federal requirements. This results in improved efficiency and enhanced autonomy for the Commonwealth.

E. *Summary of Comments and Responses to the Proposed Rulemaking*

The Board did not receive comments from the public regarding the proposed underground coal mine safety regulations during the public comment period. The Board received two comments from the Independent Regulatory Review Commission (IRRC).

IRRC recommended that the Board clarify its intent to require that training programs be approved by the Mine Safety and Health Administration (MSHA) in addition to the existing Federal provision. This comment applies similarly to §§ 208.391 and 208.406 (relating to slopes and shafts; approval of plans; and explosives and blasting; general).

The Board deleted the proposed exception to § 208.108 (relating to training programs) and instead incorporated in full the Federal provision in 30 CFR 77.107 (relating to training programs) to clarify that this final-form regulation is consistent with the Federal provision. This final-form rulemaking will require operators to seek approval of training programs from the Secretary of Labor "or his delegate." Regarding § 208.391, operators currently are required to submit plans regarding slope and shaft safety for the Department's approval; the Department accepts for approval plans submitted to MSHA under 30 CFR 77.1900 (relating to slopes and shafts; approval of plans). This final-form rulemaking clarifies that although § 208.391 incorporates the Federal provision, the Department retains independent approval authority over these plans.

Regarding § 208.406, operators currently are required to comply with Chapters 210 and 211 (relating to blasters' licenses; and storage, handling and use of explosives). This final-form rulemaking clarifies that although § 208.406 incorporates the Federal provision, operators shall still comply with the applicable Pennsylvania regulations regarding explosives and blasting.

IRRC additionally commented that § 208.364 (relating to transportation of persons; overcrowding) incorporated by reference 30 CFR 77.1604 (relating to transportation of persons; overcrowding) with an "exception of the following modification . . ." and that the Board provided for a subsection (a), printed in its entirety, making it unclear as to what has been modified from the language in 30 CFR 77.1604(a). IRRC had concerns that this was not an exception since the regulated community shall comply with existing 30 CFR 77.1604. IRRC noted that if the Board intends to modify 30 CFR 77.1604, this should be clearly stated as an additional requirement. IRRC further noted that the Board's modification changed the description of the work area, and asked the Board to explain the need for modifying 30 CFR 77.1604(a).

The Board deleted the proposed exception to § 208.364, and instead incorporates in full the Federal provision in 30 CFR 77.1604 to clarify that this final-form regulation is consistent with the Federal provision.

F. *Summary of the Final-Form Rulemaking Including Changes from Proposed to Final-Form*

§ 208.1. Definitions

This final-form rulemaking adds definitions of "barricaded," "berm," "certified or registered," "flash point," "qualified person," "roll protection," "safety can" and "trailing cable" to § 208.1 (relating to definitions).

Qualified and certified persons

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing qualified and certified persons.

Section 208.101 (relating to certified person) incorporates by reference 30 CFR 77.100 (relating to certified person). Certified persons are authorized to conduct certain tests and examinations at the surface areas of underground bituminous coal mining sites.

Section 208.102 (relating to tests for methane and for oxygen deficiency; qualified person) incorporates by reference 30 CFR 77.101 (relating to tests for methane and for oxygen deficiency; qualified person). This provision requires tests for methane and oxygen deficiency to be made by qualified persons.

Section 208.103 (relating to tests for methane; oxygen deficiency; qualified person, additional requirement) incorporates by reference 30 CFR 77.102 (relating to tests for methane; oxygen deficiency; qualified person, additional requirement). This provision requires the qualified person conducting methane and oxygen deficiency tests to possess a current card issued by MSHA indicating that the person is in fact qualified to conduct this testing.

Section 208.104 (relating to electrical work; qualified person) incorporates by reference 30 CFR 77.103 (relating to electrical work; qualified person). This provision describes qualification procedures to become a qualified person to perform electrical work.

Section 208.105 (relating to repair of energized surface high-voltage lines; qualified person) incorporates by reference 30 CFR 77.104 (relating to repair of energized surface high-voltage lines; qualified person). This provision describes the qualification requirements for persons to repair energized surface high-voltage lines.

Section 208.106 (relating to qualified hoistman; slope or shaft sinking operation; qualifications) incorporates by reference 30 CFR 77.105 (relating to qualified hoistman; slope or shaft sinking operation; qualifications). This provision describes when a hoistman is qualified to operate a hoist at a slope or shaft operation.

Section 208.107 (relating to records of certified and qualified persons) incorporates by reference 30 CFR 77.106 (relating to records of certified and qualified persons). This provision requires an operator to maintain records of certified and qualified persons.

Section 208.108 incorporates by reference 30 CFR 77.107. This provision requires operators to provide a program of training and retraining certified and qualified

persons. The Board deleted "the exception that MSHA will approve the training program" from this final-form regulation in response to IRRC's comment suggesting the Board clarify that the regulation is consistent with the Federal provision and not an additional requirement.

Surface installations

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing surface installations.

Section 208.111 (relating to surface installations; general) incorporates by reference 30 CFR 77.200 (relating to surface installations; general). This provision requires all mine structures, enclosures or other facilities to be maintained in good repair to prevent accidents and injuries.

Section 208.112 (relating to methane content in surface installations) incorporates by reference 30 CFR 77.201 (relating to methane content in surface installations). This provision mandates that the methane content in the air of any structure, enclosure or other facility be less than 1% of the volume of air.

Section 208.113 (relating to tests for methane; qualified person; use of approved device) incorporates by reference 30 CFR 77.201-1 (relating to tests for methane; qualified person; use of approved device). This provision requires tests for methane in structures, enclosures or other facilities be conducted by a qualified person with an approved device at least once during each operating shift and immediately prior to any repair work when a welding torch or open flame is used or a spark may be produced.

Section 208.114 (relating to methane accumulations; change in ventilation) incorporates by reference 30 CFR 77.201-2 (relating to methane accumulations; change in ventilation). This provision provides for a change in the ventilation of any structure, enclosure or other facility when the air in a structure, enclosure or other facility contains more than 1% methane.

Section 208.115 (relating to dust accumulations in surface installations) incorporates by reference 30 CFR 77.202 (relating to dust accumulations in surface installations). This provision prohibits the dangerous accumulation of coal dust in the air of, in or on the surfaces of structures, enclosures or other facilities.

Section 208.116 (relating to use of material or equipment overhead; safeguards) incorporates by reference 30 CFR 77.203 (relating to use of material or equipment overhead; safeguards). This provision mandates the adequate protection of persons working or passing below areas where overhead work is being done or repairs are being made.

Section 208.117 (relating to openings in surface installations; safeguards) incorporates by reference 30 CFR 77.204 (relating to openings in surface installations; safeguards). This provision provides that openings in surface installations through which people or material may fall must be protected by railings, barriers or similar protective coverings or devices.

Section 208.118 (relating to travelways at surface installations) incorporates by reference 30 CFR 77.205 (relating to travelways at surface installations). This provision requires travelways to be maintained in a condition as to minimize the risk of slips, falls and other accidents.

Section 208.119 (relating to ladders; construction; installation and maintenance) incorporates by reference 30 CFR 77.206 (relating to ladders; construction; installation and maintenance). This provision provides for the safe use and maintenance of ladders.

Section 208.120 (relating to illumination) incorporates by reference 30 CFR 77.207 (relating to illumination). This provision requires safe illumination of surface structures, paths, walkways, stairways, switch panels, loading and dumping sites, and working areas.

Section 208.121 (relating to storage of materials) incorporates by reference 30 CFR 77.208 (relating to storage of materials). This provision requires materials to be stored in a way to minimize unsafe conditions.

Section 208.122 (relating to surge and storage piles) incorporates by reference 30 CFR 77.209 (relating to surge and storage piles). This provision prohibits a person from walking or standing immediately above a reclamation area or another area at or near a surge or storage pile where the reclamation operation may expose the person to a hazard.

Section 208.123 (relating to hoisting of materials) incorporates by reference 30 CFR 77.210 (relating to hoisting of materials). This provision mandates that hitches and slings used for hoisting be suitable for handling the type of materials being hoisted and requires workers to stay clear of hoisted loads.

Section 208.124 (relating to draw-off tunnels; stockpiling and reclaiming operations; general) incorporates by reference 30 CFR 77.211 (relating to draw-off tunnels; stockpiling and reclaiming operations; general). This provision requires tunnels located below stockpiles, surge piles and coal storage silos to be ventilated so that concentrations of methane do not exceed 1%. The provision also requires the concentration of methane to be less than 1% before electric equipment is energized, operated or repaired.

Section 208.125 (relating to continuous methane monitoring device; installation and operation; automatic deenergization of electric equipment) incorporates by reference 30 CFR 77.211-1 (relating to continuous methane monitoring device; installation and operation; automatic deenergization of electric equipment). This provision provides that continuous methane monitoring devices must be set to de-energize electric equipment automatically when a monitor is not operating properly and give a warning signal to alert of a certain concentration of methane not above 1%.

Section 208.126 (relating to draw-off tunnel ventilation fans; installation) incorporates by reference 30 CFR 77.212 (relating to draw-off tunnel ventilation fans; installation). This provision dictates installation requirements for draw-off tunnel ventilation fans.

Section 208.127 (relating to draw-off tunnel escapeways) incorporates by reference 30 CFR 77.213 (relating to draw-off tunnel escapeways). This provision provides that an escapeway shall be installed at the closed end of the tunnel to a safe location on the surface.

Thermal dryers

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing thermal dryers.

Section 208.131 (relating to thermal dryers; general) incorporates by reference 30 CFR 77.300 (relating to thermal dryers; general). This provision provides that the operation and maintenance of thermal dryers shall comply with 30 CFR 77.301—77.306.

Section 208.132 (relating to dryer heating units; operation) incorporates by reference 30 CFR 77.301 (relating to dryer heating units; operation). This provision dictates the operation of dryer heating units used to dry coal at high temperatures.

Section 208.133 (relating to bypass stacks) incorporates by reference 30 CFR 77.302 (relating to bypass stacks). This provision requires thermal dryer systems to include a bypass stack, relief stack or individual discharge stack provided with automatic venting to permit gases from the dryer to bypass the heating chamber and vent to the outside atmosphere.

Section 208.134 (relating to hot gas inlet chamber dropout doors) incorporates by reference 30 CFR 77.303 (relating to hot gas inlet chamber dropout doors). This provision requires thermal dryer systems with hot gas inlet chambers to be equipped with dropout doors at the bottom of the inlet chamber to permit coal, fly ash or other heated material to fall from the chamber.

Section 208.135 (relating to explosion release vents) incorporates by reference 30 CFR 77.304 (relating to explosion release vents). This provision provides that drying chambers, dry-dust collectors and ductwork between collectors and discharge stacks must be protected by explosion release vents which open directly to the outside atmosphere.

Section 208.136 (relating to access to drying chambers, hot gas inlet chambers and duct-work; installation and maintenance) incorporates by reference 30 CFR 77.305 (relating to access to drying chambers, hot gas inlet chambers and ductwork; installation and maintenance). This provision requires drying chambers, hot gas inlet chambers and all ductwork in which coal dust may accumulate to be equipped with tight sealing access doors.

Section 208.137 (relating to fire protection) incorporates by reference 30 CFR 77.306 (relating to fire protection). This provision allows an authorized representative of the regulator to require certain fire protection measures like water sprays and fog nozzles.

Section 208.138 (relating to thermal dryers; location and installation; general) incorporates by reference 30 CFR 77.307 (relating to thermal dryers; location and installation; general). This provision provides setback requirements for thermal dryers from mine openings and installation requirements regarding enclosing thermal dryers.

Section 208.139 (relating to structures housing other facilities; use of partitions) incorporates by reference 30 CFR 77.308 (relating to structures housing other facilities; use of partitions). This provision requires that thermal dryers installed in structures also housing tipples, cleaning plants or other operating facility be separated from other working areas by a substantial partition.

Section 208.140 (relating to visual check of system equipment) incorporates by reference 30 CFR 77.309 (relating to visual check of system equipment). This provision requires frequent visual checks of thermal dryer system control stations.

Section 208.141 (relating to control stations; location) incorporates by reference 30 CFR 77.309-1 (relating to control stations; location). This provision requires thermal dryer control stations to be located so as to give the operator of the control system the widest field of visibility of the system and equipment.

Section 208.142 (relating to control panels) incorporates by reference 30 CFR 77.310 (relating to control panels). This provision requires control panels to be located in areas free of moisture and requires control panels to be accompanied by diagrams and directions for use.

Section 208.143 (relating to alarm devices) incorporates by reference 30 CFR 77.311 (relating to alarm devices). This provision mandates that thermal dryer systems be equipped with audible and visible alarm devices.

Section 208.144 (relating to fail safe monitoring systems) incorporates by reference 30 CFR 77.312 (relating to fail safe monitoring systems). This provision provides that fail safe monitoring systems and controls must accompany thermal dryer systems to ensure the dryer system is safely shut down in the event of a failure of any component of the dryer system.

Section 208.145 (relating to wet-coal feed bins; low-level indicators) incorporates by reference 30 CFR 77.313 (relating to wet-coal feedbins; low-level indicators). This provision provides that the wet-coal bins feeding the thermal drying systems must be equipped with audible and visual low-coal-level indicators.

Section 208.146 (relating to automatic temperature control instruments) incorporates by reference 30 CFR 77.314 (relating to automatic temperature control instruments). This provision dictates the type, use and inspection requirements for automatic temperature control instruments associated with thermal dryer systems.

Section 208.147 (relating to thermal dryers; examination and inspection) incorporates by reference 30 CFR 77.315 (relating to thermal dryers; examination and inspection). This provision mandates the examination of thermal dryer systems for fires and coal-dust accumulations.

Safeguards for mechanical equipment

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing safeguards for mechanical equipment.

Section 208.151 (relating to mechanical equipment guards) incorporates by reference 30 CFR 77.400 (relating to mechanical equipment guards). This provision requires parts of mechanical equipment to be guarded to prevent accidents and injuries to workers.

Section 208.152 (relating to stationary grinding machines; protective devices) incorporates by reference 30 CFR 77.401 (relating to stationary grinding machines; protective devices). This provision requires stationary grinding machines to be equipped with parts and certain protective devices to protect workers.

Section 208.153 (relating to hand-held power tools; safety devices) incorporates by reference 30 CFR 77.402 (relating to hand-held power tools; safety devices). This provision mandates that hand-held power tools must be equipped with controls requiring constant hand or finger pressure to operate and must be equipped with friction or equivalent safety devices.

Section 208.154 (relating to mobile equipment; falling object protective structures) incorporates by reference 30 CFR 77.403 (relating to mobile equipment; falling object protective structures (FOPS)). This provision requires falling object protective structures to be installed to certain types of equipment at the surface work areas of underground mine sites.

Section 208.155 (relating to mobile equipment; rollover protective structures) relates to rollover protective

structures (ROPS) for mobile equipment and provides that all rubber-tired or crawler-mounted self-propelled scrapers front-end loaders, dozers, cranes, loaders and tractors, with or without attachments, at the surface work areas of underground coal mines shall be provided with ROPS in accordance with the certification requirements approved by MSHA.

Section 208.156 (relating to seat belts) incorporates by reference 30 CFR 77.403-1(g) (relating to mobile equipment; rollover protective structures (ROPS)). This provision requires the use of seat belts by operators of mobile equipment that are required to be equipped with ROPS.

Section 208.157 (relating to machinery and equipment; operation and maintenance) incorporates by reference 30 CFR 77.404 (relating to machinery and equipment; operation and maintenance). This provision dictates operation and maintenance requirements for machinery and equipment.

Section 208.158 (relating to performing work from a raised position; safeguards) incorporates by reference 30 CFR 77.405 (relating to performing work from a raised position; safeguards). This provision provides that workers may not work on or from a piece of mobile equipment in a raised position unless it has been securely blocked in place. Moreover, work may not be performed under machinery or equipment that is raised until it is securely blocked in place.

Section 208.159 (relating to drive belts) incorporates by reference 30 CFR 77.406 (relating to drive belts). This provision dictates the use of drive belts for machines.

Section 208.160 (relating to power-driven pulleys) incorporates by reference 30 CFR 77.407 (relating to power-driven pulleys). This provision mandates that belts, chains and ropes may not be guided onto a power-driven moving pulley or similar system with the hands and pulleys of conveyors may not be manually cleaned while the conveyor is in motion.

Section 208.161 (relating to welding operations) incorporates by reference 30 CFR 77.408 (relating to welding operations). This provision requires welding operations to be shielded and the area well ventilated.

Section 208.162 (relating to shovels, draglines and tractors) incorporates by reference 30 CFR 77.409 (relating to shovels, draglines, and tractors). This provision dictates the use of shovels, draglines and tractors and requires shovels and draglines to be equipped with handrails.

Section 208.163 (relating to mobile equipment; automatic warning devices) incorporates by reference 30 CFR 77.410 (relating to mobile equipment; automatic warning devices). This provision provides that mobile equipment such as forklifts and front-end loaders must be equipped with warning devices and dictates the types of warning those devices emit.

Section 208.164 (relating to compressed air and boilers; general) incorporates by reference 30 CFR 77.411 (relating to compressed air and boilers; general). This provision requires boilers and pressure vessels to be constructed, installed and maintained in accordance with the standards and specifications of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code.

Section 208.165 (relating to compressed air systems) incorporates by reference 30 CFR 77.412 (relating to compressed air systems). This provision specifies the operation and maintenance requirements for compressed air systems.

Section 208.166 (relating to boilers) incorporates by reference 30 CFR 77.413 (relating to boilers). This provision provides the operation and maintenance requirements for boilers.

Electrical equipment—general

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing electrical equipment.

Section 208.171 (relating to electric power circuits and electric equipment; de-energization) incorporates by reference 30 CFR 77.500 (relating to electric power circuits and electric equipment; deenergization). This provision requires power circuits and electric equipment to be de-energized before work is done on circuits and equipment.

Section 208.172 (relating to electric distribution circuits and equipment; repair) incorporates by reference 30 CFR 77.501 (relating to electric distribution circuits and equipment; repair). This provision provides that repair of electric distribution circuits and equipment shall be conducted by a qualified person.

Section 208.173 (relating to qualified person) incorporates by reference 30 CFR 77.501-1 (relating to qualified person). This provision provides that a qualified person for the purposes of § 208.131 is one that meets the requirements of § 208.83 (relating to power centers).

Section 208.174 (relating to electric equipment; examination, testing and maintenance) incorporates by reference 30 CFR 77.502 (relating to electric equipment; examination, testing, and maintenance). This provision requires electric equipment to be frequently examined and tested and properly maintained.

Section 208.175 (relating to qualified person) incorporates by reference 30 CFR 77.502-1 (relating to qualified person). This provision provides that a qualified person for the purposes of § 208.133 is one that meets the requirements of § 208.83.

Section 208.176 (relating to electric equipment; frequency of examination and testing) incorporates by reference 30 CFR 77.502-2 (relating to electric equipment; frequency of examination and testing). This provision requires at least monthly testing of electric equipment.

Section 208.177 (relating to electric conductors; capacity and insulation) incorporates by reference 30 CFR 77.503 (relating to electric conductors; capacity and insulation). This provision mandates size and current carrying capacity requirements for electric conductors.

Section 208.178 (relating to electric conductors) incorporates by reference 30 CFR 77.503-1 (relating to electric conductors). This provision requires electric conductors to meet size and minimum current carrying capacity requirements provided for in the National Electric Code. There is a similar minimum standard for trailing cables in this provision as well.

Section 208.179 (relating to electrical connections or splices; suitability) incorporates by reference 30 CFR 77.504 (relating to electrical connections or splices; suitability). This provision specifies that electrical connections or splices must be mechanically and electrically efficient.

Section 208.180 (relating to cable fittings; suitability) incorporates by reference 30 CFR 77.505 (relating to cable fittings; suitability). This provision dictates that cables must enter metal frames of motors, splice boxes and electric compartments only through proper fittings.

Section 208.181 (relating to electric equipment and circuits; overload and short-circuit protection) incorporates by reference 30 CFR 77.506 (relating to electric equipment and circuits; overload and short-circuit protection). This provision mandates that automatic circuit-breaking devices or fuses of the correct type and capacity shall be installed to protect electric equipment and circuits from overload and short-circuit.

Section 208.182 (relating to electric equipment and circuits; overload and short-circuit protection; minimum requirements) incorporates by reference 30 CFR 77.506-1 (relating to electric equipment and circuits; overload and short circuit protection; minimum requirements). This provision requires devices providing overload or short-circuit protection to conform to the minimum requirements for protection of electric circuits and equipment in the National Electric Code.

Section 208.183 (relating to electric equipment; switches) incorporates by reference 30 CFR 77.507 (relating to electric equipment; switches). This provision requires all electric equipment to be provided with switches or other controls that are safely designed.

Section 208.184 (relating to lightning arresters; ungrounded and exposed power conductors and telephone wires) incorporates by reference 30 CFR 77.508 (relating to lightning arresters, ungrounded and exposed power conductors and telephone wires). This provision requires all underground, exposed power conductors and telephone wires to be equipped with suitable lighting arresters.

Section 208.185 (relating to lightning arresters; wires entering buildings) incorporates by reference 30 CFR 77.508-1 (relating to lightning arresters; wires entering buildings). This provision provides that lighting arresters shall be provided at the point where telephone wires enter a building.

Section 208.186 (relating to transformers; installation and guarding) incorporates by reference 30 CFR 77.509 (relating to transformers; installation and guarding). This provision dictates the installation and guarding requirements for transformers.

Section 208.187 (relating to resistors; location and guarding) incorporates by reference 30 CFR 77.510 (relating to resistors; location and guarding). This provision requires resistors, heaters and rheostats to be located to minimize fires and hazards.

Section 208.188 (relating to danger signs at electrical installations) incorporates by reference 30 CFR 77.511 (relating to danger signs at electrical installations). This provision specifies that suitable danger signs shall be posted at all major electrical installations.

Section 208.189 (relating to inspection and cover plates) incorporates by reference 30 CFR 77.512 (relating to inspection and cover plates). This provision dictates that inspection and cover plates on electrical equipment shall be kept in place at all times except during repair.

Section 208.190 (relating to insulating mats at power switches) incorporates by reference 30 CFR 77.513 (relating to insulating mats at power switches). This provision requires nonconductive material to be kept in place at all switchboards and power-control switches.

Section 208.191 (relating to switchboards; passageways and clearance) incorporates by reference 30 CFR 77.514 (relating to switchboards; passageways and clearance). This provision requires switchboards to be installed to provide passageways permitting access to the back of the switchboard from both ends for inspection, adjustment or repair. Openings are to be guarded.

Section 208.192 (relating to bare signal or control wires; voltage) incorporates by reference 30 CFR 77.515 (relating to bare signal or control wires; voltage). This provision requires the voltage on bare signal or control wires accessible to personal contact to not exceed 40 volts.

Section 208.193 (relating to electric wiring and equipment; installation and maintenance) incorporates by reference 30 CFR 77.516 (relating to electric wiring and equipment; installation and maintenance). This provision requires all wiring and electric equipment to meet the requirements of the National Electric Code in effect at the time of installation.

Trailing cables

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing trailing cables.

Section 208.201 (relating to trailing cables; short-circuit protection; disconnecting devices) incorporates by reference 30 CFR 77.600 (relating to trailing cables; short-circuit protection; disconnecting devices). This provision requires short-circuit protection for trailing cables to be provided by automatic circuit breakers. Moreover, disconnecting devices used to disconnect power from trailing cables shall be plainly marked.

Section 208.202 (relating to trailing cables or portable cables; temporary splices) incorporates by reference 30 CFR 77.601 (relating to trailing cables or portable cables; temporary splices). This provision specifies how temporary splices in trailing or portable cables are to be made.

Section 208.203 (relating to permanent splicing of trailing cables) incorporates by reference 30 CFR 77.602 (relating to permanent splicing of trailing cables). This provision provides specifications for when permanent splices in trailing cables are made.

Section 208.204 (relating to clamping of trailing cables to equipment) incorporates by reference 30 CFR 77.603 (relating to clamping of trailing cables to equipment). This provision requires trailing cables to be clamped to machines in a manner that protects the cables from damage.

Section 208.205 (relating to protection of trailing cables) incorporates by reference 30 CFR 77.604 (relating to protection of trailing cables). This provision requires trailing cables to be adequately protected.

Section 208.206 (relating to breaking trailing cable and power cable connections) incorporates by reference 30 CFR 77.605 (relating to breaking trailing cable and power cable connections). This provision mandates that trailing and power cable connections may not be made or broken under load.

Section 208.207 (relating to energized trailing cables; handling) incorporates by reference 30 CFR 77.606 (relating to energized trailing cables; handling). This provision requires persons handling energized trailing cables to wear protective gloves.

Section 208.208 (relating to rubber gloves; minimum requirements) incorporates by reference 30 CFR 77.606-1 (relating to rubber gloves; minimum requirements). This provision provides the minimum requirements for the use of rubber gloves when handling energized trailing cables.

Grounding

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing grounding.

Section 208.211 (relating to grounding metallic sheaths, armors and conduits enclosing power conductors) incorporates by reference 30 CFR 77.700 (relating to grounding metallic sheaths, armors, and conduits enclosing power conductors). This provision requires the metallic sheaths, armors and conduits enclosing power conductors to be electrically continuous throughout and to be grounded by approved methods.

Section 208.212 (relating to approved methods of grounding) incorporates by reference 30 CFR 77.700-1 (relating to approved methods of grounding). This provision dictates the approved methods of grounding.

Section 208.213 (relating to grounding metallic frames, casings and other enclosures of electric equipment) incorporates by reference 30 CFR 77.701 (relating to grounding metallic frames, casings, and other enclosures of electric equipment). This provision provides that metallic frames, casings and other enclosures of electric equipment that may become live must be grounded.

Section 208.214 (relating to approved methods of grounding of equipment receiving power from ungrounded alternating current power systems) incorporates by reference 30 CFR 77.701-1 (relating to approved methods of grounding of equipment receiving power from ungrounded alternating current power systems). This provision specifies the approved methods of grounding equipment receiving power from underground alternating current systems.

Section 208.215 (relating to approved methods of grounding metallic frames, casings and other enclosures of electric equipment receiving power from a direct-current power system) incorporates by reference 30 CFR 77.701-2 (relating to approved methods of grounding metallic frames, casings, and other enclosures of electric equipment receiving power from a direct-current power system). This provision specifies the approved methods of grounding metallic frames, casings and other enclosures of electric equipment receiving power from a direct-current power system.

Section 208.216 (relating to grounding wires; capacity) incorporates by reference 30 CFR 77.701-3 (relating to grounding wires; capacity). This provision specifies the approval requirements when grounding wires are used to ground metallic sheaths, armors, conduits, frames, casings and other metallic enclosures.

Section 208.217 (relating to use of grounding connectors) incorporates by reference 30 CFR 77.701-4 (relating to use of grounding connectors). This provision requires clamps to be used or installed when attaching grounding wires to grounded power conductors.

Section 208.218 (relating to protection other than grounding) incorporates by reference 30 CFR 77.702 (relating to protection other than grounding). This provision permits the use of protective methods other than grounding when these methods are approved and no less effective than grounding.

Section 208.219 (relating to grounding frames of stationary high-voltage equipment receiving power from ungrounded delta systems) incorporates by reference 30 CFR 77.703 (relating to grounding frames of stationary high-voltage equipment receiving power from ungrounded delta systems). This provision requires the frames of stationary high-voltage equipment receiving power from ungrounded delta systems to be grounded.

Section 208.220 (relating to approved methods of grounding) incorporates by reference 30 CFR 77.703-1 (relating to approved methods of grounding). This provision specifies which methods of grounding will be approved with respect to the grounding of frames of high-voltage equipment.

Section 208.221 (relating to work on high-voltage lines; de-energizing and grounding) incorporates by reference 30 CFR 77.704 (relating to work on high-voltage lines; deenergizing and grounding). This provision requires high-voltage lines to be de-energized and grounded prior to work being started on them.

Section 208.222 (relating to work on high-voltage lines) incorporates by reference 30 CFR 77.704-1 (relating to work on high-voltage lines). This provision specifies requirements for working on high-voltage lines.

Section 208.223 (relating to repairs to energized high-voltage lines) incorporates by reference 30 CFR 77.704-2 (relating to repairs to energized high-voltage lines). This provision identifies the specifications for when and how high-voltage lines may be repaired.

Section 208.224 (relating to work on energized high-voltage surface lines; reporting) incorporates by reference 30 CFR 77.704-3 (relating to work on energized high-voltage surface lines; reporting). This provision requires records of repairs to high-voltage lines to be maintained.

Section 208.225 (relating to simultaneous repairs) incorporates by reference 30 CFR 77.704-4 (relating to simultaneous repairs). This provision requires workers to work simultaneously when working on high-voltage lines within reach of each other.

Section 208.226 (relating to installation of protective equipment) incorporates by reference 30 CFR 77.704-5 (relating to installation of protective equipment). This provision requires protective equipment to be installed prior to beginning work on high-voltage lines.

Section 208.227 (relating to protective clothing; use and inspection) incorporates by reference 30 CFR 77.704-6 (relating to protective clothing; use and inspection). This provision requires workers to wear protective clothing when performing work on high-voltage lines.

Section 208.228 (relating to protective equipment; inspection) incorporates by reference 30 CFR 77.704-7 (relating to protective equipment; inspection). This provision requires the visual inspection of protective equipment and clothing.

Section 208.229 (relating to protective equipment; testing and storage) incorporates by reference 30 CFR 77.704-8 (relating to protective equipment; testing and storage). This provision requires protective equipment to be tested and stored properly and in compliance with certain standards.

Section 208.230 (relating to operating disconnecting or cutout switches) incorporates by reference 30 CFR 77.704-9 (relating to operating disconnecting or cutout switches). This provision mandates that disconnecting or cutout switches on high-voltage lines shall only be operated with insulated sticks, fuse tongs or pullers which are adequately insulated.

Section 208.231 (relating to tying into energized high-voltage surface circuits) incorporates by reference 30 CFR 77.704-10 (relating to tying into energized high-voltage surface circuits). This provision requires workers tying

into high-voltage surface circuits to wear protective clothing and employ protective equipment.

Section 208.232 (relating to use of grounded messenger wires; ungrounded systems) incorporates by reference 30 CFR 77.704-11 (relating to use of grounded messenger wires; ungrounded systems). This provision permits the use of grounded messenger wires to suspend cables of systems to serve as a grounding medium.

Section 208.233 (relating to guy wires; grounding) incorporates by reference 30 CFR 77.705 (relating to guy wires; grounding). This provision requires guy wires from poles supporting high-voltage transmission lines to be securely connected.

Surface high-voltage distribution

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing surface high-voltage distribution.

Section 208.241 (relating to high-voltage circuits; circuit breakers) incorporates by reference 30 CFR 77.800 (relating to high-voltage circuits; circuit breakers). This provision provides that high-voltage circuits providing power to portable or mobile equipment must be protected by suitable circuit breakers.

Section 208.242 (relating to testing, examination and maintenance of circuit breakers; procedures) incorporates by reference 30 CFR 77.800-1 (relating to testing, examination, and maintenance of circuit breakers; procedures). This provision provides the testing and examination procedures for circuit breakers.

Section 208.243 (relating to testing, examination and maintenance of circuit breakers; record) incorporates by reference 30 CFR 77.800-2 (relating to testing, examination, and maintenance of circuit breakers; record). This provision requires written records to be kept for tests of circuit breakers.

Section 208.244 (relating to grounding resistors) incorporates by reference 30 CFR 77.801 (relating to grounding resistors). This provision requires grounding resistors, when required, to be of the proper ohmic value to limit the voltage drop in the grounding circuit external to the resistor to no more than 100 volts under fault conditions.

Section 208.245 (relating to grounding resistors; continuous current rating) incorporates by reference 30 CFR 77.801-1 (relating to grounding resistors; continuous current rating). This provision requires the current rating of grounding resistors to meet the extended time rating in American Institute of Electrical Engineering Standard No. 32.

Section 208.246 (relating to protection of high-voltage circuits; neutral grounding resistors; disconnecting devices) incorporates by reference 30 CFR 77.802 (relating to protection of high-voltage circuits; neutral grounding resistors; disconnecting devices). This provision requires high-voltage circuits supplying portable or mobile equipment to contain either a direct or derived neutral which must be grounded through a suitable resistor.

Section 208.247 (relating to fail safe ground check circuits on high-voltage resistance grounded systems) incorporates by reference 30 CFR 77.803 (relating to fail safe ground check circuits on high-voltage resistance grounded systems). This provision requires high-voltage, resistance grounded systems to include a fail safe ground check circuit or other no less effective device.

Section 208.248 (relating to fail safe ground check circuits; maximum voltage) incorporates by reference 30 CFR 77.803-1 (relating to fail safe ground check circuits; maximum voltage). This provision specifies that the maximum voltage used for ground check circuits under 30 CFR 77.803 may not exceed 96 volts.

Section 208.249 (relating to ground check systems not employing pilot check wires; approval by the Secretary of the United States Department of Labor) incorporates by reference 30 CFR 77.803-2 (relating to ground check systems not employing pilot check wires; approval by the Secretary). This provision permits approval of ground check systems not employing pilot check wires when it is determined that the system includes a fail safe design.

Section 208.250 (relating to high-voltage trailing cables; minimum design requirements) incorporates by reference 30 CFR 77.804 (relating to high-voltage trailing cables; minimum design requirements). This provision provides the minimum design requirements for high-voltage trailing cables.

Section 208.251 (relating to cable couplers and connection boxes; minimum design requirements) incorporates by reference 30 CFR 77.805 (relating to cable couplers and connection boxes; minimum design requirements). This provision provides the minimum design requirements for cable couplers and connection boxes.

Section 208.252 (relating to connection of single-phase loads) incorporates by reference 30 CFR 77.806 (relating to connection of single-phase loads). This provision requires single-phase loads to be connected phase-to-phase in resistance grounded systems.

Section 208.253 (relating to installation of high-voltage transmission cables) incorporates by reference 30 CFR 77.807 (relating to installation of high-voltage transmission cables). This provision mandates that high-voltage transmission cables shall be installed or placed to afford protection against damage.

Section 208.254 (relating to high-voltage powerlines; clearances above ground) incorporates by reference 30 CFR 77.807-1 (relating to high-voltage powerlines; clearances above ground). This provision requires high-voltage powerlines located above driveways, haulageways and railroad tracks to be installed to provide the minimum vertical clearance specified in the National Electric Safety Code. A powerline may not be installed less than 15 feet above ground.

Section 208.255 (relating to booms and masts; minimum distance from high-voltage lines) incorporates by reference 30 CFR 77.807-2 (relating to booms and masts; minimum distance from high-voltage lines). This provision specifies that booms and masts of equipment operated on the surface may not be operated within 10 feet of an overhead energized powerline.

Section 208.256 (relating to movement of equipment; minimum distance from high-voltage lines) incorporates by reference 30 CFR 77.807-3 (relating to movement of equipment; minimum distance from high-voltage lines). This provision specifies the minimum distance requirements from high-voltage powerlines for moving equipment.

Section 208.257 (relating to disconnecting devices) incorporates by reference 30 CFR 77.808 (relating to disconnecting devices). This provision requires disconnecting devices to be installed at the beginning of each branch line in a high-voltage circuit.

Section 208.258 (relating to identification of circuit breakers and disconnecting switches) incorporates by reference 30 CFR 77.809 (relating to identification of circuit breakers and disconnecting switches). This provision requires circuit breakers and disconnection switches to be labelled to show the units they control.

Section 208.259 (relating to high-voltage equipment; grounding) incorporates by reference 30 CFR 77.810 (relating to high-voltage equipment; grounding). This provision requires frames, supporting structures and enclosures of stationary, portable or mobile high-voltage equipment to be grounded.

Section 208.260 (relating to movement of portable substations and transformers) incorporates by reference 30 CFR 77.811 (relating to movement of portable substations and transformers). This provision requires portable substations and transformers to be de-energized before moving.

Low-voltage and medium-voltage alternating current

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing low-voltage and medium-voltage alternating current.

Section 208.271 (relating to low-voltage and medium-voltage circuits serving portable or mobile three-phase alternating current equipment; circuit breakers) incorporates by reference 30 CFR 77.900 (relating to low- and medium-voltage circuits serving portable or mobile three-phase alternating current equipment; circuit breakers).

Section 208.272 (relating to testing, examination and maintenance of circuit breakers; procedures) incorporates by reference 30 CFR 77.900-1 (relating to testing, examination, and maintenance of circuit breakers; procedures).

Section 208.273 (relating to testing, examination and maintenance of circuit breakers; record) incorporates by reference 30 CFR 77.900-2 (relating to testing, examination, and maintenance of circuit breakers; record).

Section 208.274 (relating to protection of low-voltage and medium-voltage three-phase circuits) incorporates by reference 30 CFR 77.901 (relating to protection of low- and medium-voltage three-phase circuits).

Section 208.275 (relating to grounding resistor; continuous current rating) incorporates by reference 30 CFR 77.901-1 (relating to grounding resistor; continuous current rating).

Section 208.276 (relating to low-voltage and medium-voltage ground check monitor circuits) incorporates by reference 30 CFR 77.902 (relating to low- and medium-voltage ground check monitor circuits).

Section 208.277 (relating to fail safe ground check circuits; maximum voltage) incorporates by reference 30 CFR 77.902-1 (relating to fail safe ground check circuits; maximum voltage).

Section 208.278 (relating to approved ground check systems not employing pilot check wires) incorporates by reference 30 CFR 77.902-2 (relating to approved ground check systems not employing pilot check wires).

Section 208.279 (relating to attachment of ground conductors and ground check wires to equipment frames; use of separate connections) incorporates by reference 30 CFR 77.902-3 (relating to attachment of ground conductors and ground check wires to equipment frames; use of separate connections).

Section 208.280 (relating to disconnecting devices) incorporates by reference 30 CFR 77.903 (relating to disconnecting devices).

Section 208.281 (relating to identification of circuit breakers) incorporates by reference 30 CFR 77.904 (relating to identification of circuit breakers).

Section 208.282 (relating to connection of single-phase loads) incorporates by reference 30 CFR 77.905 (relating to connection of single-phase loads).

Section 208.283 (relating to trailing cables supplying power to low-voltage mobile equipment; ground wires and ground check wires) incorporates by reference 30 CFR 77.906 (relating to trailing cables supplying power to low-voltage mobile equipment; ground wires and ground check wires).

Ground control

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing ground control.

Section 208.291 (relating to highwalls, pits and spoil banks; plans) incorporates by reference 30 CFR 77.1000 (relating to highwalls, pits and spoil banks; plans).

Section 208.292 (relating to filing of plan) incorporates by reference 30 CFR 77.1000-1 (relating to filing of plan).

Section 208.293 (relating to stripping; loose material) incorporates by reference 30 CFR 77.1001 (relating to stripping; loose material).

Section 208.294 (relating to box cuts; spoil material placement) incorporates by reference 30 CFR 77.1002 (relating to box cuts; spoil material placement).

Section 208.295 (relating to benches) incorporates by reference 30 CFR 77.1003 (relating to benches).

Section 208.296 (relating to ground control; inspections and maintenance; general) incorporates by reference 30 CFR 77.1004 (relating to ground control; inspection and maintenance; general).

Section 208.297 (relating to scaling highwalls; general) incorporates by reference 30 CFR 77.1005 (relating to scaling highwalls; general).

Section 208.298 (relating to highwalls; men working) incorporates by reference 30 CFR 77.1006 (relating to highwalls; men working).

Section 208.299 (relating to drilling; general) incorporates by reference 30 CFR 77.1007 (relating to drilling; general).

Section 208.300 (relating to relocation of drills; safeguards) incorporates by reference 30 CFR 77.1008 (relating to relocation of drills; safeguards).

Section 208.301 (relating to drill; operation) incorporates by reference 30 CFR 77.1009 (relating to drill; operation).

Section 208.302 (relating to collaring holes) incorporates by reference 30 CFR 77.1010 (relating to collaring holes).

Section 208.303 (relating to drill holes; guarding) incorporates by reference 30 CFR 77.1011 (relating to drill holes; guarding).

Section 208.304 (relating to jackhammers; operation; safeguards) incorporates by reference 30 CFR 77.1012 (relating to jackhammers; operation; safeguards).

Section 208.305 (relating to air drills; safeguards) incorporates by reference 30 CFR 77.1013 (relating to air drills; safeguards).

Fire protection

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing fire protection.

Section 208.311 (relating to fire protection; training and organization) incorporates by reference 30 CFR 77.1100 (relating to fire protection; training and organization).

Section 208.312 (relating to escape and evacuation; plan) incorporates by reference 30 CFR 77.1101 (relating to escape and evacuation; plan).

Section 208.313 (relating to warning signs; smoking and open flame) incorporates by reference 30 CFR 77.1102 (relating to warning signs; smoking and open flame).

Section 208.314 (relating to flammable liquids; storage) incorporates by reference 30 CFR 77.1103 (relating to flammable liquids; storage).

Section 208.315 (relating to accumulations of combustible materials) incorporates by reference 30 CFR 77.1104 (relating to accumulations of combustible materials).

Section 208.316 (relating to internal combustion engines; fueling) incorporates by reference 30 CFR 77.1105 (relating to internal combustion engines; fueling).

Section 208.317 (relating to battery-charging stations; ventilation) incorporates by reference 30 CFR 77.1106 (relating to battery-charging stations; ventilation).

Section 208.318 (relating to belt conveyors) incorporates by reference 30 CFR 77.1107 (relating to belt conveyors).

Section 208.319 (relating to firefighting equipment; requirements; general) incorporates by reference 30 CFR 77.1108 (relating to firefighting equipment; requirements; general).

Section 208.320 (relating to type and capacity of firefighting equipment) incorporates by reference 30 CFR 77.1108-1 (relating to type and capacity of firefighting equipment).

Section 208.321 (relating to quantity and location of firefighting equipment) incorporates by reference 30 CFR 77.1109 (relating to quantity and location of firefighting equipment).

Section 208.322 (relating to examination and maintenance of firefighting equipment) incorporates by reference 30 CFR 77.1110 (relating to examination and maintenance of firefighting equipment).

Section 208.323 (relating to welding, cutting and soldering; use of fire extinguisher) incorporates by reference 30 CFR 77.1111 (relating to welding, cutting, soldering; use of fire extinguisher).

Section 208.324 (relating to welding, cutting or soldering with arc or flame; safeguards) incorporates by reference 30 CFR 77.1112 (relating to welding, cutting, soldering with arc or flame; safeguards).

Maps

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing maps.

Section 208.331 (relating to mine map) incorporates by reference 30 CFR 77.1200 (relating to mine map). This provision specifies the requirements for mine maps.

Section 208.332 (relating to certification of mine maps) incorporates by reference 30 CFR 77.1201 (relating to certification of mine maps). This provision identifies certification requirements for mine maps.

Section 208.333 (relating to availability of mine map) incorporates by reference 30 CFR 77.1202 (relating to availability of mine map). This provision requires mine maps to be available for inspection.

Personnel hoisting

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing personnel hoisting.

Section 208.341 (relating to personnel hoists and elevators) incorporates by reference 30 CFR 77.1400 (relating to personnel hoists and elevators).

Section 208.342 (relating to automatic controls and brakes) incorporates by reference 30 CFR 77.1401 (relating to automatic controls and brakes).

Section 208.343 (relating to rated capacity) incorporates by reference 30 CFR 77.1402 (relating to rated capacity).

Section 208.344 (relating to maximum load; posting) relates to posting a load maximum for elevators and hoists and incorporates by reference 30 CFR 77.1402-1 (relating to maximum load; posting).

Section 208.345 (relating to daily examination of hoisting equipment) incorporates by reference 30 CFR 77.1403 (relating to daily examination of hoisting equipment).

Section 208.346 (relating to certifications and records of daily examinations) incorporates by reference 30 CFR 77.1404 (relating to certifications and records of daily examinations).

Section 208.347 (relating to operation of hoisting equipment after repairs) incorporates by reference 30 CFR 77.1405 (relating to operation of hoisting equipment after repairs).

Wire ropes

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing wire ropes.

Section 208.351 (relating to wire ropes; scope) incorporates by reference 30 CFR 77.1430 (relating to wire ropes; scope).

Section 208.352 (relating to minimum rope strength) incorporates by reference 30 CFR 77.1431 (relating to minimum rope strength).

Section 208.353 (relating to initial measurement) incorporates by reference 30 CFR 77.1432 (relating to initial measurement).

Section 208.354 (relating to examinations) incorporates by reference 30 CFR 77.1433 (relating to examinations).

Section 208.355 (relating to retirement criteria) incorporates by reference 30 CFR 77.1434 (relating to retirement criteria).

Section 208.356 (relating to load end attachments) incorporates by reference 30 CFR 77.1435 (relating to load end attachments).

Section 208.357 (relating to drum end attachment) incorporates by reference 30 CFR 77.1436 (relating to drum end attachment).

Section 208.358 (relating to end attachment retermination) incorporates by reference 30 CFR 77.1437 (relating to end attachment retermination).

Section 208.359 (relating to end attachment replacement) incorporates by reference 30 CFR 77.1438 (relating to end attachment replacement).

Loading and haulage

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing loading and haulage.

Section 208.361 (relating to loading and haulage; general) incorporates by reference 30 CFR 77.1600 (relating to loading and haulage; general).

Section 208.362 (relating to transportation of persons; restrictions) incorporates by reference 30 CFR 77.1601 (relating to transportation of persons; restrictions).

Section 208.363 (relating to trains and locomotives; authorized persons) incorporates by reference 30 CFR 77.1603 (relating to trains and locomotives; authorized persons).

Section 208.364 incorporates by reference 30 CFR 77.1604. In response to IRRC's comment, the Board deleted the modification to the prohibition of overcrowding man-trip vehicles or other conveyances, which applied the prohibition to "surface work areas of underground bituminous coal mines" to clarify that this final-form regulation is consistent with the Federal provision.

Section 208.365 (relating to loading and haulage equipment; installations) incorporates by reference 30 CFR 77.1605 (relating to loading and haulage equipment; installations).

Section 208.366 (relating to loading and haulage equipment; inspection and maintenance) incorporates by reference 30 CFR 77.1606 (relating to loading and haulage equipment; inspection and maintenance).

Section 208.367 (relating to loading and haulage equipment; operation) incorporates by reference 30 CFR 77.1607 (relating to loading and haulage equipment; operation).

Section 208.368 (relating to dumping facilities) incorporates by reference 30 CFR 77.1608 (relating to dumping facilities).

Miscellaneous

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing miscellaneous provisions from the Federal regulations.

Section 208.371 (relating to communications in work areas) incorporates by reference 30 CFR 77.1700 (relating to communications in work areas).

Section 208.372 (relating to first aid equipment; location; minimum requirements) incorporates by reference 30 CFR 77.1707 (relating to first aid equipment; location; minimum requirements).

Section 208.373 (relating to protective clothing; requirements) incorporates by reference 30 CFR 77.1710 (relating to protective clothing; requirements).

Section 208.374 (relating to distinctively colored hard hats or hard caps; identification for newly employed, inexperienced miners) incorporates by reference 30 CFR 77.1710-1 (relating to distinctively colored hard hats or hard caps; identification for newly employed, inexperienced miners).

Section 208.375 (relating to smoking prohibition) incorporates by reference 30 CFR 77.1711 (relating to smoking prohibition).

Trolley wires and trolley feeder wires

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing trolley wires and trolley feeder wires.

Section 208.381 (relating to cutout switches) incorporates by reference 30 CFR 77.1800 (relating to cutout switches).

Section 208.382 (relating to overcurrent protection) incorporates by reference 30 CFR 77.1801 (relating to overcurrent protection).

Section 208.383 (relating to devices for overcurrent protection) incorporates by reference 30 CFR 77.1801-1 (relating to devices for overcurrent protection).

Section 208.384 (relating to insulation of trolley wires, trolley feeder wires and bare signal wires; guarding of trolley wires and trolley feeder wires) incorporates by reference 30 CFR 77.1802 (relating to insulation of trolley wires, trolley feeder wires and bare signal wires; guarding of trolley wires and trolley feeder wires).

Slope and shaft sinking

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing slope and shaft sinking.

Section 208.391 incorporates by reference 30 CFR 77.1900 and clarifies that the Department, in addition to MSHA, will continue to approve plans regarding slope and shaft sinking and construction. In response to IRRC's comment, the Board changed "modification" to "addition" to clarify that this final-form regulation does not modify the language of any specific provision of the *Code of Federal Regulations*, and is not an additional requirement. The Department currently accepts for approval plans submitted to MSHA under 30 CFR 77.1900. This final-form regulation clarifies that although § 208.391 incorporates the Federal provision, the Department retains independent approval authority over these plans.

Section 208.392 (relating to compliance with approved slope and shaft sinking plans) incorporates by reference 30 CFR 77.1900-1 (relating to compliance with approved slope and shaft sinking plans).

Section 208.393 (relating to preshift and onshift inspections; reports) incorporates by reference 30 CFR 77.1901 (relating to preshift and onshift inspections; reports).

Section 208.394 (relating to methane and oxygen deficiency tests; approved devices) incorporates by reference 30 CFR 77.1901-1 (relating to methane and oxygen deficiency tests; approved devices).

Section 208.395 (relating to drilling and mucking operations) incorporates by reference 30 CFR 77.1902 (relating to drilling and mucking operations).

Section 208.396 (relating to permissible diesel-powered equipment) incorporates by reference 30 CFR 77.1902-1 (relating to permissible diesel-powered equipment).

Section 208.397 (relating to hoists and hoisting; minimum requirements) incorporates by reference 30 CFR 77.1903 (relating to hoists and hoisting; minimum requirements).

Section 208.398 (relating to communications between slope and shaft bottoms and hoist operators) incorporates by reference 30 CFR 77.1904 (relating to communications between slope and shaft bottoms and hoist operators).

Section 208.399 (relating to hoist safeguards; general) incorporates by reference 30 CFR 77.1905 (relating to hoist safeguards; general).

Section 208.400 (relating to hoists; daily inspection) incorporates by reference 30 CFR 77.1906 (relating to hoists; daily inspection).

Section 208.401 (relating to hoist construction; general) incorporates by reference 30 CFR 77.1907 (relating to hoist construction; general).

Section 208.402 (relating to hoist installations; use) incorporates by reference 30 CFR 77.1908 (relating to hoist installations; use).

Section 208.403 (relating to hoist operation; qualified hoistman) incorporates by reference 30 CFR 77.1908-1 (relating to hoist operation; qualified hoistman).

Section 208.404 (relating to explosives and blasting; use of permissible explosives and shot-firing units) incorporates by reference 30 CFR 77.1909 (relating to explosives and blasting; use of permissible explosives and shot-firing units).

Section 208.405 (relating to use of nonpermissible explosives and nonpermissible shot-firing units; approval by Health and Safety District Manager) incorporates by reference 30 CFR 77.1909-1 (relating to use of nonpermissible explosives and nonpermissible shot-firing units; approval by Health and Safety District Manager).

Section 208.406 incorporates by reference 30 CFR 77.1910 (relating to explosives and blasting; general) with a modification that operators comply with relevant provisions of Chapters 210 and 211. IRRC commented that the proposed "modification" within § 208.406 implies that the modification was an additional requirement from those in the Federal provision. The Board declines to change the language of this final-form regulation. Although § 208.406 incorporates the Federal provision, this final-form regulation clarifies that operators must still comply with the applicable Pennsylvania regulations regarding explosives and blasting.

Section 208.407 (relating to ventilation of slopes and shafts) incorporates by reference 30 CFR 77.1911 (relating to ventilation of slopes and shafts).

Section 208.408 (relating to ladders and stairways) incorporates by reference 30 CFR 77.1912 (relating to ladders and stairways).

Section 208.409 (relating to fire-resistant wood) incorporates by reference 30 CFR 77.1913 (relating to fire-resistant wood).

Section 208.410 (relating to electrical equipment) incorporates by reference 30 CFR 77.1914 (relating to electrical equipment).

Section 208.411 (relating to storage and handling of combustible materials) incorporates by reference 30 CFR 77.1915 (relating to storage and handling of combustible materials).

Section 208.412 (relating to welding, cutting and soldering; fire protection) incorporates by reference 30 CFR 77.1916 (relating to welding, cutting, and soldering; fire protection).

G. *Benefits, Costs and Compliance*

Benefits

This final-form rulemaking implements existing Federal regulations thereby making them independently enforceable in this Commonwealth. This promotes interaction between the regulated community and the Commonwealth. Furthermore, the definitions in § 208.1 improve the clarity of the regulatory scheme.

Compliance costs

This final-form rulemaking does not add compliance costs since it implements existing Federal regulations with which mining operators in this Commonwealth already comply.

Paperwork requirements

This final-form rulemaking does not generate additional paperwork because mining operators must comply with the existing Federal regulations that are implemented by this final-form rulemaking.

H. *Pollution Prevention*

The Federal Pollution Prevention Act of 1990 (42 U.S.C.A. §§ 13101—13109) establishes 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.

I. *Sunset Review*

The regulations will be reviewed in accordance with the sunset review schedule published by the Department to determine whether they effectively fulfill the goals for which they are intended.

J. *Regulatory Review*

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), on July 17, 2014, the Department submitted a copy of the notice of proposed rulemaking, published at 44 Pa.B. 5191 (August 2, 2014), to IRRC and the Chairpersons of the House and Senate Environmental Resources and Energy Committees for review and comment.

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

Under section 5.1(j.2) of the Regulatory Review Act (71 P. S. § 745.5a(j.2)), on November 10, 2015, this final-form rulemaking was deemed approved by the House and Senate Committees. Under section 5.1(e) of the Regulatory Review Act, IRRC met on November 12, 2015, and approved this final-form rulemaking.

K. *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 at 1 Pa. Code §§ 7.1 and 7.2.

(2) A public comment period was provided as required by law.

(3) These regulations do not enlarge the purpose of the proposed rulemaking published at 44 Pa.B. 5191.

(4) These regulations are necessary and appropriate for administration and enforcement of the authorizing acts identified in Section C of this order.

L. *Order*

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

(a) The regulations of the Department, 25 Pa. Code Chapter 208, are amended by amending § 208.1 and by adding §§ 208.101—208.108, 208.111—208.127, 208.131—208.147, 208.151—208.166, 208.171—208.193, 208.201—208.208, 208.211—208.233, 208.241—208.260, 208.271—208.283, 208.291—208.305, 208.311—208.324, 208.331—208.333, 208.341—208.347, 208.351—208.359, 208.361—208.368, 208.371—208.375, 208.381—208.384 and 208.391—208.412 to read as set forth in Annex A.

(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 Senate and House 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 order shall take effect immediately.

JOHN QUIGLEY,
Chairperson

(*Editor's Note*: For the text of the order of the Independent Regulatory Review Commission relating to this document, see 45 Pa.B. 6862 (November 28, 2015).)

Fiscal Note: Fiscal Note 7-488 remains valid for the final adoption of the subject regulations.

Annex A

TITLE 25. ENVIRONMENTAL PROTECTION

PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION

Subpart D. ENVIRONMENTAL HEALTH AND SAFETY

ARTICLE IV. OCCUPATIONAL HEALTH AND SAFETY

CHAPTER 208. UNDERGROUND COAL MINE SAFETY

GENERAL PROVISIONS

§ 208.1. Definitions.

The following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise:

AED—Automated external defibrillator—A portable device that uses electric shock to restore a stable heart rhythm to an individual in cardiac arrest.

Act—The Bituminous Coal Mine Safety Act (52 P. S. §§ 690-101—690-708).

Approval or *approved*—The term as defined in section 104 of the act (52 P. S. § 690-104).

Barricaded—To obstruct passage of persons, vehicles or flying materials.

Berm—A pile or mound of material capable of restraining a vehicle.

Certified or *registered*—A person certified or registered by the state in which the coal mine is located to perform duties prescribed by 30 CFR Part 77 (relating to mandatory safety standards, surface coal mines and surface work areas of underground coal mines), except that, in a state where a program of certification or registration is not provided or when the program does not meet at least minimum Federal standards established by the Secretary of the United States Department of Labor, the certification or registration shall be by the Secretary of the United States Department of Labor.

Flash point—The minimum temperature at which sufficient vapor is released by a liquid or solid to form a flammable vapor-air mixture at atmospheric pressure.

MSHA—The term as defined in section 104 of the act.

Miner—The term as defined in section 104 of the act.

NIOSH—The term as defined in section 104 of the act.

Operator—The term as defined in section 104 of the act.

Overpressure—The pressure over the background atmospheric pressure that could result from an explosion, which includes the impact of the pressure wave on an object.

psi—Pounds per square inch.

Qualified person—The term means either of the following as determined by the context of the regulation:

(i) An individual deemed qualified by the Secretary of the United States Department of Labor and designated by the operator to make tests and examinations required under 30 CFR Part 77.

(ii) An individual deemed, in accordance with the minimum requirements to be established by the Secretary of the United States Department of Labor, qualified by training, education and experience to perform electrical work, to maintain electrical equipment, and to conduct examinations and make tests of all electrical equipment.

Representative of the miners—The term as defined in section 104 of the act.

Roll protection—A framework, safety canopy or similar protection for the operator when equipment overturns.

SCSR—Self-contained self-rescue device—A type of closed-circuit, self-contained breathing apparatus approved by MSHA and NIOSH under 42 CFR Part 84 (relating to approval of respiratory protective devices) for escape only from underground mines.

Safety can—An approved container, of not over 5 gallons capacity, having a spring-closing lid and spout cover.

Trailing cable—The cable connecting portable and mobile equipment to a power source. A cable is not considered a trailing cable if it connects to equipment which is installed in a stationary location and is permanently wired.

Underground bituminous coal mine or mine—The term as defined in section 104 of the act.

QUALIFIED AND CERTIFIED PERSONS

§ 208.101. Certified person.

The provisions of 30 CFR 77.100 (relating to certified person) are incorporated by reference.

§ 208.102. Tests for methane and for oxygen deficiency; qualified person.

The provisions of 30 CFR 77.101 (relating to tests for methane and for oxygen deficiency; qualified person) are incorporated by reference.

§ 208.103. Tests for methane; oxygen deficiency; qualified person, additional requirement.

The provisions of 30 CFR 77.102 (relating to tests for methane; oxygen deficiency; qualified person, additional requirement) are incorporated by reference.

§ 208.104. Electrical work; qualified person.

The provisions of 30 CFR 77.103 (relating to electrical work; qualified person) are incorporated by reference.

§ 208.105. Repair of energized surface high-voltage lines; qualified person.

The provisions of 30 CFR 77.104 (relating to repair of energized surface high-voltage lines; qualified person) are incorporated by reference.

§ 208.106. Qualified hoistman; slope or shaft sinking operation; qualifications.

The provisions of 30 CFR 77.105 (relating to qualified hoistman; slope or shaft sinking operation; qualifications) are incorporated by reference.

§ 208.107. Records of certified and qualified persons.

The provisions of 30 CFR 77.106 (relating to records of certified and qualified persons) are incorporated by reference.

§ 208.108. Training programs.

The provisions of 30 CFR 77.107 (relating to training programs) are incorporated by reference.

SURFACE INSTALLATIONS

§ 208.111. Surface installations; general.

The provisions of 30 CFR 77.200 (relating to surface installations; general) are incorporated by reference.

§ 208.112. Methane content in surface installations.

The provisions of 30 CFR 77.201 (relating to methane content in surface installations) are incorporated by reference.

§ 208.113. Tests for methane; qualified person; use of approved device.

The provisions of 30 CFR 77.201-1 (relating to tests for methane; qualified person; use of approved device) are incorporated by reference.

§ 208.114. Methane accumulations; change in ventilation.

The provisions of 30 CFR 77.201-2 (relating to methane accumulations; change in ventilation) are incorporated by reference.

§ 208.115. Dust accumulations in surface installations.

The provisions of 30 CFR 77.202 (relating to dust accumulations in surface installations) are incorporated by reference.

§ 208.116. Use of material or equipment overhead; safeguards.

The provisions of 30 CFR 77.203 (relating to use of material or equipment overhead; safeguards) are incorporated by reference.

§ 208.117. Openings in surface installations; safeguards.

The provisions of 30 CFR 77.204 (relating to openings in surface installations; safeguards) are incorporated by reference.

§ 208.118. Travelways at surface installations.

The provisions of 30 CFR 77.205 (relating to travelways at surface installations) are incorporated by reference.

§ 208.119. Ladders; construction; installation and maintenance.

The provisions of 30 CFR 77.206 (relating to ladders; construction; installation and maintenance) are incorporated by reference.

§ 208.120. Illumination.

The provisions of 30 CFR 77.207 (relating to illumination) are incorporated by reference.

§ 208.121. Storage of materials.

The provisions of 30 CFR 77.208 (relating to storage of materials) are incorporated by reference.

§ 208.122. Surge and storage piles.

The provisions of 30 CFR 77.209 (relating to surge and storage piles) are incorporated by reference.

§ 208.123. Hoisting of materials.

The provisions of 30 CFR 77.210 (relating to hoisting of materials) are incorporated by reference.

§ 208.124. Draw-off tunnels; stockpiling and reclaiming operations; general.

The provisions of 30 CFR 77.211 (relating to draw-off tunnels; stockpiling and reclaiming operations; general) are incorporated by reference.

§ 208.125. Continuous methane monitoring device; installation and operation; automatic deenergization of electric equipment.

The provisions of 30 CFR 77.211-1 (relating to continuous methane monitoring device; installation and operation; automatic deenergization of electric equipment) are incorporated by reference.

§ 208.126. Draw-off tunnel ventilation fans; installation.

The provisions of 30 CFR 77.212 (relating to draw-off tunnel ventilation fans; installation) are incorporated by reference.

§ 208.127. Draw-off tunnel escapeways.

The provisions of 30 CFR 77.213 (relating to draw-off tunnel escapeways) are incorporated by reference.

THERMAL DRYERS

§ 208.131. Thermal dryers; general.

The provisions of 30 CFR 77.300 (relating to thermal dryers; general) are incorporated by reference.

§ 208.132. Dryer heating units; operation.

The provisions of 30 CFR 77.301 (relating to dryer heating units; operation) are incorporated by reference.

§ 208.133. Bypass stacks.

The provisions of 30 CFR 77.302 (relating to bypass stacks) are incorporated by reference.

§ 208.134. Hot gas inlet chamber dropout doors.

The provisions of 30 CFR 77.303 (relating to hot gas inlet chamber dropout doors) are incorporated by reference.

§ 208.135. Explosion release vents.

The provisions of 30 CFR 77.304 (relating to explosion release vents) are incorporated by reference.

§ 208.136. Access to drying chambers, hot gas inlet chambers and duct-work; installation and maintenance.

The provisions of 30 CFR 77.305 (relating to access to drying chambers, hot gas inlet chambers and ductwork; installation and maintenance) are incorporated by reference.

§ 208.137. Fire protection.

The provisions of 30 CFR 77.306 (relating to fire protection) are incorporated by reference.

§ 208.138. Thermal dryers; location and installation; general.

The provisions of 30 CFR 77.307 (relating to thermal dryers; location and installation; general) are incorporated by reference.

§ 208.139. Structures housing other facilities; use of partitions.

The provisions of 30 CFR 77.308 (relating to structures housing other facilities; use of partitions) are incorporated by reference.

§ 208.140. Visual check of system equipment.

The provisions of 30 CFR 77.309 (relating to visual check of system equipment) are incorporated by reference.

§ 208.141. Control stations; location.

The provisions of 30 CFR 77.309-1 (relating to control stations; location) are incorporated by reference.

§ 208.142. Control panels.

The provisions of 30 CFR 77.310 (relating to control panels) are incorporated by reference.

§ 208.143. Alarm devices.

The provisions of 30 CFR 77.311 (relating to alarm devices) are incorporated by reference.

§ 208.144. Fail safe monitoring systems.

The provisions of 30 CFR 77.312 (relating to fail safe monitoring systems) are incorporated by reference.

§ 208.145. Wet-coal feed bins; low-level indicators.

The provisions of 30 CFR 77.313 (relating to wet-coal feedbins; low-level indicators) are incorporated by reference.

§ 208.146. Automatic temperature control instruments.

The provisions of 30 CFR 77.314 (relating to automatic temperature control instruments) are incorporated by reference.

§ 208.147. Thermal dryers; examination and inspection.

The provisions of 30 CFR 77.315 (relating to thermal dryers; examination and inspection) are incorporated by reference.

SAFEGUARDS FOR MECHANICAL EQUIPMENT

§ 208.151. Mechanical equipment guards.

The provisions of 30 CFR 77.400 (relating to mechanical equipment guards) are incorporated by reference.

§ 208.152. Stationary grinding machines; protective devices.

The provisions of 30 CFR 77.401 (relating to stationary grinding machines; protective devices) are incorporated by reference.

§ 208.153. Hand-held power tools; safety devices.

The provisions of 30 CFR 77.402 (relating to hand-held power tools; safety devices) are incorporated by reference.

§ 208.154. Mobile equipment; falling object protective structures.

The provisions of 30 CFR 77.403 (relating to mobile equipment; falling object protective structures (FOPS)) are incorporated by reference.

§ 208.155. Mobile equipment; rollover protective structures.

All rubber-tired or crawler-mounted self-propelled scrapers front-end loaders, dozers, cranes, loaders and tractors, with or without attachments, at the surface work areas of underground coal mines shall be provided with rollover protective structures, in accordance with the certification requirements approved by MSHA.

§ 208.156. Seat belts.

The provisions of 30 CFR 77.403-1(g) (relating to mobile equipment; rollover protective structures (ROPS)) are incorporated by reference.

§ 208.157. Machinery and equipment; operation and maintenance.

The provisions of 30 CFR 77.404 (relating to machinery and equipment; operation and maintenance) are incorporated by reference.

§ 208.158. Performing work from a raised position; safeguards.

The provisions of 30 CFR 77.405 (relating to performing work from a raised position; safeguards) are incorporated by reference.

§ 208.159. Drive belts.

The provisions of 30 CFR 77.406 (relating to drive belts) are incorporated by reference.

§ 208.160. Power-driven pulleys.

The provisions of 30 CFR 77.407 (relating to power-driven pulleys) are incorporated by reference.

§ 208.161. Welding operations.

The provisions of 30 CFR 77.408 (relating to welding operations) are incorporated by reference.

§ 208.162. Shovels, draglines and tractors.

The provisions of 30 CFR 77.409 (relating to shovels, draglines, and tractors) are incorporated by reference.

§ 208.163. Mobile equipment; automatic warning devices.

The provisions of 30 CFR 77.410 (relating to mobile equipment; automatic warning devices) are incorporated by reference.

§ 208.164. Compressed air and boilers; general.

The provisions of 30 CFR 77.411 (relating to compressed air and boilers; general) are incorporated by reference.

§ 208.165. Compressed air systems.

The provisions of 30 CFR 77.412 (relating to compressed air systems) are incorporated by reference.

§ 208.166. Boilers.

The provisions of 30 CFR 77.413 (relating to boilers) are incorporated by reference.

ELECTRICAL EQUIPMENT—GENERAL

§ 208.171. Electric power circuits and electric equipment; de-energization.

The provisions of 30 CFR 77.500 (relating to electric power circuits and electric equipment; deenergization) are incorporated by reference.

§ 208.172. Electric distribution circuits and equipment; repair.

The provisions of 30 CFR 77.501 (relating to electric distribution circuits and equipment; repair) are incorporated by reference.

§ 208.173. Qualified person.

The provisions of 30 CFR 77.501-1 (relating to qualified person) are incorporated by reference.

§ 208.174. Electric equipment; examination, testing and maintenance.

The provisions of 30 CFR 77.502 (relating to electric equipment; examination, testing, and maintenance) are incorporated by reference.

§ 208.175. Qualified person.

The provisions of 30 CFR 77.502-1 (relating to qualified person) are incorporated by reference.

§ 208.176. Electric equipment; frequency of examination and testing.

The provisions of 30 CFR 77.502-2 (relating to electric equipment; frequency of examination and testing) are incorporated by reference.

§ 208.177. Electric conductors; capacity and insulation.

The provisions of 30 CFR 77.503 (relating to electric conductors; capacity and insulation) are incorporated by reference.

§ 208.178. Electric conductors.

The provisions of 30 CFR 77.503-1 (relating to electric conductors) are incorporated by reference.

§ 208.179. Electrical connections or splices; suitability.

The provisions of 30 CFR 77.504 (relating to electrical connections or splices; suitability) are incorporated by reference.

§ 208.180. Cable fittings; suitability.

The provisions of 30 CFR 77.505 (relating to cable fittings; suitability) are incorporated by reference.

§ 208.181. Electric equipment and circuits; overload and short-circuit protection.

The provisions of 30 CFR 77.506 (relating to electric equipment and circuits; overload and short-circuit protection) are incorporated by reference.

§ 208.182. Electric equipment and circuits; overload and short-circuit protection; minimum requirements.

The provisions of 30 CFR 77.506-1 (relating to electric equipment and circuits; overload and short circuit protection; minimum requirements) are incorporated by reference.

§ 208.183. Electric equipment; switches.

The provisions of 30 CFR 77.507 (relating to electric equipment; switches) are incorporated by reference.

§ 208.184. Lightning arresters; ungrounded and exposed power conductors and telephone wires.

The provisions of 30 CFR 77.508 (relating to lightning arresters, ungrounded and exposed power conductors and telephone wires) are incorporated by reference.

§ 208.185. Lightning arresters; wires entering buildings.

The provisions of 30 CFR 77.508-1 (relating to lightning arresters; wires entering buildings) are incorporated by reference.

§ 208.186. Transformers; installation and guarding.

The provisions of 30 CFR 77.509 (relating to transformers; installation and guarding) are incorporated by reference.

§ 208.187. Resistors; location and guarding.

The provisions of 30 CFR 77.510 (relating to resistors; location and guarding) are incorporated by reference.

§ 208.188. Danger signs at electrical installations.

The provisions of 30 CFR 77.511 (relating to danger signs at electrical installations) are incorporated by reference.

§ 208.189. Inspection and cover plates.

The provisions of 30 CFR 77.512 (relating to inspection and cover plates) are incorporated by reference.

§ 208.190. Insulating mats at power switches.

The provisions of 30 CFR 77.513 (relating to insulating mats at power switches) are incorporated by reference.

§ 208.191. Switchboards; passageways and clearance.

The provisions of 30 CFR 77.514 (relating to switchboards; passageways and clearance) are incorporated by reference.

§ 208.192. Bare signal or control wires; voltage.

The provisions of 30 CFR 77.515 (relating to bare signal or control wires; voltage) are incorporated by reference.

§ 208.193. Electric wiring and equipment; installation and maintenance.

The provisions of 30 CFR 77.516 (relating to electric wiring and equipment; installation and maintenance) are incorporated by reference.

TRAILING CABLES

§ 208.201. Trailing cables; short-circuit protection; disconnecting devices.

The provisions of 30 CFR 77.600 (relating to trailing cables; short-circuit protection; disconnecting devices) are incorporated by reference.

§ 208.202. Trailing cables or portable cables; temporary splices.

The provisions of 30 CFR 77.601 (relating to trailing cables or portable cables; temporary splices) are incorporated by reference.

§ 208.203. Permanent splicing of trailing cables.

The provisions of 30 CFR 77.602 (relating to permanent splicing of trailing cables) are incorporated by reference.

§ 208.204. Clamping of trailing cables to equipment.

The provisions of 30 CFR 77.603 (relating to clamping of trailing cables to equipment) are incorporated by reference.

§ 208.205. Protection of trailing cables.

The provisions of 30 CFR 77.604 (relating to protection of trailing cables) are incorporated by reference.

§ 208.206. Breaking trailing cable and power cable connections.

The provisions of 30 CFR 77.605 (relating to breaking trailing cable and power cable connections) are incorporated by reference.

§ 208.207. Energized trailing cables; handling.

The provisions of 30 CFR 77.606 (relating to energized trailing cables; handling) are incorporated by reference.

§ 208.208. Rubber gloves; minimum requirements.

The provisions of 30 CFR 77.606-1 (relating to rubber gloves; minimum requirements) are incorporated by reference.

GROUNDING

§ 208.211. Grounding metallic sheaths, armors and conduits enclosing power conductors.

The provisions of 30 CFR 77.700 (relating to grounding metallic sheaths, armors, and conduits enclosing power conductors) are incorporated by reference.

§ 208.212. Approved methods of grounding.

The provisions of 30 CFR 77.700-1 (relating to approved methods of grounding) are incorporated by reference.

§ 208.213. Grounding metallic frames, casings and other enclosures of electric equipment.

The provisions of 30 CFR 77.701 (relating to grounding metallic frames, casings, and other enclosures of electric equipment) are incorporated by reference.

§ 208.214. Approved methods of grounding of equipment receiving power from ungrounded alternating current power systems.

The provisions of 30 CFR 77.701-1 (relating to approved methods of grounding of equipment receiving power from ungrounded alternating current power systems) are incorporated by reference.

§ 208.215. Approved methods of grounding metallic frames, casings and other enclosures of electric equipment receiving power from a direct-current power system.

The provisions of 30 CFR 77.701-2 (relating to approved methods of grounding metallic frames, casings, and other enclosures of electric equipment receiving power from a direct-current power system) are incorporated by reference.

§ 208.216. Grounding wires; capacity.

The provisions of 30 CFR 77.701-3 (relating to grounding wires; capacity) are incorporated by reference.

§ 208.217. Use of grounding connectors.

The provisions of 30 CFR 77.701-4 (relating to use of grounding connectors) are incorporated by reference.

§ 208.218. Protection other than grounding.

The provisions of 30 CFR 77.702 (relating to protection other than grounding) are incorporated by reference.

§ 208.219. Grounding frames of stationary high-voltage equipment receiving power from ungrounded delta systems.

The provisions of 30 CFR 77.703 (relating to grounding frames of stationary high-voltage equipment receiving power from ungrounded delta systems) are incorporated by reference.

§ 208.220. Approved methods of grounding.

The provisions of 30 CFR 77.703-1 (relating to approved methods of grounding) are incorporated by reference.

§ 208.221. Work on high-voltage lines; de-energizing and grounding.

The provisions of 30 CFR 77.704 (relating to work on high-voltage lines; deenergizing and grounding) are incorporated by reference.

§ 208.222. Work on high-voltage lines.

The provisions of 30 CFR 77.704-1 (relating to work on high-voltage lines) are incorporated by reference.

§ 208.223. Repairs to energized high-voltage lines.

The provisions of 30 CFR 77.704-2 (relating to repairs to energized high-voltage lines) are incorporated by reference.

§ 208.224. Work on energized high-voltage surface lines; reporting.

The provisions of 30 CFR 77.704-3 (relating to work on energized high-voltage surface lines; reporting) are incorporated by reference.

§ 208.225. Simultaneous repairs.

The provisions of 30 CFR 77.704-4 (relating to simultaneous repairs) are incorporated by reference.

§ 208.226. Installation of protective equipment.

The provisions of 30 CFR 77.704-5 (relating to installation of protective equipment) are incorporated by reference.

§ 208.227. Protective clothing; use and inspection.

The provisions of 30 CFR 77.704-6 (relating to protective clothing; use and inspection) are incorporated by reference.

§ 208.228. Protective equipment; inspection.

The provisions of 30 CFR 77.704-7 (relating to protective equipment; inspection) are incorporated by reference.

§ 208.229. Protective equipment; testing and storage.

The provisions of 30 CFR 77.704-8 (relating to protective equipment; testing and storage) are incorporated by reference.

§ 208.230. Operating disconnecting or cutout switches.

The provisions of 30 CFR 77.704-9 (relating to operating disconnecting or cutout switches) are incorporated by reference.

§ 208.231. Tying into energized high-voltage surface circuits.

The provisions of 30 CFR 77.704-10 (relating to tying into energized high-voltage surface circuits) are incorporated by reference.

§ 208.232. Use of grounded messenger wires; ungrounded systems.

The provisions of 30 CFR 77.704-11 (relating to use of grounded messenger wires; ungrounded systems) are incorporated by reference.

§ 208.233. Guy wires; grounding.

The provisions of 30 CFR 77.705 (relating to guy wires; grounding) are incorporated by reference.

SURFACE HIGH-VOLTAGE DISTRIBUTION

§ 208.241. High-voltage circuits; circuit breakers.

The provisions of 30 CFR 77.800 (relating to high-voltage circuits; circuit breakers) are incorporated by reference.

§ 208.242. Testing, examination and maintenance of circuit breakers; procedures.

The provisions of 30 CFR 77.800-1 (relating to testing, examination, and maintenance of circuit breakers; procedures) are incorporated by reference.

§ 208.243. Testing, examination and maintenance of circuit breakers; record.

The provisions of 30 CFR 77.800-2 (relating to testing, examination, and maintenance of circuit breakers; record) are incorporated by reference.

§ 208.244. Grounding resistors.

The provisions of 30 CFR 77.801 (relating to grounding resistors) are incorporated by reference.

§ 208.245. Grounding resistors; continuous current rating.

The provisions of 30 CFR 77.801-1 (relating to grounding resistors; continuous current rating) are incorporated by reference.

§ 208.246. Protection of high-voltage circuits; neutral grounding resistors; disconnecting devices.

The provisions of 30 CFR 77.802 (relating to protection of high-voltage circuits; neutral grounding resistors; disconnecting devices) are incorporated by reference.

§ 208.247. Fail safe ground check circuits on high-voltage resistance grounded systems.

The provisions of 30 CFR 77.803 (relating to fail safe ground check circuits on high-voltage resistance grounded systems) are incorporated by reference.

§ 208.248. Fail safe ground check circuits; maximum voltage.

The provisions of 30 CFR 77.803-1 (relating to fail safe ground check circuits; maximum voltage) are incorporated by reference.

§ 208.249. Ground check systems not employing pilot check wires; approval by the Secretary of the United States Department of Labor.

The provisions of 30 CFR 77.803-2 (relating to ground check systems not employing pilot check wires; approval by the Secretary) are incorporated by reference.

§ 208.250. High-voltage trailing cables; minimum design requirements.

The provisions of 30 CFR 77.804 (relating to high-voltage trailing cables; minimum design requirements) are incorporated by reference.

§ 208.251. Cable couplers and connection boxes; minimum design requirements.

The provisions of 30 CFR 77.805 (relating to cable couplers and connection boxes; minimum design requirements) are incorporated by reference.

§ 208.252. Connection of single-phase loads.

The provisions of 30 CFR 77.806 (relating to connection of single-phase loads) are incorporated by reference.

§ 208.253. Installation of high-voltage transmission cables.

The provisions of 30 CFR 77.807 (relating to installation of high-voltage transmission cables) are incorporated by reference.

§ 208.254. High-voltage powerlines; clearances above ground.

The provisions of 30 CFR 77.807-1 (relating to high-voltage powerlines; clearances above ground) are incorporated by reference.

§ 208.255. Booms and masts; minimum distance from high-voltage lines.

The provisions of 30 CFR 77.807-2 (relating to booms and masts; minimum distance from high-voltage lines) are incorporated by reference.

§ 208.256. Movement of equipment; minimum distance from high-voltage lines.

The provisions of 30 CFR 77.807-3 (relating to movement of equipment; minimum distance from high-voltage lines) are incorporated by reference.

§ 208.257. Disconnecting devices.

The provisions of 30 CFR 77.808 (relating to disconnecting devices) are incorporated by reference.

§ 208.258. Identification of circuit breakers and disconnecting switches.

The provisions of 30 CFR 77.809 (relating to identification of circuit breakers and disconnecting switches) are incorporated by reference.

§ 208.259. High-voltage equipment; grounding.

The provisions of 30 CFR 77.810 (relating to high-voltage equipment; grounding) are incorporated by reference.

§ 208.260. Movement of portable substations and transformers.

The provisions of 30 CFR 77.811 (relating to movement of portable substations and transformers) are incorporated by reference.

LOW-VOLTAGE AND MEDIUM-VOLTAGE ALTERNATING CURRENT

§ 208.271. Low-voltage and medium-voltage circuits serving portable or mobile three-phase alternating current equipment; circuit breakers.

The provisions of 30 CFR 77.900 (relating to low- and medium-voltage circuits serving portable or mobile three-phase alternating current equipment; circuit breakers) are incorporated by reference.

§ 208.272. Testing, examination and maintenance of circuit breakers; procedures.

The provisions of 30 CFR 77.900-1 (relating to testing, examination, and maintenance of circuit breakers; procedures) are incorporated by reference.

§ 208.273. Testing, examination and maintenance of circuit breakers; record.

The provisions of 30 CFR 77.900-2 (relating to testing, examination, and maintenance of circuit breakers; record) are incorporated by reference.

§ 208.274. Protection of low-voltage and medium-voltage three-phase circuits.

The provisions of 30 CFR 77.901 (relating to protection of low- and medium-voltage three-phase circuits) are incorporated by reference.

§ 208.275. Grounding resistor; continuous current rating.

The provisions of 30 CFR 77.901-1 (relating to grounding resistor; continuous current rating) are incorporated by reference.

§ 208.276. Low-voltage and medium-voltage ground check monitor circuits.

The provisions of 30 CFR 77.902 (relating to low- and medium-voltage ground check monitor circuits) are incorporated by reference.

§ 208.277. Fail safe ground check circuits; maximum voltage.

The provisions of 30 CFR 77.902-1 (relating to fail safe ground check circuits; maximum voltage) are incorporated by reference.

§ 208.278. Approved ground check systems not employing pilot check wires.

The provisions of 30 CFR 77.902-2 (relating to approved ground check systems not employing pilot check wires) are incorporated by reference.

§ 208.279. Attachment of ground conductors and ground check wires to equipment frames; use of separate connections.

The provisions of 30 CFR 77.902-3 (relating to attachment of ground conductors and ground check wires to equipment frames; use of separate connections) are incorporated by reference.

§ 208.280. Disconnecting devices.

The provisions of 30 CFR 77.903 (relating to disconnecting devices) are incorporated by reference.

§ 208.281. Identification of circuit breakers.

The provisions of 30 CFR 77.904 (relating to identification of circuit breakers) are incorporated by reference.

§ 208.282. Connection of single-phase loads.

The provisions of 30 CFR 77.905 (relating to connection of single-phase loads) are incorporated by reference.

§ 208.283. Trailing cables supplying power to low-voltage mobile equipment; ground wires and ground check wires.

The provisions of 30 CFR 77.906 (relating to trailing cables supplying power to low-voltage mobile equipment; ground wires and ground check wires) are incorporated by reference.

GROUND CONTROL

§ 208.291. Highwalls, pits and spoil banks; plans.

The provisions of 30 CFR 77.1000 (relating to highwalls, pits and spoil banks; plans) are incorporated by reference.

§ 208.292. Filing of plan.

The provisions of 30 CFR 77.1000-1 (relating to filing of plan) are incorporated by reference.

§ 208.293. Stripping; loose material.

The provisions of 30 CFR 77.1001 (relating to stripping; loose material) are incorporated by reference.

§ 208.294. Box cuts; spoil material placement.

The provisions of 30 CFR 77.1002 (relating to box cuts; spoil material placement) are incorporated by reference.

§ 208.295. Benches.

The provisions of 30 CFR 77.1003 (relating to benches) are incorporated by reference.

§ 208.296. Ground control; inspections and maintenance; general.

The provisions of 30 CFR 77.1004 (relating to ground control; inspection and maintenance; general) are incorporated by reference.

§ 208.297. Scaling highwalls; general.

The provisions of 30 CFR 77.1005 (relating to scaling highwalls; general) are incorporated by reference.

§ 208.298. Highwalls; men working.

The provisions of 30 CFR 77.1006 (relating to highwalls; men working) are incorporated by reference.

§ 208.299. Drilling; general.

The provisions of 30 CFR 77.1007 (relating to drilling; general) are incorporated by reference.

§ 208.300. Relocation of drills; safeguards.

The provisions of 30 CFR 77.1008 (relating to relocation of drills; safeguards) are incorporated by reference.

§ 208.301. Drill; operation.

The provisions of 30 CFR 77.1009 (relating to drill; operation) are incorporated by reference.

§ 208.302. Collaring holes.

The provisions of 30 CFR 77.1010 (relating to collaring holes) are incorporated by reference.

§ 208.303. Drill holes; guarding.

The provisions of 30 CFR 77.1011 (relating to drill holes; guarding) are incorporated by reference.

§ 208.304. Jackhammers; operation; safeguards.

The provisions of 30 CFR 77.1012 (relating to jackhammers; operation; safeguards) are incorporated by reference.

§ 208.305. Air drills; safeguards.

The provisions of 30 CFR 77.1013 (relating to air drills; safeguards) are incorporated by reference.

FIRE PROTECTION

§ 208.311. Fire protection; training and organization.

The provisions of 30 CFR 77.1100 (relating to fire protection; training and organization) are incorporated by reference.

§ 208.312. Escape and evacuation; plan.

The provisions of 30 CFR 77.1101 (relating to escape and evacuation; plan) are incorporated by reference.

§ 208.313. Warning signs; smoking and open flame.

The provisions of 30 CFR 77.1102 (relating to warning signs; smoking and open flame) are incorporated by reference.

§ 208.314. Flammable liquids; storage.

The provisions of 30 CFR 77.1103 (relating to flammable liquids; storage) are incorporated by reference.

§ 208.315. Accumulations of combustible materials.

The provisions of 30 CFR 77.1104 (relating to accumulations of combustible materials) are incorporated by reference.

§ 208.316. Internal combustion engines; fueling.

The provisions of 30 CFR 77.1105 (relating to internal combustion engines; fueling) are incorporated by reference.

§ 208.317. Battery-charging stations; ventilation.

The provisions of 30 CFR 77.1106 (relating to battery-charging stations; ventilation) are incorporated by reference.

§ 208.318. Belt conveyors.

The provisions of 30 CFR 77.1107 (relating to belt conveyors) are incorporated by reference.

§ 208.319. Firefighting equipment; requirements; general.

The provisions of 30 CFR 77.1108 (relating to firefighting equipment; requirements; general) are incorporated by reference.

§ 208.320. Type and capacity of firefighting equipment.

The provisions of 30 CFR 77.1108-1 (relating to type and capacity of firefighting equipment) are incorporated by reference.

§ 208.321. Quantity and location of firefighting equipment.

The provisions of 30 CFR 77.1109 (relating to quantity and location of firefighting equipment) are incorporated by reference.

§ 208.322. Examination and maintenance of firefighting equipment.

The provisions of 30 CFR 77.1110 (relating to examination and maintenance of firefighting equipment) are incorporated by reference.

§ 208.323. Welding, cutting and soldering; use of fire extinguisher.

The provisions of 30 CFR 77.1111 (relating to welding, cutting, soldering; use of fire extinguisher) are incorporated by reference.

§ 208.324. Welding, cutting or soldering with arc or flame; safeguards.

The provisions of 30 CFR 77.1112 (relating to welding, cutting, soldering with arc or flame; safeguards) are incorporated by reference.

MAPS

§ 208.331. Mine map.

The provisions of 30 CFR 77.1200 (relating to mine map) are incorporated by reference.

§ 208.332. Certification of mine maps.

The provisions of 30 CFR 77.1201 (relating to certification of mine maps) are incorporated by reference.

§ 208.333. Availability of mine map.

The provisions of 30 CFR 77.1202 (relating to availability of mine map) are incorporated by reference.

PERSONNEL HOISTING

§ 208.341. Personnel hoists and elevators.

The provisions of 30 CFR 77.1400 (relating to personnel hoists and elevators) are incorporated by reference.

§ 208.342. Automatic controls and brakes.

The provisions of 30 CFR 77.1401 (relating to automatic controls and brakes) are incorporated by reference.

§ 208.343. Rated capacity.

The provisions of 30 CFR 77.1402 (relating to rated capacity) are incorporated by reference.

§ 208.344. Maximum load; posting.

The provisions of 30 CFR 77.1402-1 (relating to maximum load; posting) are incorporated by reference.

§ 208.345. Daily examination of hoisting equipment.

The provisions of 30 CFR 77.1403 (relating to daily examination of hoisting equipment) are incorporated by reference.

§ 208.346. Certifications and records of daily examinations.

The provisions of 30 CFR 77.1404 (relating to certifications and records of daily examinations) are incorporated by reference.

§ 208.347. Operation of hoisting equipment after repairs.

The provisions of 30 CFR 77.1405 (relating to operation of hoisting equipment after repairs) are incorporated by reference.

WIRE ROPES

§ 208.351. Wire ropes; scope.

The provisions of 30 CFR 77.1430 (relating to wire ropes; scope) are incorporated by reference.

§ 208.352. Minimum rope strength.

The provisions of 30 CFR 77.1431 (relating to minimum rope strength) are incorporated by reference.

§ 208.353. Initial measurement.

The provisions of 30 CFR 77.1432 (relating to initial measurement) are incorporated by reference.

§ 208.354. Examinations.

The provisions of 30 CFR 77.1433 (relating to examinations) are incorporated by reference.

§ 208.355. Retirement criteria.

The provisions of 30 CFR 77.1434 (relating to retirement criteria) are incorporated by reference.

§ 208.356. Load end attachments.

The provisions of 30 CFR 77.1435 (relating to load end attachments) are incorporated by reference.

§ 208.357. Drum end attachment.

The provisions of 30 CFR 77.1436 (relating to drum end attachment) are incorporated by reference.

§ 208.358. End attachment retermination.

The provisions of 30 CFR 77.1437 (relating to end attachment retermination) are incorporated by reference.

§ 208.359. End attachment replacement.

The provisions of 30 CFR 77.1438 (relating to end attachment replacement) are incorporated by reference.

LOADING AND HAULAGE

§ 208.361. Loading and haulage; general.

The provisions of 30 CFR 77.1600 (relating to loading and haulage; general) are incorporated by reference.

§ 208.362. Transportation of persons; restrictions.

The provisions of 30 CFR 77.1601 (relating to transportation of persons; restrictions) are incorporated by reference.

§ 208.363. Trains and locomotives; authorized persons.

The provisions of 30 CFR 77.1603 (relating to trains and locomotives; authorized persons) are incorporated by reference.

§ 208.364. Transportation of persons; overcrowding.

The provisions of 30 CFR 77.1604 (relating to transportation of persons; overcrowding) are incorporated by reference.

§ 208.365. Loading and haulage equipment; installations.

The provisions of 30 CFR 77.1605 (relating to loading and haulage equipment; installations) are incorporated by reference.

§ 208.366. Loading and haulage equipment; inspection and maintenance.

The provisions of 30 CFR 77.1606 (relating to loading and haulage equipment; inspection and maintenance) are incorporated by reference.

§ 208.367. Loading and haulage equipment; operation.

The provisions of 30 CFR 77.1607 (relating to loading and haulage equipment; operation) are incorporated by reference.

§ 208.368. Dumping facilities.

The provisions of 30 CFR 77.1608 (relating to dumping facilities) are incorporated by reference.

MISCELLANEOUS

§ 208.371. Communications in work areas.

The provisions of 30 CFR 77.1700 (relating to communications in work areas) are incorporated by reference.

§ 208.372. First aid equipment; location; minimum requirements.

The provisions of 30 CFR 77.1707 (relating to first aid equipment; location; minimum requirements) are incorporated by reference.

§ 208.373. Protective clothing; requirements.

The provisions of 30 CFR 77.1710 (relating to protective clothing; requirements) are incorporated by reference.

§ 208.374. Distinctively colored hard hats or hard caps; identification for newly employed, inexperienced miners.

The provisions of 30 CFR 77.1710-1 (relating to distinctively colored hard hats or hard caps; identification for newly employed, inexperienced miners) are incorporated by reference.

§ 208.375. Smoking prohibition.

The provisions of 30 CFR 77.1711 (relating to smoking prohibition) are incorporated by reference.

TROLLEY WIRES AND TROLLEY FEEDER WIRES

§ 208.381. Cutout switches.

The provisions of 30 CFR 77.1800 (relating to cutout switches) are incorporated by reference.

§ 208.382. Overcurrent protection.

The provisions of 30 CFR 77.1801 (relating to overcurrent protection) are incorporated by reference.

§ 208.383. Devices for overcurrent protection.

The provisions of 30 CFR 77.1801-1 (relating to devices for overcurrent protection) are incorporated by reference.

§ 208.384. Insulation of trolley wires, trolley feeder wires and bare signal wires; guarding of trolley wires and trolley feeder wires.

The provisions of 30 CFR 77.1802 (relating to insulation of trolley wires, trolley feeder wires and bare signal wires; guarding of trolley wires and trolley feeder wires) are incorporated by reference.

SLOPE AND SHAFT SINKING

§ 208.391. Slopes and shafts; approval of plans.

The provisions of 30 CFR 77.1900 (relating to slopes and shafts; approval of plans) are incorporated by reference, with the following addition:

The Department will approve plans relating to slope and shaft sinking and construction.

§ 208.392. Compliance with approved slope and shaft sinking plans.

The provisions of 30 CFR 77.1900-1 (relating to compliance with approved slope and shaft sinking plans) are incorporated by reference.

§ 208.393. Preshift and onshift inspections; reports.

The provisions of 30 CFR 77.1901 (relating to preshift and onshift inspections; reports) are incorporated by reference.

§ 208.394. Methane and oxygen deficiency tests; approved devices.

The provisions of 30 CFR 77.1901-1 (relating to methane and oxygen deficiency tests; approved devices) are incorporated by reference.

§ 208.395. Drilling and mucking operations.

The provisions of 30 CFR 77.1902 (relating to drilling and mucking operations) are incorporated by reference.

§ 208.396. Permissible diesel-powered equipment.

The provisions of 30 CFR 77.1902-1 (relating to permissible diesel-powered equipment) are incorporated by reference.

§ 208.397. Hoists and hoisting; minimum requirements.

The provisions of 30 CFR 77.1903 (relating to hoists and hoisting; minimum requirements) are incorporated by reference.

§ 208.398. Communications between slope and shaft bottoms and hoist operators.

The provisions of 30 CFR 77.1904 (relating to communications between slope and shaft bottoms and hoist operators) are incorporated by reference.

§ 208.399. Hoist safeguards; general.

The provisions of 30 CFR 77.1905 (relating to hoist safeguards; general) are incorporated by reference.

§ 208.400. Hoists; daily inspection.

The provisions of 30 CFR 77.1906 (relating to hoists; daily inspection) are incorporated by reference.

§ 208.401. Hoist construction; general.

The provisions of 30 CFR 77.1907 (relating to hoist construction; general) are incorporated by reference.

§ 208.402. Hoist installations; use.

The provisions of 30 CFR 77.1908 (relating to hoist installations; use) are incorporated by reference.

§ 208.403. Hoist operation; qualified hoistman.

The provisions of 30 CFR 77.1908-1 (relating to hoist operation; qualified hoistman) are incorporated by reference.

§ 208.404. Explosives and blasting; use of permissible explosives and shot-firing units.

The provisions of 30 CFR 77.1909 (relating to explosives and blasting; use of permissible explosives and shot-firing units) are incorporated by reference.

§ 208.405. Use of nonpermissible explosives and nonpermissible shot-firing units; approval by Health and Safety District Manager.

The provisions of 30 CFR 77.1909-1 (relating to use of nonpermissible explosives and nonpermissible shot-firing units; approval by Health and Safety District Manager) are incorporated by reference.

§ 208.406. Explosives and blasting; general.

The provisions of 30 CFR 77.1910 (relating to explosives and blasting; general) are incorporated by reference, with the exception of the following modification:

(b) All explosive materials, detonators and any other related blasting material employed in the development of any slope or shaft shall be stored, transported, carried, charged and fired in accordance with Chapters 210 and 211 (relating to blasters' licenses; and storage, handling and use of explosives). Except as provided in paragraph (c) of this section, all shots shall be fired from the surface.

§ 208.407. Ventilation of slopes and shafts.

The provisions of 30 CFR 77.1911 (relating to ventilation of slopes and shafts) are incorporated by reference.

§ 208.408. Ladders and stairways.

The provisions of 30 CFR 77.1912 (relating to ladders and stairways) are incorporated by reference.

§ 208.409. Fire-resistant wood.

The provisions of 30 CFR 77.1913 (relating to fire-resistant wood) are incorporated by reference.

§ 208.410. Electrical equipment.

The provisions of 30 CFR 77.1914 (relating to electrical equipment) are incorporated by reference.

§ 208.411. Storage and handling of combustible materials.

The provisions of 30 CFR 77.1915 (relating to storage and handling of combustible materials) are incorporated by reference.

§ 208.412. Welding, cutting and soldering; fire protection.

The provisions of 30 CFR 77.1916 (relating to welding, cutting, and soldering; fire protection) are incorporated by reference.

[Pa.B. Doc. No. 15-2216. Filed for public inspection December 18, 2015, 9:00 a.m.]

Title 52—PUBLIC UTILITIES

PENNSYLVANIA PUBLIC UTILITY COMMISSION

[52 PA. CODE CH. 54]

[L-2014-2421001]

Automatic Adjustment Clauses Related to Electric Default Service

The Pennsylvania Public Utility Commission (Commission), on June 11, 2015, adopted a final rulemaking order establishing a symmetrical rate of interest which will be applicable to both over and under collections resulting from the reconciliation of utilities' actual costs and revenue collected through automatic adjustment clauses regarding electric default service.

Executive Summary

On May 22, 2014, the Pennsylvania Public Utility Commission (Commission) issued an Advance Notice of Proposed Rulemaking Order (ANOPR Order) proposing to establish a symmetrical rate of interest which will be applicable to both over and under collections resulting from the reconciliation of utilities' actual costs and revenue collected through automatic adjustment clauses regarding electric default service. On October 2, 2014, the Commission issued a Proposed Rulemaking Order setting forth similar proposals. The Commission received comments in response to the May 22, 2014 ANOPR Order and the October 2, 2014 Proposed Rulemaking Order from the Office of Consumer Advocate, the Office of Small Business Advocate, the Independent Regulatory Review Commission, the Energy Association of Pennsylvania, PPL Electric Utilities Corporation, PECO Energy Company, and the Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company and West Penn Power Company.

The Commission proposed to establish a symmetrical rate of interest applicable to over and under collections resulting from reconciliation of automatic adjustment clause costs and revenues related to electric default service to better ensure that utilities' current prices reflect current costs as accurately as is feasible. Based upon our review and consideration of the comments filed in response to our May 22, 2014 ANOPR Order and the October 2, 2014 Proposed Rulemaking Order, the Commission proposes to adopt the final regulations as set forth in Annex A of the Final Rulemaking Order.

Public Meeting held
June 11, 2015

Commissioners Present: Gladys M. Brown, Chairperson; John F. Coleman, Jr., Vice Chairperson; James H. Cawley; Pamela A. Witmer; Robert F. Powelson

Automatic Adjustment Clauses Related to Electric Default Service; Doc. No. L-2014-2421001

Final Rulemaking Order

By the Commission:

On October 2, 2014, the Pennsylvania Public Utility Commission (Commission) issued a Proposed Rulemaking Order proposing to establish a symmetrical rate of interest which will be applicable to both over and under collections resulting from the reconciliation of default service providers' (DSPs) actual costs and revenue collected through automatic adjustment clauses regarding electric default service. In order to fully recover the cost of providing service, DSPs, which currently are electric distribution companies (EDCs), are permitted to utilize automatic adjustment clauses to increase or decrease rates to reflect changes in certain costs. The Commission has determined that traditional methods of reconciliation accounting could, however, cause a great deal of volatility in default service rates associated with the recovery of revenue and cost imbalances created by the use of these automatic adjustment clauses.

In order to alleviate these concerns, the Commission proposed to establish a uniform policy regarding whether interest is recoverable when reconciling costs through automatic adjustment clauses and the rate of interest that is paid or collected. Based upon our review and consideration of the comments filed by the Office of Consumer Advocate (OCA), the Independent Regulatory Review Commission (IRRC), and Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company and West Penn Power Company (collectively, the First Energy Companies), we shall adopt the final regulations as set forth in Annex A to this Order.

Background

On May 22, 2014, the Commission issued an Advance Notice of Proposed Rulemaking Order (ANOPR Order) proposing to establish a symmetrical rate of interest which will be applicable to both over and under collections resulting from the reconciliation DSPs actual costs and revenue collected through automatic adjustment clauses regarding electric default service. Based upon our review and consideration of the comments filed in response to the May 22, 2014 ANOPR Order by the OCA, the Office of Small Business Advocate, the Energy Association of Pennsylvania, PPL Electric Utilities Corporation, PECO Energy Company, and the FirstEnergy Companies, the Commission proposed the regulations set forth in the October 2, 2014 Proposed Rulemaking Order.[1]

In the October 2, 2014 Proposed Rulemaking Order, the Commission proposed to establish a symmetrical rate of interest which will be applicable to over and under collections resulting from the reconciliation of DSPs' costs and revenues resulting from automatic adjustment clauses related to electric default service. The proposed applicable rate of interest on over and under collections would be interest at the prime rate for commercial borrowing in effect on the last day of the month the over or under collection occurred, as reported in the *Wall Street Journal* (or other publically available source identified by the Commission). For example, the interest rate applied to over or under collections in the month of March would be the prime rate that was in effect on March 31 as reported in the *Wall Street Journal*.

This proposed rate of interest would be computed monthly from the month the over collection or under collection occurs to the effective month that the over collection is refunded to customers or the under collection is collected from customers. Additionally, this rate of interest would apply universally to all over and under collections reconciled through automatic adjustment clauses related to electric default service filed with the Commission pursuant to 52 Pa. Code § 54.187(b) (relating to default service rate design and the recovery of reasonable costs), including:

- Price-to-Compare (PTC)
- Hourly Pricing Default Service Rider (HPDSR)
- Transmission Service Charge (TSC)
- Generation Supply Charges 1 & 2 (GSC-1 & GSC-2)
- Generation Supply Adjustment 1, 2, 3, 4 (GSA 1, 2, 3, 4)
- Generation Supply Service Rate (GSSR)
- Default Service (DS)
- Default Service Supply (DSS)
- Generation Supply Rate (GSR)

Discussion

In response to our proposed regulations set forth in the October 2, 2014 Proposed Rulemaking Order and Annex A thereto, the Commission received comments from the OCA, First Energy Companies and IRRC. In their comments, both the OCA and the First Energy Companies generally support the Commission's proposal to establish a symmetrical rate of interest which will be applicable to over and under collections resulting from the reconciliation of electric default service rates. Specifically, the OCA commented that a "symmetric market-based approach to the application of interest might make some EDCs [DSPs] more amenable to reconciliation periods which will better serve customers and make price comparisons easier." OCA Comments at 5. Similarly, the First Energy Companies comment that "[e]stablishing symmetrical interest rates for over and under collections is equitable to both customers and EDCs [DSPs] because it provides for identical treatment." First Energy Comments at 2.

Although the First Energy Companies support the Commission's proposed application of a symmetrical rate of interest to default service reconciliations, they have a concern with the use of the prime rate for commercial borrowing as the applicable symmetrical rate of interest due to its "historical volatility."[2] First Energy Comments

[1] The comments filed in response to the ANOPR Order were considered, reviewed and discussed by the Commission in the October 2, 2014 Proposed Rulemaking Order.

[2] The OCA supports either the use of the prime rate of interest, as the Commission proposes to use, or a rate reflective of residential interest for residential customers as the rate of interest which will be applicable to over and under collections resulting from the reconciliation of electric default service rates. OCA Comments at 6.

at 2. The First Energy Companies comment that customers could be exposed to significant swings in interest rates if the prime rate of interest is symmetrically applied to default service reconciliations without providing for an "escape hatch."[3] Id. at 3. Accordingly, the First Energy Companies suggest that the Commission use a symmetrical interest rate at the legal rate of interest. Id.

As explained in the October 2, 2014 Proposed Rulemaking Order, the Commission believes that using the prime interest rate is the most appropriate rate of interest to apply to default service reconciliations as it is the rate which is most commensurate with market rates. Additionally, the prime interest rate is publicly known, available, and transparent. Further, the prime interest rate reflects the terms and risks inherent in the utility reconciliation process.

Although the Commission believes that using the prime rate of interest is most appropriate here, the Commission will slightly modify our proposed regulations to alleviate the concerns raised by the First Energy Companies (and echoed by IRRC). Specifically, we will revise our proposed regulations to provide that the applicable rate of interest on over and under collections will be interest at the prime rate for commercial borrowing, which rate shall not exceed the legal rate of interest. The Commission believes that this modification will protect customers from significant swings in interest rates and will provide the "escape hatch" the First Energy Companies have requested in the event the prime rate of interest becomes volatile in the future.

Additionally, in the October 2, 2014 Proposed Rulemaking Order, the Commission proposed to use the prime rate of interest "as reported in the *Wall Street Journal* or other publically available source identified by the Commission." In their comments, IRRC recommends deleting the phrase "or other publically available source identified by the Commission" to avoid confusion in the future. IRRC Comments at 1. Specifically, IRRC mentions that including the phrase "or other publically available source identified by the Commission" creates ambiguity as to: (1) what other rate source the Commission would contemplate in the future, (2) how notice of a different rate source would be provided, and (3) what opportunity there would be for comment prior to a change in rate source. Id. Additionally, IRRC notes that such proposed phrase technically permits a utility to choose between the *Wall Street Journal* rate "or" a new rate identified by the Commission in the future. Id.

The Commission agrees that the phrase "or other publically available source identified by the Commission" creates ambiguity in the proposed regulations and should be deleted. The Commission also agrees with IRRC that should the *Wall Street Journal* no longer be the most appropriate market index for purposes of determining the prime rate of interest in the future, the Commission can use its general powers to rescind or modify regulations pursuant to 66 Pa.C.S. §§ 501(a) and (b) in order to determine a more appropriate rate source. As such, the Commission will revise Section 54.190(c) of the proposed regulations to state as follows:

> (c) *Interest collectible on over collections and under collections.* When revenues exceed costs, the over collections shall be refunded to customers with interest. When costs exceed revenues, the under collections shall be collected from customers with interest. Interest on over collections and under collections shall be computed at the prime rate of interest for commercial banking, not to exceed the legal rate of interest, in effect on the last day of the month the over or under collection occurs, as reported in the *Wall Street Journal*.

In their comments, the First Energy Companies request that the Commission allow them to maintain their current interest charge calculation process until the new process can be "adequately transitioned, reviewed and audited."[4] First Energy Comments at 3. As set forth in the October 2, 2014 Proposed Rulemaking Order, all electric DSPs, other than the First Energy Companies, are using the interest calculation proposed by the Commission for purposes of their automatic adjustment clauses related to electric default service. Additionally, as stated in our Proposed Rulemaking Order, the Commission will only require DSPs to implement the proposed interest rate methodology commencing with the first 66 Pa.C.S. § 1307(e) reconciliation period after the effective date of any regulations adopted pursuant to this rulemaking process.

To illustrate, if the effective date of the regulations adopted by this rulemaking is December 31, 2015,[5] the First Energy Companies will not be required to transition their current interest charge calculation until the 66 Pa.C.S. § 1307(e) reconciliation period beginning June 1, 2016. At a minimum, the First Energy Companies will have six months to transition their current interest charge calculation process prior to their first 66 Pa.C.S. § 1307(e) reconciliation period following the effective date of any regulations adopted by this rulemaking. The Commission, however, estimates that such transition will merely involve changing the interest charge calculation method on the First Energy Companies' accounting spreadsheets, which will require minimal time (less than one month) to complete. As such, the First Energy Companies will have a reasonable amount of time to transition their current interest calculation practices to conform to those proposed by the Commission herein.

Although all electric DSPs, other than the First Energy Companies, are using the interest calculation proposed by the Commission, the Commission recognizes that the interest rate structure proposed herein does not currently comply with the Commission's regulations, 52 Pa. Code §§ 1.1—111.14, and/or DSPs' current tariffs regarding electric default service. Therefore, commencing with the first 66 Pa.C.S. § 1307(e) reconciliation period after the effective date of any regulations adopted pursuant to this rulemaking process, all electric DSPs must revise their tariffs and tariff riders to implement the proposed interest rate methodology set forth in Annex A of this Final Rulemaking Order.

In addition to the proposed interest rate structure set forth herein, the Commission reminds DSPs to consider filing an interim rate adjustment and/or cost reconciliation when the DSP anticipates substantial over or under collections. In fact, the Commission recognizes that such interim rate adjustments and cost reconciliations are in the public interest as they provide DSPs with a mechanism to reduce significant imbalances in over and under collections. For example, Section 69.1809(c) of the Commission's regulations regarding default service provide in relevant part that:

[3] In their comments, IRRC echoes the First Energy Companies' recommendation of providing for an "escape hatch" so that customers are not exposed to significant swings in interest rates. IRRC Comments at 2.

[4] In their comments, IRRC echoes the comments of the First Energy Companies in this regard and asks that the Commission explain how the implementation timeline for the regulations set forth in this rulemaking are reasonable. IRRC Comments at 2.

[5] As set forth on the Regulatory Analysis Form, the effective date of any final form regulations adopted by this rulemaking is estimated to be during or before the fourth quarter of 2015.

> It may be in the public interest to reconcile default service costs more frequently than at each PTC [price-to-compare] adjustment interval. The DSP [default service provider] should propose interim reconciliation prior to the next subsequent PTC adjustment interval when current monthly revenues have diverged from current monthly costs, plus any cumulative over/under recoveries, by greater than 4% since the last rate adjustment. . . . Interim reconciliation proposals should result in a PTC adjustment that will resolve cumulative under or over recoveries by the time of the next PTC adjustment interval.

52 Pa. Code § 69.1809(c).

Although the Commission cannot completely eradicate all imbalances in the amount of costs that are over and under collected, the proposed symmetrical interest rate structure set forth herein is designed to deter DSPs from inaccurately forecasting costs and sales to improperly increase interest earnings. This symmetrical application of interest to over and under collections uses the prime rate of interest which is not only commensurate with market rates, but is also publicly known, available and transparent. Overall, application of the symmetrical rate of interest, at prime rate, to over and under collections reflects the terms and risks inherent in the utility reconciliation process.

Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), on February 27, 2015, the Commission submitted a copy of the notice of proposed rulemaking, published at 45 Pa.B. 1258 (March 14, 2015), to IRRC and the Chairpersons of the House Consumer Affairs Committee and the Senate Consumer Protection and Professional Licensure Committee for review and comment.

Under section 5(c) of the Regulatory Review Act, the Commission shall submit to IRRC and the House and Senate Committees copies of comments received during the public comment period, as well as other documents when requested. In preparing the final-form rulemaking, the Commission has considered all comments from IRRC, the House and Senate Committees and the public.

Under section 5.1(j.2) of the Regulatory Review Act (71 P. S. § 745.5a(j.2)), on November 10, 2015, the final-form rulemaking was deemed approved by the House and Senate Committees. Under section 5.1(e) of the Regulatory Review Act, IRRC met on November 12, 2015, and approved the final-form rulemaking.

Conclusion

Establishing a symmetrical rate of interest applicable to over and under collections resulting from reconciliation of automatic adjustment clause costs and revenues is designed to better ensure that DSPs' current prices reflect current costs as accurately as is feasible. The Commission, therefore, formally adopts the final regulations as set forth in Annex A to this Final Rulemaking Order.

Accordingly, pursuant to its authority under sections 501, 1301, 1307 and 2804 of the Public Utility Code (66 Pa.C.S. §§ 501, 1301, 1307 and 2804) and sections 201 and 202 of the act of July 31, 1968 (P. L. 769, No. 240) (45 P. S. §§ 1201 and 1202), and the regulations promulgated thereunder at 1 Pa. Code §§ 7.1, 7.2 and 7.5; section 204(b) of the Commonwealth Attorneys Act (71 P. S. § 732.204(b)); section 5 of the Regulatory Review Act (71 P. S. § 745.5); and section 612 of The Administrative Code of 1929 (71 P. S. § 232), and the regulations promulgated thereunder at 4 Pa. Code §§ 7.231—7.234, we will adopt as final the regulations as set forth in Annex A; *Therefore*,

It Is Ordered That:

1. The regulations of the Commission, 52 Pa. Code Chapter 54, are amended by adding § 54.190 and by amending § 54.187 to read as set forth in Annex A.

2. The Secretary shall submit this order and Annex A to the Office of Attorney General for approval as to legality.

3. The Secretary shall submit this order and Annex A to the Governor's Budget Office for review of fiscal impact.

4. The Secretary shall submit this order and Annex A for review by the designated standing committees of both houses of the General Assembly, and for review and approval by the Independent Regulatory Review Commission.

5. The Secretary shall duly certify this order and Annex A with the Legislative Reference Bureau for publication in the *Pennsylvania Bulletin*.

6. These regulations shall become effective upon publication in the *Pennsylvania Bulletin*.

7. All electric default service providers must revise their tariffs and tariff riders regarding electric default service to implement the proposed interest rate methodology set forth in Annex A of this Order commencing with the first 66 Pa.C.S. § 1307(e) reconciliation period after the effective date of any regulations adopted pursuant to this rulemaking process.

8. This order and Annex A be posted on the Commission's web site.

9. A copy of this order and Annex A shall be served on the Bureau of Investigation and Enforcement, the Office of Consumer Advocate, the Office of Small Business Advocate, and all parties who commented in response to the October 2, 2014 Proposed Rulemaking Order.

10. The contact person for legal matters for this final rulemaking is Krystle J. Sacavage, Assistant Counsel, Law Bureau, (717) 787-5262. Alternate formats of this document are available to persons with disabilities and may be obtained by contacting Sherri DelBiondo, Regulatory Coordinator, Law Bureau, (717) 772-4597.

ROSEMARY CHIAVETTA,
Secretary

(*Editor's Note*: For the text of the order of the Independent Regulatory Review Commission relating to this document, see 45 Pa.B. 6862 (November 28, 2015).)

Fiscal Note: Fiscal Note 57-307 remains valid for the final adoption of the subject regulations.

Annex A

TITLE 52. PUBLIC UTILITIES

PART I. PUBLIC UTILITY COMMISSION

Subpart C. FIXED SERVICE UTILITIES

CHAPTER 54. ELECTRICITY GENERATION CUSTOMER CHOICE

Subchapter G. DEFAULT SERVICE

§ 54.187. Default service rate design and the recovery of reasonable costs.

(a) The Commission may modify contracts or disallow costs when after a hearing the party seeking recovery of the costs of a procurement plan is found to be at fault for either of the following:

(1) Not complying with the Commission-approved procurement plan.

(2) The commission of fraud, collusion or market manipulation with regard to these contracts.

(b) The costs incurred for providing default service shall be recovered on a full and current basis through a reconcilable automatic adjustment clause under 66 Pa.C.S. § 1307 (relating to sliding scale of rates; adjustments), all reasonable costs incurred under 66 Pa.C.S. § 2807(e)(3.9) (relating to duties of electric distribution companies) and a Commission-approved competitive procurement plan. The use of an automatic adjustment clause shall be subject to audit and annual review, consistent with 66 Pa.C.S. § 1307(d) and (e).

(c) Except for rates available consistent with § 54.190 (relating to universal interest applicable to over collections and under collections resulting from reconciliation of automatic adjustment clauses costs and revenues related to electric default service), a default service customer shall be offered a single rate option, which shall be identified as the PTC and displayed as a separate line item on a customer's monthly bill.

(d) The rates charged for default service may not decline with the increase in kilowatt hours of electricity used by a default service customer in a billing period.

(e) The PTC shall be designed to recover all default service costs, including generation, transmission and other default service cost elements, incurred in serving the average member of a customer class. An EDC's default service costs may not be recovered through the distribution rate. Costs currently recovered through the distribution rate, which are reallocated to the default service rate, may not be recovered through the distribution rate. The distribution rate shall be reduced to reflect costs reallocated to the default service rate.

(f) A DSP shall use an automatic energy adjustment clause, consistent with 66 Pa.C.S. § 1307 and Chapter 75 (relating to alternative energy portfolio standards), to recover all reasonable costs incurred through compliance with the Alternative Energy Portfolio Standards Act (73 P. S. §§ 1648.1—1648.8). The use of an automatic adjustment clause shall be subject to audit and annual review, consistent with 66 Pa.C.S. § 1307(d) and (e), regarding fuel cost adjustment audits and automatic adjustment reports and proceedings.

(g) The default service rate schedule must include rates that correspond to demand side response and demand side management programs, as defined in section 2 of the Alternative Energy Portfolio Standards Act (73 P. S. § 1648.2), when the Commission mandates these rates pursuant to its authority under 66 Pa.C.S. Chapter 1 (relating to general provisions).

(h) Default service rates may not be adjusted more frequently than on a quarterly basis for all customer classes with a maximum registered peak load up to 25 kW, to ensure the recovery of costs reasonably incurred in acquiring electricity at the least cost to customers over time. DSPs may propose alternative divisions of customers by maximum registered peak load to preserve existing customer classes.

(i) Default service rates shall be adjusted on a quarterly basis, or more frequently, for all customer classes with a maximum registered peak load of 25 kW to 500 kW, to ensure the recovery of costs reasonably incurred in acquiring electricity at the least cost to customers over time. DSPs may propose alternative divisions of customers by maximum registered peak load to preserve existing customer classes.

(j) Default service rates shall be adjusted on a monthly basis, or more frequently, for all customer classes with a registered peak load of equal to or greater than 500 kW to ensure the recovery of costs reasonably incurred in acquiring electricity at the least cost to customers over time. DSPs may propose alternative divisions of customers by registered peak load to preserve existing customer classes.

(k) When a supplier fails to deliver electric generation supply to a DSP, the DSP shall be responsible for acquiring replacement electric generation supply consistent with its Commission-approved contingency plan. When necessary to procure electric generation supply before the implementation of a contingency plan, a DSP shall acquire supply at the least cost to customers over time and fully recover all reasonable costs associated with this activity that are not otherwise recovered through its contract terms with the default supplier. The DSP shall follow acquisition strategies that reflect the incurrence of reasonable costs, consistent with 66 Pa.C.S. § 2807, when selecting from the various options available in these energy markets.

§ 54.190. Universal interest applicable to over collections and under collections resulting from reconciliation of automatic adjustment clauses costs and revenues related to electric default service.

(a) *General rule.* This section applies to automatic adjustment clauses related to electric default service filed with the Commission by a DSP under § 54.187(b) (relating to default service rate design and the recovery of reasonable costs).

(b) *Definitions.* The following words and terms, when used in this section, have the following meaning, unless the context clearly indicates otherwise:

Costs—The total amount of expenses, or class of expenses incurred, which is the basis of the automatic adjustment clause.

Over collection—The amount equal to revenues received under an automatic adjustment clause which exceeds the amount of costs incurred.

Revenue—The total proceeds received under the automatic adjustment clause.

Under collection—The amount equal to costs incurred under an automatic adjustment clause which exceeds the amount of revenues received.

(c) *Interest collectible on over collections and under collections.* When revenues exceed costs, the over collections shall be refunded to customers with interest. When costs exceed revenues, the under collections shall be collected from customers with interest. Interest on over collections and under collections shall be computed at the prime rate of interest for commercial banking, not to exceed the legal rate of interest, in effect on the last day of the month the over collection or under collection occurs, as reported in the *Wall Street Journal*. Interest shall be computed monthly from the month the over collection or under collection occurs to the effective month that the over collection is refunded or the under collection is collected.

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