RULES AND REGULATIONS

Title 25—ENVIRONMENTAL PROTECTION

ENVIRONMENTAL QUALITY BOARD [25 PA. CODE CHS. 88 AND 90] Coal Refuse Disposal

The Environmental Quality Board (Board) by this order amends Chapters 88 and 90 (relating to anthracite coal; and coal refuse disposal). The amendments address permitting and performance standards for coal refuse disposal operations.

This order was adopted by the Board at its meeting of April $17,\ 2001.$

A. Effective Date

These amendments will go into effect upon publication in the *Pennsylvania Bulletin* as final rulemaking.

B. Contact Persons

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C. Statutory Authority

The amendments are adopted under the authority of section 4.2 of the Surface Mining Conservation and Reclamation Act (SMCRA) (52 P. S. § 1396.4b(a)); section 3.2 of the Coal Refuse Disposal Control Act (CRDCA) (52 P. S. § 30.53b); and section 1920-A of The Administrative Code of 1929 (71 P. S. § 510-20).

D. Background and Summary

This rulemaking is necessary to update Chapters 88 and 90 to bring them into conformance with the CRDCA as amended by the act of December 7, 1994 (P. L. 808, No. 114) (Act 114). Act 114 was signed into law on December 7, 1994, and became effective on February 5, 1995.

Subsequent to Act 114 becoming law, the Department developed a supporting technical guidance document, titled "Coal Refuse Disposal—Site Selection." The technical guidance document clarified the Act 114 site selection process and outlined information needed to apply for, and receive, a stream barrier variance under section 6.1 of the CRDCA (52 P. S. § 30.56a). The technical guidance document was circulated for comment to the regulated community, Fish and Boat Commission, Game Commission, the Federal Office of Surface Mining, Reclamation and Enforcement (OSM), the United States Environmental Protection Agency (EPA), the United States Fish and Wildlife Service and the United States Army Corps of Engineers.

Prior to the development of the proposed rulemaking, the Department submitted the Act 114 amendments to OSM for approval as a program amendment. On April 22,

1998, OSM published a conditional approval of the Act 114 amendments in 63 F.R. 77 (April 22, 1998). In the conditional approval, OSM found that the word "significant" in section 6.1(h)(5) of the CRDCA, as it pertains to granting variances to the 100-foot stream buffer zone, was inconsistent with Federal law. The Department took action to address this matter by suspending implementation of the term "significant" in section 6.1(h)(5) of the CRDCA. This matter was announced at 28 Pa.B.2544 (May 30, 1998). Consequently, the proposed rulemaking regarding stream buffer zone variances was based on language communicated to the Department by OSM in its conditional approval of the Act 114 amendments. The proposed language included a requirement that each stream variance must be accompanied by a demonstration that "the activities will not cause or contribute to the violation of state or federal water quality standards, and will not adversely affect water quality and quantity, or other environmental resources of the stream." That requirement differed from the precise language of section 6.1(h)(5) of the CRDCA, which requires a demonstration that "there will be no adverse hydrologic or water quality impacts as a result of the variance." In the final-form version, § 90.49(c)(1) (relating to stream buffer zone variance) has been revised to more closely follow the statutory language by including the "as a result of the variance" phrase.

The OSM's published approval also recognized that the Department's technical guidance document had satisfied the concerns of the United States Fish and Wildlife Service regarding compliance with section 7 of the Endangered Species Act of 1973 (16 U.S.C.A. § 1536). On May 2, 1998, the Department submitted a letter to OSM outlining its approach to addressing the required conditions through rulemaking. This rulemaking includes those clarifications.

These regulatory changes were reviewed and discussed with the Mining and Reclamation Advisory Board (MRAB). The MRAB is the Department's advisory body for regulations pertaining to surface coal mining, including coal refuse disposal. A draft of the proposed rulemaking was reviewed and discussed with the MRAB's Regulation, Legislation and Technical Committee on November 17, 1999. The MRAB concurred with the proposed rulemaking at its meeting on January 6, 2000. The proposed rulemaking was adopted by the Board at its April 18, 2000, meeting and published at 30 Pa.B. 3053 (June 17, 2000). The MRAB reviewed and discussed the draft final rulemaking at meetings on January 4 and February 21, 2001. The MRAB concurred with the final rulemaking at its meeting on February 21, 2001.

The rulemaking adds § 90.5 and amends § 88.281. These sections reflect the requirements of section 4.1 of CRDCA (52 P. S. § 30.54a), which outlines a comparative analysis process for evaluating potential sites for coal refuse disposal. The CRDCA and the proposed regulations establish a two-step process for the permitting of coal refuse disposal sites. The first step is a preapplication site selection process intended to steer applicants to areas previously disturbed by mining. In the absence of previously disturbed sites, the site selection process requires an evaluation of nearby candidate sites with the goal of choosing the site that results in minimal adverse impacts. Following the Department's approval of the applicant's site selection, the applicant proceeds to the second step which involves preparing and submitting a permit appli-

cation for the selected site. Section 90.5 outlines the need to conduct the mandatory site selection step prior to applying for a permit for coal refuse disposal activities.

The rulemaking amends § 90.12 (relating to geology) to request geologic information that is needed to review a permit application for coal refuse disposal activities. The existing language in § 90.12 is borrowed from Chapter 87 (relating to surface mining of coal) and was written to gather information relating to sites where coal will be mined. The new language solicits information on surficial geology, soils and characteristics of joints and fractures. This information is more useful in evaluating sites that will be used for coal refuse disposal activities. Based on comments received from the MRAB, subsection (b) was added to the final-form regulations to address certification requirements regarding submission of geologic information.

The rulemaking adds language to § 90.13 (relating to groundwater information) regarding groundwater flow as it relates to groundwater and surface water protection, and language describing requirements relating to preventing precipitation from contacting the coal refuse during temporary cessation. Section 90.13 sets forth the requirements of section 6.1(i) of the CRDCA. Under the Act 114 amendments, all new coal refuse disposal areas must include systems to prevent adverse impacts to surface and groundwater. Section 90.13 is intended to solicit collection of the information needed to allow a complete technical evaluation of the proposed groundwater and surface water protection system.

The rulemaking adds a new § 90.49. This new section reflects section 6.1(h)(5) of the CRDCA, which gives the Department authority to grant a variance to dispose of coal refuse within 100 feet (30.48 meters) of the bank of a stream and to relocate or divert streams for the purpose of coal refuse disposal. Language is included to ensure that coal refuse disposal operations, which fall outside the scope of § 90.49, comply with the stream buffer zone provisions of § 86.102(12). Section 90.49 requires the Department to issue the variance as a written order and operators to give public notice of the application for the variance. It also requires the Department to conduct a public hearing when any person files an exception to the proposed variance.

The rulemaking adds § 90.50 and amends § 90.122. The new language outlines design and performance standards for systems to prevent adverse impacts to surface and groundwater and to prevent precipitation from contacting the coal refuse. This language reflects the requirements of section 6.1(i) of the CRDCA. The phrase ... prevent precipitation from coming into contact with the coal refuse" in § 90.50(b) is based on section 6.1(i) of the CRDCA. This statutory requirement was intended to ensure that precipitation contacting the coal refuse is kept to a minimum, thereby reducing the volume of water needing treatment after the site is closed. The system must be designed and installed in a manner that minimizes the amount of time coal refuse is exposed to precipitation. The objective is to have the system installed incrementally as refuse disposal progresses. The final system, in conjunction with the groundwater and surface water diversion systems, will result in greatly reduced postdisposal outflows.

Section 90.116a (relating to hydrologic balance: water rights and replacement) is added to provide a cross-reference to the water supply replacement provisions of the current surface mining regulations in Chapter 87. The requirement in § 87.119 (relating to hydrologic bal-

ance: water rights and replacement) applies to all surface mining activities, one of which is coal refuse disposal. These requirements have been historically used to address water supply impacts at coal refuse sites. The new regulation clarifies that coal refuse disposal site operators are required to replace water supplies that are impacted by their operations.

The rulemaking adds a new Subchapter F (relating to coal refuse disposal activities on areas with preexisting pollutional discharges) to implement section 6.2 of the CRDCA for coal refuse disposal activities on areas previously affected by mining. The CRDCA postponed implementation of the section 6.2 provisions pending the promulgation of regulations governing the use of sites with preexisting pollutional discharges. The new Subchapter F is designed to provide incentives for operators to enter, conduct coal refuse disposal activities and reclaim areas that were previously affected by coal mining activities that have pollutional discharges. The language is modeled on the existing remining incentive provisions of Chapters 87 and 88. These provisions have been in effect since 1985 and have been successful in encouraging operators to enter sites with preexisting pollutional discharges. The result has been new and innovative technology for the control and treatment of mine drainage, improvement to water quality, recovery of coal reserves that would otherwise remain unmined and reclamation of abandoned sites at operator cost instead of state cost.

At the present time, coal refuse disposal site operators who reaffect areas with existing pollutional discharges are not eligible for bond release unless they eliminate those discharges. As a result, operators typically develop coal refuse disposal operations on virgin sites. Section 6.2 of the CRDCA was intended to provide incentives to encourage operators to reclaim previously disturbed land by creating a limited exception to the existing regulations. These exceptions provide for special permits and release of bonds at areas with preexisting pollutional discharges. The new Subchapter F regulations are expected to encourage reclamation of abandoned mine lands.

Finally, the rulemaking adds Chapter 90, Subchapter G (relating to experimental practices). The Subchapter G reflects the requirements of section 6.3 of the CRDCA (52 P. S. § 30.56c). Section 90.401 (relating to general) is designed to encourage advances in coal refuse disposal practices and advances in technology that will enhance environmental protection. Federal regulations require substantial coordination during review of experimental practice applications between the State regulatory agency and OSM. Therefore, Federal counterpart language relating to experimental practices is fully incorporated by cross reference in § 90.401(b) to ensure that the language is consistent with the Federal requirements.

E. Summary of Comments and Responses on the Proposed Rulemaking and Changes Made in the Final Rulemaking

At its meeting on April 18, 2000, the Board approved publication of the proposed amendments. The proposed amendments were published at 30 Pa.B. 3053 (June 17, 2000).

Comments were accepted from June 17 to August 16, 2000. Two public hearings were held on July 19 and July 26, 2000, to accept comments regarding the proposed rulemaking. Comments were received from five parties during the course of the public comment period. Commentators included the United States Fish and Wildlife

Service, the United States Office of Surface Mining (OSM), the Game Commission, the Pennsylvania Coal Association (PCA) and the Independent Regulatory Review Commission (IRRC).

The following is a discussion of comments received on the proposed rulemaking and changes made in the finalform rulemaking.

§ 88.310 Coal refuse disposal: general requirements.

The term "test results" was inadvertently left out of § 88.310(k) of the proposed rulemaking, and has been inserted in the final version.

§ 90.1. Definitions.

One comment was received regarding the term "business necessity," which is used in §§ 88.310 and 90.167 (relating to coal refuse disposal: general requirements; and cessation of operations: temporary). Sections 88.310 and 90.167 address extensions to time limits for temporary cessation at coal refuse facilities for reasons of labor strike or business necessity. The commentator recommended that the term "business necessity" be defined in the regulations.

The Board realizes that the term "business necessity" is broad. However, there is benefit to the regulated community and to the Department in using a broad term. The term, left undefined, gives a degree of flexibility to the industry and the Commonwealth. It allows for unforeseen factors to be considered when entertaining requests for extensions based on business necessity. Therefore, the term has not been defined.

One comment was received regarding the definition of "public recreational impoundment." The commentator indicated that since the definition is taken directly from the statute, the Board should simply reference the statute.

The Board believes that repeating statutory definitions in the regulations increases the readability and clarity of the regulations. The practice serves to make the regulation more user-friendly by making definitions of important terms readily available to the reader. The definition remains in the final-form regulations.

A comment was received concerning the term "operator." The commentator pointed out that the term is used throughout the regulations, but is not defined. The commentator suggested referencing the definition of "operator" contained in the CRDCA.

The Board concurred that the term should be defined in the regulations. The suggested statutory definition has therefore been inserted in § 90.1 (relating to definitions).

Two comments were received requesting definitions of the terms "coal refuse disposal operations" and "coal refuse disposal activities."

The Board agrees that there was need for clarification. A definition of "coal refuse disposal" was added to § 90.1. The term "coal refuse disposal operations" has been deleted from § 90.49. New language has been added at § 90.49(b) to better define the subset of activities that is subject to § 86.102(12). The term "coal refuse disposal activities" is defined in § 90.301.

§ 90.5. Site selection and permitting.

One commentator suggested that § 90.5 be revised to clarify when a site selection decision is appealable. The commentator indicated that the regulation should reflect that disapproval of a selected site is a final appealable action while approval of a selected site is not.

The Board agrees with the spirit of the comment. However, clarifying language was not necessary. The site selection process outlined in § 90.5 is the prerequisite to the permitting process. Since the process continues following approval of a selected site, the approval of a site is not an appealable action. Appeals may be appropriately filed at the time of permit issuance. However, when the Department disapproves a site, the operator is precluded from moving to the next step in the process. Disapproval is therefore a final appealable action of the Department.

Additionally, the final-form regulation includes a cross reference to an existing technical guidance document that will be relied upon during the site selection process.

§ 90.12. Geology.

A commentator suggested two changes to § 90.12. One suggestion was to add the phrase "as appropriate" after requirements for test borings, geologic information and groundwater information. The second suggested change was to exclude nonuse aquifers from the description requirements.

The Board disagrees with the suggested changes. The term "as appropriate" obfuscates the regulation, where currently it is quite clear. The nonuse aquifer concept flows from Act 2 provisions of the Land Recycling and Remediation Program. However, Act 2 specifically excludes mining. Inclusion of the nonuse aquifer concept in the mining program would run counter to the current mining statutes and regulations. These statutes and regulations require that mining activities be conducted to ensure protection of the hydrologic balance, including measures to protect the quality and quantity of surface water and groundwater within the permit and adjacent areas.

The final wording of § 90.12 has been revised to include subsection (b). This revision addresses the need for certification of geologic information and was added based on comments from the MRAB.

§ 90.13. Groundwater information.

One comment was received regarding language of proposed § 90.13(2). The commentator suggested that the phrase "specific attention" was vague and that the Board consider revising this subsection to require a description of the groundwater flow system.

The Board agrees. The final-form regulation has been modified as suggested.

§ 90.49. Stream buffer zone variance.

One comment was received regarding specific wording proposed in § 90.49(c)(1). The commentator indicated that the term "coal refuse disposal activities" should be used rather than the term "coal refuse disposal."

The Board disagrees. Section 90.49 reflects provisions of section 6.1(h)(5) of the CRDCA as amended by Act 114. Section 6.1(h)(5) of the CRDCA clearly enumerates the operations that are subject to that section's variance provision. These specific operations are the disposal of coal refuse and the related stream diversions or relocations. Requests for variances for other mining operations fall under the variance provisions of § 86.102(12). Section 86.102(12) covers activities listed under the term "surface mining operations" as defined in § 86.101. A reference to § 86.102(12) was included in the proposed rulemaking in § 90.49(b). In the final-form regulation, § 90.49(c)(1) has been modified to include the phrase "as a result of the variance." This new language was added for clarification and to ensure consistency with the statute.

Two comments were received regarding the variance criteria under § 90.49(c). The commentators recommended that language regarding stream relocations and diversions be inserted. The language would then more closely track the statutory language.

The Board agrees with this recommendation, and the language has been revised as suggested.

One commentator requested that § 90.49(a) and (c) be modified to only apply to "perennial or intermittent streams." The commentator argued that the language would then be consistent with stream buffer zone provisions in §§ 86.101, 86.102 and the SMCRA.

The Board disagrees. Section 90.49 follows the statutory language of the CRDCA and will remain unchanged. Furthermore, the CRDCA buffer zone provision was amended after §§ 86.101 and 86.102 were promulgated and after the buffer zone provision of SMRCA, was enacted. Under the rules of statutory construction, the language of the CRDCA will control because it is later in time and more specific, applying only to coal refuse disposal.

One commentator argued that language should be included in § 90.49(c)(1) to explicitly state that adverse water quality impacts must be prevented downstream of the fill area, not within the reach of the stream contained within or diverted through the fill.

The Board recognizes that, as a practical matter, adverse impacts will be assessed downstream of the site's discharge. However, the regulatory language is consistent with the statutory language and will remain unchanged.

One comment addressed the need to include a reference to the Game Commission in § 90.49(c)(2)(ii). The commentator suggested that the regulation explicitly reference the Game Commission due to its obligations under the 34 Pa.C.S. (relating to the Game and Wildlife Code) to protect riparian and wetland areas.

The Board believes it is unnecessary to include the suggested reference. Section 90.49(c)(2)(ii) includes a reference to the Fish and Boat Commission because the Commission is explicitly mentioned in the statute. The Game Commission will be given an opportunity to review and comment on stream barrier variances. The existing technical guidance document covering stream barrier variances at coal refuse sites specifically directs the Department to provide the Game Commission with a copy of the variance application and to consider its comments.

One commentator suggested that § 90.49(c)(2)(ii) be revised to require the Department to consider "timely" information submitted by the Fish and Boat Commission.

The Board believes the revision is unnecessary. The Department's existing technical guidance document regarding stream buffer variances already limits the comment period to 30 days. Inclusion of the word "timely," which is not a precise term, would not improve the regulation.

One commentator noted that the phrase "coal refuse disposal operations other than coal refuse disposal," as used in § 90.49(b), was unclear.

The Board agrees. The phrase has been deleted and the subsection has been modified to clarify the subset of activities that are subject to the stream buffer zone provisions in § 86.102(12). Additionally, the term "coal refuse disposal," which is part of the new language inserted in the final-form version of § 90.49(b), has been defined in § 90.1.

One commentator noted that it is unclear how an operator can make the demonstration, required by $\S 90.49(c)(1)$, that "coal refuse disposal will not adversely affect water quality and quantity..." The commentator suggested that the final-form regulation include the criteria the Department will use to judge if an operator has made an adequate demonstration.

The Board believes the broad statutory language used in § 90.49(c)(1) is sufficient. The broad language allows Department technical staff the flexibility to consider site-specific factors when assessing stream buffer zone proposals and mitigation plans. Permits issued under the CRDCA are conditioned to maintain downstream uses.

Minor modifications were also made to § 90.40(a) and (c)(3) at final rulemaking for clarity.

§ 90.50. Groundwater and surface water protection systems.

One comment was received regarding \S 90.50(c). The commentator questioned the meaning of the phrase "other physical or chemical process." Additionally, the comment focused on the vagueness of the phrase "particular attention."

The Board agrees that the subsection needed to be improved. The final-form version of § 90.50(c) has been revised. The term "particular attention" has been deleted, and examples of processes that could potentially deteriorate groundwater and surface water protection systems have been included.

§ 90.116a. Hydrologic balance: water rights and replacement.

Language in § 90.116a was modified at final rule-making to incorporate the newly defined terms in § 90.1, including "operator" and "coal refuse disposal."

§ 90.122. Coal refuse disposal.

Language was added at final rulemaking to address the MRAB's comments that the proposed language could be misinterpreted to require that all coal refuse be sheltered from precipitation during the operational life of the disposal area.

Subchapter E. Site Selection.

§ 90.201. Definitions.

One commentator recommended that the definition of "search area" under § 90.201 be modified to require that the delineated area be entirely within Commonwealth boundaries. The argument was made that an operator could intentionally exclude preferred sites in this Commonwealth by locating large portions of the search area in adjacent states.

The Board believes this change is unnecessary. The CRDCA does not limit the search area to this Commonwealth. The Department will have the final say on the configuration of the 25-mile search area. In circumstances where an applicant has designed the search area to deliberately exclude preferred sites, the Department will require the search area to be reconfigured.

One comment addressed the fact that the proposed definition of "search area" contained a substantive provision better suited for inclusion in § 90.202, relating to general requirements.

The Board decided to move the last sentence of the definition, which contains the substantive provision, to \S 90.202(b).

One comment was received regarding the definition of "preferred site" under § 90.201. The commentator pointed out that the definition does not include specific criteria for determinations regarding preferred sites.

The Board finds that additional criteria are not needed in the regulation. The Department's existing technical guidance, titled "Coal Refuse Disposal—Site Selection," contains criteria for identifying preferred sites. Considerations such as in-stream water quality, length of polluted stream segment and the percent of disturbed land in relation to the size of the watershed are addressed. While not absolutes, these criteria serve as a guide to operators and Department staff conducting "preferred site" assessments.

§ 90.202. General requirements.

Two comments were received regarding the proposed language in § 90.202(c)(2) limiting coal refuse disposal at sites "likely to contain" Federally listed threatened or endangered plants or animals. One commentator argued that restricting sites which are "known to contain" listed species is consistent with the CRDCA and fully complies with the Federal statutes and regulations, because consultation and concurrence are required where those species are known to exist, and where their continued existence may therefore be jeopardized. In contrast to the clear language of the CRDCA, the proposed language contains no standard for determining whether a site is "likely to contain" an endangered or threatened species. The second commentator pointed out that the "likely to contain" language is inconsistent with the enabling statute. Both commentators recommended that the "likely to contain" phrase be deleted.

The Board has determined there is no need to reference sites that are "likely to contain" threatened or endangered species in § 90.202(c)(2). The language regarding sites that are "likely to contain" threatened or endangered species was originally included to address a concern raised by OSM in regard to the Department's technical guidance on coal refuse disposal site selection. In response to a recent Department inquiry, OSM found that the requirement to consider sites that are likely to contain threatened or endangered species is not needed in § 90.202(c)(2) because the requirement currently exists in § 90.18. Accordingly, the "likely to contain" phrase has been deleted from § 90.202(c)(2).

One commentator suggested revising § 90.202(a) to restrict information gathered to make the required preferred site demonstration to "reasonably available data."

The Board did not adopt this recommendation. The proposed regulatory language follows the statutory language. The considerations regarding "reasonably available data" only come into play after the preferred site issue had been resolved under section 4.1(a) of the CRDCA.

One comment was received regarding the evaluation criteria concerning review of an alternate site versus an existing preferred site. The commentator points to the different criteria spelled out in §§ 90.202 and 90.204 as proof of an inconsistent approach to assessing alternate and preferred sites.

The Board disagrees with the underlying premise of the comment. The criteria reflected in the regulations is consistent with the statutory intent. Section 4.1 of the CRDCA requires certain criteria to be considered when evaluating preferred versus alternate sites. The criteria under § 90.202(a) reflects section 4.1(a) of the CRDCA and is to be used to evaluate an applicant's demonstration that an alternate site is more suitable than a

preferred site. Section 90.204 is designed to reflect section 4.1(c) and (d) of the CRDCA, which addresses circumstances where an applicant is comparing various alternate sites. Section 90.204 comes into play when a preferred site does not exist within the search area or when the applicant has already made the demonstration, required under § 90.202(a), that an alternate site is more suitable. In the final-form rulemaking, the phrase "using criteria in § 90.202(a)" has been added for clarity in § 90.204(a)(1).

One commentator suggested deleting the phrase "unless it is a preferred site" from § 90.202(d). The commentator argues that the language allows the Department to minimize important environmental factors, such as exceptional value wetlands, wetlands and State listed threatened or endangered species for sites that meet the preferred site definition.

The Board did not accept this recommendation. Section 4.1(a) and (b) of the CRDCA explicitly address criteria for preferred sites. Section 4.1(b) of the CRDCA exempts preferred sites from the absolute exclusions listed under § 90.202(d). Regardless of the site's status as alternate or preferred, the regulations and CRDCA require that a site can only be approved when the adverse environmental impacts will not clearly outweigh the public benefits. Additionally, the wetland encroachment issues will be addressed during the permitting process, which requires a detailed site assessment following the site selection process.

A commentator noted that language in § 90.202(e) unnecessarily deviates from its statutory counterpart language.

To more closely track the statute, the Board has revised language in § 90.202(e).

One commentator pointed out that § 90.202(c)(2) appears to be inconsistent with section 4.1(b) of the CRDCA in that it allows the approval of coal refuse disposal on nonpreferred sites known to contain the Federally listed species when the Department concludes and the USFWS concurs that the proposed use of the site would be unlikely to adversely affect these species. The commentator noted that section 4.1(b) of the CRDCA provides an absolute prohibition for using nonpreferred sites for refuse disposal on sites known to contain Federal threatened or endangered plants or animals or State threatened or endangered animals. Additionally, the commentator observed that § 90.202(c)(2) does not contain the complete text of the Department's technical guidance, titled "Coal Refuse Disposal—Site Selection," regarding restrictions at sites containing Federally listed threatened or endangered species.

The Board concurs with the comments. Section 90.202(c)(2) was inadvertently misplaced and has been moved to § 90.202(e)(7). The missing portion of the text in the technical guidance language, "... or result in the take of Federally listed threatened or endangered species in violation of section 9 of the Endangered Species Act of 1973," has been added to the new § 90.202(e)(7).

One commentator pointed out that $\S 90.202(d)(3)$ is inconsistent with section 4.1(b) of the CRDCA. The paragraph refers to State threatened or endangered plants; the statute does not.

The Board concurs with the comment. The reference to State threatened or endangered plants has been deleted from § 90.202(e)(3) in the final rulemaking.

Section 90.202(b) has been expanded due to the inclusion of language moved from the definition of the term "search area" in § 90.201.

§ 90.203. Proposing a preferred site.

One comment was received indicating that § 90.203 should be deleted since it reiterates the requirements in § 90.202.

The Board disagrees that \S 90.203 simply reiterates the requirements of \S 90.202. Section 90.203 implements section 4.1(a)(5) of the CRDCA. Section 90.202 implements section 4.1(c) and (d) of the CRDCA.

§ 90.205. Alternatives analysis.

One commentator argued that § 90.205, as written, circumvents the alternatives analysis required by Chapter 105 (relating to dam safety and waterway management).

The commentator did not make a recommendation for changing the wording of § 90.205. Regardless, the Board sees little room for change. Section 90.205 tracks the exact language of section 4.1(e) of the statute. The Act 114 revisions to the CRDCA do address Chapter 105 requirements. Section 4.1(e) of the CRDCA explicitly states that the alternatives analysis outlined under section 4.1 of the CRDCA satisfies the requirement for an alternatives analysis under the Dam Safety and Encroachments Act (32 P. S. §§ 693.1—693.27).

Subchapter F. Coal Refuse Disposal Activities on Areas with Preexisting Pollutional Discharges

§ 90.302. Definitions.

One commentator recommended simply cross referencing the definitions of "actual improvement," "coal refuse disposal activities" and "pollution abatement area" since they are taken directly from the statute.

As stated previously, the Board believes that repeating statutory definitions in the regulations increases the readability and clarity of the regulations. The practice serves to make the regulation more user-friendly by making definitions of important terms readily available to the reader.

§ 90.303. Applicability.

Two commentators pointed out that § 90.303(a) differs from the statutory language for no clear reason. They recommended revising the subsection to include the statutory language.

The Board agrees that the language should mirror the statute where possible. Section 90.303(a) has been revised as suggested.

§ 90.304. Application for authorization.

One commentator questioned the criteria the Department will use to determine the "other water quality parameters. . ." outlined under $\S 90.304(a)(2)(ii)$.

The Board does not feel any revision is needed. Additional water quality parameters may need to be assessed if warranted based on site-specific knowledge regarding historical uses or problems at a given mine site. The operator will be made aware of additional monitoring requirements during the review of the permit application.

§ 90.306. Operational requirements.

One comment was received indicating that § 90.306(a)(4) should be revised to delete the requirement that the operator provide a notarized statement regarding the progress of the abatement plan.

The Board concurs. The requirement to submit a notarized statement has been deleted.

§ 90.309. Criteria and schedule for release of bonds on pollution abatement areas.

One comment was received regarding the inclusion of the term "planting" in both § 90.309(a)(2) and (b)(1).

The Board has determined that the term should be limited to $\S 90.309(b)(1)$. The term was inadvertently included in $\S 90.309(a)(2)$ and has been deleted in the final-form version.

F. Benefits, Costs and Compliance

Executive Order 1996-1 requires a cost/benefit analysis of the final-form regulations. The final-form regulations should result in substantial benefits to the Commonwealth. Although costs and benefits cannot be calculated with precision, the Department has developed some estimates that provide a means of gauging the significance of these regulations. The benefits and costs are as follows: Benefits

This rulemaking benefits the regulated community, Department staff and the public by providing a more detailed outline of the requirements under Act 114. This clarification of the statute directly benefits approximately 26 coal refuse disposal site operators who are potential applicants for coal refuse disposal permits.

The site selection provisions of the regulations are designed to steer operators who are evaluating prospective coal refuse disposal sites to areas previously disturbed by mining. The regulations are also designed to minimize the total number of disposal sites. The limited number of sites serves to minimize the likelihood of citizens being exposed to the effects of coal refuse disposal. To make the use of sites with preexisting discharges more palatable to operators, Act 114 included provisions for modified discharge limits and alternative reclamation standards. Unlike the other sections of Act 114, these provisions were not self-implementing. They are contingent on this rulemaking. This final-form rulemaking will therefore fulfill the intent of Act 114.

Sites reclaimed by operators as a result of Subchapter F incentives will reduce the Commonwealth's abandoned mine reclamation obligation. Prior to the Act 114 amendment to the CRDCA, operators were exposed to potentially unlimited liability for treatment of preexisting discharges that would remain after coal refuse disposal was complete. This potential liability has discouraged operators from reentering sites and thus limited the amount of operator reclamation. The regulations will result in a reduction of water pollution from areas that have been previously mined, will lead to additional reclamation of areas that have been previously mined, and will benefit the Commonwealth and landowners by promoting the reuse of previously disturbed areas as opposed to virgin sites.

The site-selection provisions of Subchapter E in conjunction with surface and groundwater protection systems, will result in improved water quality and disposal of coal refuse at the most environmentally suitable site available.

The experimental practice provisions outlined in Subchapter G will enable operators to develop more cost effective coal refuse disposal methods.

Compliance Costs

Subchapter F will impose additional site characterization costs. If operators choose to use sites with preexisting discharges, they will bear slightly higher costs in preparing permit applications than they would incur for other permit applications. Costs will be related to the development of abatement plans, as well as implementation of the abatement plans and certification of completion of those plans. Costs will vary based on the number of discharges and the degree of pollution at the site as well as the technology needed to achieve a predicted improvement. Costs for characterization of discharge quality and quantity are estimated to be approximately \$500 per discharge. These additional costs will only come into play in cases where operators perceive that the economic benefits for disposing of coal refuse in an area previously affected by mining outweigh the additional costs required to characterize the preexisting discharges.

Subchapter E provisions mirror the self-implementing provisions of Act 114. The regulated industry has been complying with the requirements since Act 114 became effective in 1995. The additional up-front site characterization and alternatives analysis required by Act 114 and proposed Subchapter E can result in significant costs to the operator (\$50,000—\$70,000 per site).

Act 114 and the final-form regulations require coal refuse disposal sites to incorporate systems to prevent adverse impacts to surface and groundwater and to prevent precipitation from contacting the coal refuse. The regulated community has been following these selfimplementing Act 114 provisions since 1995. The finalform regulations do not add new requirements beyond those in the statute. The final-form regulations covering the types of systems to be installed is not prescriptive; therefore, the costs related to design and construction can vary considerably depending on the systems proposed. However, the costs of designing and installing systems at large coal refuse disposal sites may be substantial. The economic impact is partly mitigated due to the limited number of anticipated sites. Additionally, since the required systems will reduce groundwater and surface water recharge to the coal refuse pile, the costs will be offset by the long-term savings realized due to reduced water treatment costs.

Compliance Assistance Plan

There is no compliance assistance plan specifically designed to assist coal refuse disposal applicants. The limited number of expected applications allows the Department the opportunity to provide customized technical assistance on each application.

Paperwork Requirements

Act 114 was largely self-implementing; therefore, the reporting and recordkeeping have been absorbed into the regulatory program over the past 5 years. Subchapter F imposes no additional paperwork because it merely creates an option for operators to disturb areas that contain preexisting pollutional discharges. If an operator exercises this option, Subchapter F does require increased background water quality information that is not ordinarily required in permit applications. This information is necessary to ensure accurate information about the quantity and quality of preexisting pollutional discharges from the site, so that any changes in background data caused by the proposed activities may be more completely and accurately understood. Subchapter G will require an applicant to submit a substantial amount of additional paperwork. The additional paperwork will only apply to sites where an operator chooses to propose experimental practices.

G. Sunset Review

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

H. Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), on May 31, 2000, the Department submitted a copy of the proposed rulemaking to IRRC and the Chairpersons of the Senate and House Environmental Resources and Energy Committees.

In compliance with section 5(c) of the Regulatory Review Act, the Department also provided IRRC and the Committees with copies of comments as well as other documentation. In preparing these final-form regulations, the Department has considered the comments received from IRRC and the public. The Committee did not submit comments.

Under section 5.1(d) of the Regulatory Review Act (71 P. S. § 745.5a(d)), these final-form regulations were deemed approved by the House Environmental Resources and Energy Committee and by the Senate Environmental Resources and Energy Committee on May 29, 2001. IRRC met on June 7, 2001, and approved the final-form regulations in accordance with section 5.1(e) of the Regulatory Review Act.

I. 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 there under in 1 Pa. Code §§ 7.1 and 7.2.
- (2) A public comment period was provided as required by law and all comments were considered.
- (3) These final-form regulations do not enlarge the proposal published at 30 Pa.B. 3053.
- (4) These final-form regulations are necessary and appropriate for administration and enforcement of the authorizing acts identified in section C of this Preamble.

J. Order

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

- (a) The regulations of the Department, 25 Pa. Code Chapters 88 and 90, are amended by amending §§ 88.281, 88.310, 88.332, 90.1, 90.12, 90.13, 90.34, 90.45, 90.101, 90.122 and 90.167; and by adding §§ 90.5, 90.49, 90.50, 90.116a, 90.201—90.207, 90.301—90.309 and 90.401 to read as set forth in Annex A, with ellipses referring to the existing text of the regulations.
- (b) The Chairperson of the Board shall submit this order and Annex A to the Office of General Counsel and the Office of Attorney General for review and approval as to legality and form, as required by law.
- (c) The Chairperson of the Board shall submit this order and Annex A to IRRC and the Senate and House Environmental Resources and Energy 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 upon publication in the *Pennsylvania Bulletin*.

Fiscal Note: Fiscal Note 7-352 remains valid for the final adoption of the subject regulations.

(*Editor's Note*: For the text of the order of the Independent Regulatory Review Commission, relating to this document, see 31 Pa.B. 3370 (June 23, 2001).)

DAVID E. HESS, Chairperson

Annex A

TITLE 25. ENVIRONMENTAL PROTECTION PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION

Subpart C. PROTECTION OF NATURAL RESOURCES

ARTICLE I. LAND RESOURCES CHAPTER 88. ANTHRACITE COAL

§ 88.281. Requirements.

A person who conducts coal refuse disposal activities shall comply with the performance standards and design requirements of this subchapter, §§ 90.5, 90.49, 90.50 and Chapter 90, Subchapters E—G.

- (1) Disposal of coal refuse in an active surface mine shall comply with the performance standards in Subchapter B (relating to surface anthracite coal mines: minimum environmental protection performance standards) and § 88.315 (relating to coal refuse disposal: active surface mines).
- (2) Disposal of coal refuse in an active bank removal operation shall comply with the performance standards of Subchapter C (relating to anthracite bank removal and reclamation: minimum environmental protection performance standards).
- (3) Disposal of coal refuse in an abandoned or active underground coal mine shall comply with the performance standards in Subchapter F (relating to anthracite underground mines).

§ 88.310. Coal refuse disposal: general requirements

- (a) Coal refuse shall be hauled or conveyed to and placed in designated disposal areas authorized for that purpose. The refuse shall be placed in a controlled manner to ensure the following:
- (1) The land mass designated as the disposal area is suitable for reclamation and revegetation compatible with the natural surroundings.
 - (2) Stability of the disposal area.
- (3) Leachate and surface runoff from the disposal area will not degrade surface waters or groundwaters or exceed the established effluent limitations.
- (b) The disposal area shall be designed using recognized professional standards and approved by the Department. The design shall be certified by a registered professional engineer.
- (c) Trees, grasses, shrubs and other organic materials shall be removed for a distance of 50 feet from the current disposal area concurrent with the placement of refuse.
- (d) Slope protection shall be provided to minimize surface erosion at the site. The disturbed areas, including

- diversion ditches that are not riprapped, shall be vegetated upon completion of construction.
- (e) The coal refuse to be placed in the fill shall be hauled or conveyed and placed in horizontal lifts in a controlled manner, concurrently compacted as necessary to ensure mass stability and prevent mass movement, covered and graded to allow surface and subsurface drainage to be compatible with the natural surroundings, and ensure a long-term static safety factor of 1.5 and seismic safety factor of 1.2.
- (f) The final configuration of the disposal shall be suitable for the approved postmining land uses.
- (g) Terraces may be utilized to control erosion and enhance stability if approved by the Department.
- (h) If the disposal area contains springs, natural or manmade water-courses or wet-weather seeps, an underdrain system consisting of durable rock shall be constructed from the wet areas in a manner that prevents infiltration of the water into the spoil material. The underdrain system shall be designed and constructed using standard geotechnical engineering methods.
- (i) Coal refuse may be returned to underground mine workings, but only in accordance with a disposal program approved by the Department and the Mine Safety and Health Administration.
- (j) The system to prevent adverse impacts to the surface water and groundwater shall be constructed in accordance with design schematics, test results, descriptions, plans, maps, profiles or cross-sections approved in the permit and shall function to prevent adverse impacts to surface water and groundwater.
- (k) The system to prevent precipitation from coming in contact with the coal refuse shall be constructed in accordance with design schematics, test results, descriptions, plans, maps, profiles and cross-sections approved in the permit and shall function to prevent precipitation from contacting the coal refuse.
- (1) The system shall be installed as phases of the disposal area reach capacity, as specified in the permit, when the operation temporarily ceases for a period in excess of 90 days (unless the Department approves a longer period, not to exceed 1 year) or when the operation permanently ceases.
- (2) The system shall be designed to allow for revegetation of the site in accordance with the standard of success under § 88.330 (relating to revegetation: standards for successful revegetation) and for prevention of erosion.

§ 88.332. Cessation of operations: temporary.

- (a) As soon as it is known that the operation will temporarily cease for more than 30 days, the operator shall submit a notice of intention, in writing, to temporarily cease the operation. The notice shall include a statement of the exact number of acres which will have been affected in the permit area, the extent and kind of reclamation of those areas, and identification of the backfilling, regrading, revegetation, monitoring and water treatment activities that will continue during the temporary cessation. The system for preventing precipitation from contacting the coal refuse shall be installed when the temporary cessation exceeds 90 days. The Department may approve a longer period, not to exceed 1 year, under subsection (b).
- (b) Temporary cessation of an operation may not exceed 90 days unless the Department approves a longer period for reasons of seasonal shutdown or labor strike.

(c) Temporary cessation does not relieve the operator of the obligation to comply with any provisions of the permit.

CHAPTER 90. COAL REFUSE DISPOSAL Subchapter A. GENERAL PERMIT AND APPLICATION REQUIREMENTS FOR COAL REFUSE DISPOSAL

§ 90.1. Definitions.

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

* * * * *

Coal refuse disposal—The storage, placement or disposal of coal refuse. The term includes engineered features integral to the placement of the coal refuse including relocations or diversions of stream segments contained within the proposed fill area and the construction of required systems to prevent adverse impacts to surface water and groundwater and to prevent precipitation from contacting the coal refuse.

* * * * *

Operator—A person operating a coal refuse disposal area, or part thereof.

* * * * *

Public recreational impoundment—A closed basin, naturally formed or artificially built, which is dammed or excavated for the retention of water and which is owned, rented or leased by the Federal government, the Commonwealth or a political subdivision of this Commonwealth and which is used for swimming, boating, water skiing, hunting, fishing, skating or other similar activities.

§ 90.5. Site selection and permitting.

- (a) Prior to applying for a permit to conduct coal refuse disposal activities, the applicant shall comply with Subchapter E (relating to site selection). The Department's technical guidance document Number 563-2113-660, titled *Coal Refuse Disposal—Site Selection*, shall be used as guidance for selecting a coal refuse disposal site.
- (b) After the Department has approved a site in accordance with Subchapter E, the applicant may apply for a permit for coal refuse disposal activities in accordance with Chapters 86 and 88 (relating to surface and underground coal mining: general; and anthracite coal) and this chapter.

§ 90.12. Geology.

- (a) The application shall include a description of the area and structural geology within the proposed permit and adjacent area, including the lithology of the strata that influence the occurrence, availability, movement and quality of groundwater that may be affected by the coal refuse disposal. For lands within the proposed permit and adjacent areas, the applicant shall provide a description of the geology with complementing maps and cross sections and the results of test borings. The description shall include the strata down to and including any aquifer that may be affected. At a minimum, the description shall include:
 - (1) The location and quality of subsurface water.
- (2) The depth, lithology and structure of near-surface bedrock.

- (3) The location, identification and status of mining and coal refuse disposal operations within or adjacent to the proposed permit area.
- (4) A description of any glacial, alluvial or colluvial deposits or other unconsolidated deposits that are present within or beneath the proposed permit area, including their thickness and location.
- (5) A description of any mine workings that are present beneath the proposed permit area.
- (6) The attitude and characteristics of joints, cleats, fracture zones and faults within the permit and adjacent areas
- (7) The location and identification of all coal seam croplines within the permit area.
- (8) A description of the physical characteristics of soils within the permit area.
- (9) A description of aquifers that are present beneath the proposed permit area.
- (b) Maps, cross-sections and geologic descriptions required by this section shall be prepared and certified by a qualified registered professional geologist.

§ 90.13. Groundwater information.

The application shall contain a description of the premining or baseline groundwater hydrology of the proposed permit and adjacent area, including the following:

- (1) The results of a groundwater inventory of existing wells, springs and other valuable groundwater resources, providing information on location, quality, quantity, depth to water and usage of the groundwater for the proposed permit and potentially impacted offsite areas. Information on water availability and occurrence, and alternate water supplies shall be emphasized and water quality information relating to suitability for existing predisposal use shall be provided. At a minimum, water quality descriptions shall include total dissolved solids or specific conductance corrected to 25°C, pH, total iron, total manganese, alkalinity, acidity and sulfates.
- (2) Other information on the baseline hydrogeologic properties of the groundwater system shall be included with the application. The Department may require information on indicator parameters such as pumping test, lithologic and piezometer data or that other appropriate information be provided. The application shall include a description of the groundwater flow system as it relates to the design and operation of the proposed groundwater and surface water protection system as described in § 90.50 (relating to design criteria: groundwater and surface water protection system).

§ 90.34. Reclamation: postdisposal land use.

- (a) An application shall contain a description of the proposed land use, following reclamation, of the lands to be affected within the proposed permit area by coal refuse disposal activities, including a discussion of the utility and capacity of the reclaimed land to support a variety of alternative uses, and the relationship of the proposed use to existing land use policies and plans. This description shall explain the following:
- (1) How the proposed postdisposal land use is to be achieved, and the necessary support activities which may be needed to achieve the proposed land use.
- (2) The detailed management plan to be implemented when pastureland is the postdisposal land use.

- (3) Materials needed for approval of the alternative use under § 90.166 (relating to postdisposal land use).
- (4) The consideration given to making all of the proposed coal refuse disposal activities consistent with surface owner plans and applicable Commonwealth and local land use plans and programs.
- (b) If an alternate land use is proposed, the description shall be accompanied by a copy of the comments concerning the proposed use from the legal or equitable owner of record of the surface areas to be affected by coal refuse disposal activities within the proposed permit area, and from the Commonwealth and local government agencies which would have to initiate, implement, approve or authorize the proposed use of the land following reclamation.

§ 90.45. Prime farmland.

A person who conducts, or intends to conduct, coal refuse disposal activities on prime farmlands historically used for cropland, in accordance with Subchapter E (relating to site selection), shall submit a plan, as part of the permit application, for the disposal and restoration of the land. The plan shall contain, at a minimum:

- (1) The proposed method and type of equipment to be used for removal, storage and replacement of the soil in accordance with §§ 90.161—90.165.
- (2) The proposed measures to be taken during soil reconstruction to prevent excessive compaction and achieve soil bulk densities which will result in the restored area being returned to equivalent or higher levels of yield as nonmined prime farmland in the surrounding area under equivalent levels of management.
- (3) The location of areas to be used for the separate stockpiling of soil and plans for soil stabilization before redistribution.
- (4) Documentation, if applicable, such as agricultural school studies or other scientific data from comparable areas, that supports the use of other suitable material, instead of the B or C soil horizon, to obtain on the restored area equivalent or higher levels of yield as nondisposal prime farmlands in the surrounding area under equivalent levels of management.
- (5) Plans for seeding or cropping the final graded disturbed land and the conservation practices to be used to adequately control erosion and sedimentation and restoration of an adequate soil moisture regime, during the period from completion of regrading until release of the performance bond or equivalent guarantee under Chapter 86, Subchapter E (relating to coal exploration). Proper adjustments for seasons shall be proposed so that final graded land is not exposed to erosion during seasons when vegetation or conservation practices cannot be established due to weather conditions.
- (6) Available agricultural school studies or other scientific data for areas with comparable soils, climate and management—including water management—that demonstrate that the proposed method of reclamation will achieve, within a reasonable time, equivalent or higher levels of yield after mining as existed before mining.
- (7) A soil survey with description of soil mapping units and representative soil profile under § 90.22 (relating to prime farmland investigation). The soil profile description shall include, but not be limited to, soil horizon depths, pH and range of soil densities for each prime farmland soil unit within the proposed permit area. The Department may require the applicant to provide information on

other physical and chemical soil properties as needed to make a determination that the operator has the technological capability to restore the prime farmland within the permit area to the soil reconstruction standards of §§ 90.161—90.165.

§ 90.49. Stream buffer zone variance.

- (a) Stream buffer zone restriction. Coal refuse disposal may not occur within 100 feet (30.48 meters) of the bank of a stream. The Department may grant a variance for disposal of coal refuse under subsection (c) if consistent with Subchapter E (relating to site selection).
- (b) *Compliance required.* Surface mining operations supporting coal refuse disposal shall comply with § 86.102(12) (relating to areas where mining is prohibited or limited).
- (c) Variance. The Department may grant a variance from the 100-foot (30.48-meter) stream buffer zone to dispose of coal refuse and to relocate or divert streams in the 100-foot (30.48-meter) stream buffer zone. The stream buffer zone is the area within 100 feet (30.48 meters) measured horizontally from the bank of any stream.
- (1) Stream buffer zone variances will only be granted if the operator demonstrates to the satisfaction of the Department that, as a result of the variance, coal refuse disposal will not adversely affect water quality and quantity, or other environmental resources of the stream and will not cause or contribute to the violation of applicable State or Federal water quality standards.
- (2) Prior to granting a variance, the operator shall be required to give public notice of the application in two newspapers of general circulation in the area once a week for 2 successive weeks.
- (i) If a person files an exception to the proposed variance within 20 days of the last publication of the notice, the Department will conduct a public hearing with respect to the application within 30 days of receipt of the exception.
- (ii) The Department will also consider information or comments submitted by the Fish and Boat Commission prior to taking action on a variance request.
- (3) The variance will be issued as a written order specifying the methods and techniques that shall be employed to prevent or mitigate adverse impacts. Mitigation can include, but is not limited to, compensatory restoration and enhancements of nearby streams or stream segments.

§ 90.50. Design criteria: groundwater and surface water protection system.

- (a) The application shall include a description of the system that will be installed to prevent adverse impacts to groundwater and surface water. The description shall include maps, plans and other information necessary to evaluate the design of the system.
- (b) The application shall include a description of the system that will be installed to prevent precipitation from coming into contact with the coal refuse. The description shall include maps, plans and other information necessary to evaluate the design of the system. The coal refuse disposal operation shall be designed in phases to minimize the amount of time the entire coal refuse area is exposed to precipitation prior to the installation of the system to prevent precipitation from contacting the coal refuse. The application shall describe the design of the

system for preventing precipitation from contacting coal refuse and how the system will be installed in accordance with the following:

- (1) During routine coal refuse disposal as phases of the coal refuse disposal area reach capacity.
- (2) During periods of temporary cessation as directed under \S 90.167(d) (relating to cessation of operations: temporary).
 - (3) When the operation permanently ceases.
- (c) The Department's technical guidance Document Number 563-2112-656, titled *Liners—Impoundments, Stockpiles, and Coal Refuse Disposal Areas*, shall be used as guidance for designing coal refuse disposal sites incorporating earthen, admixed or synthetic liners or caps for preventing adverse impacts to groundwater and surface water and for preventing precipitation from contacting coal refuse.
- (d) The application shall include a description of the measures to be taken to ensure the long-term functionality of the systems described in subsections (a) and (b). The description shall address the site's susceptibility to mine subsidence and the potential impacts of mine subsidence on the systems described in subsections (a) and (b). The description shall also address the potential for deterioration of components of the systems described in subsections (a) and (b) due to other physical or chemical processes including but not limited to attack from sulfate-laden or acidic groundwater and/or leachate.

§ 90.101. Hydrologic balance: general requirements.

- (a) Coal refuse disposal activities shall be planned and conducted to minimize disturbances to the prevailing hydrologic balance in the permit and adjacent areas and to prevent material damage to the hydrologic balance outside the permit area. The Department may require additional preventive, remedial or monitoring measures to assure that material damage to the hydrologic balance outside the permit area is prevented.
- (b) Coal refuse disposal activities shall be planned and conducted to prevent pollution of groundwater and surface water and prevent, to the maximum extent possible, changes to the water quantity, depth to groundwater and location of surface water drainage channels so that the approved postdisposal land use of the permit is not adversely affected.
- (c) The treatment requirements and effluent limitations established under § 90.102 (relating to hydrologic balance: water quality standards, effluent limitations and best management practices) may not be violated.
- (d) Operations shall be conducted to prevent water pollution and, when necessary, treatment methods shall be used.
- (e) A person who conducts coal refuse disposal activities shall conduct the disposal and reclamation operation to prevent water pollution and, when necessary, operate and maintain the necessary water treatment facilities until applicable treatment requirements and effluent limitations established under § 90.102 are achieved and maintained.

§ 90.116a. Hydrologic balance: water rights and replacement.

An operator who conducts coal refuse disposal and adversely affects a water supply by contamination, pollution, diminution or interruption shall comply with § 87.119 (relating to water rights and replacement).

§ 90.122. Coal refuse disposal.

- (a) Coal refuse shall be transported and placed in designated disposal areas approved by the Department for this purpose. These areas shall be within the permit area. The coal refuse disposal area shall be designed, constructed and maintained to ensure:
- (1) The leachate and surface runoff from the permit area will not degrade surface water or groundwater or exceed the effluent limitations of § 90.102 (relating to hydrologic balance: water quality standards, effluent limitations and best management practices).
 - (2) Prevention of combustion.
 - (3) Prevention of public health hazards.
 - (4) Stability of the fill.
- (5) The land mass designated as the coal refuse disposal area is suitable for reclamation and revegetation compatible with the natural surroundings.
- (b) The fill shall be designed using recognized professional standards, certified by a qualified registered professional engineer, and approved by the Department.
- (c) The foundation and abutment of the fill shall be stable under all conditions of construction and operation. Sufficient foundation investigations and laboratory testing of foundation materials and coal refuse shall be performed to determine the design requirements for stability of the facility. Analyses of foundation conditions shall include the effect of underground mine workings, if any, upon the stability of the structure.
- (d) The coal refuse disposal fill shall be designed to attain a minimum long-term static factor of safety of 1.5 and a minimum seismic factor of safety of 1.2, based upon data obtained from subsurface exploration, geotechnical testing, foundation design, fill design and accepted engineering analyses.
- (e) When the average slope of coal refuse disposal area exceeds 1v:2.8h-36%, or lesser slopes as may be designated by the Department based on local conditions, key way cuts, or excavation into stable bedrock or bedrock toe buttresses shall be constructed to stabilize the fill. When the toe of the fill rests on a downslope, stability analysis shall be performed in accordance with § 90.39 (relating to ponds, impoundments, banks, dams, embankments, piles and fills) to determine the size of rock toe buttresses and key way cuts.
- (f) If the disposal area contains springs, natural or manmade watercourses, or wet-weather seeps, the Department may approve an underdrain/subdrainage system, consisting of durable rock or other materials, designed and placed in a manner that prevents infiltration of the water into the fill material and ensures continued free drainage from the wet areas.
- (g) The disposal area shall be provided with a system to prevent adverse impacts to the surface water and groundwater. The system shall be constructed in accordance with design schematics, test results, descriptions, plans, maps, profiles or cross-sections approved in the permit and shall function to prevent adverse impacts to surface water and groundwater.
- (h) When a phase of the coal refuse disposal area reaches capacity, the operator shall install a system to prevent precipitation from coming in contact with the coal refuse in the completed phase.

- (1) The system shall be constructed in accordance with design schematics, test results, descriptions, plans, maps, profiles or cross-sections approved in the permit.
- (2) During normal coal refuse disposal, the system is not required to prevent precipitation from coming in contact with the coal refuse being placed in phases of the operation that have not reached capacity.
- (3) The system shall be designed to allow for revegetation of the site in accordance with the standard of success under § 90.159 (relating to revegetation: standards for successful revegetation) and for the prevention of erosion.
- (4) If the operator temporarily ceases operation of the coal refuse disposal area for a period in excess of 90 days (unless the Department, for reasons of labor strike or business necessity, approves a longer period not to exceed 1 year) or when the operation permanently ceases, the operator shall install the system for preventing precipitation from contacting the coal refuse.

§ 90.167. Cessation of operations: temporary.

- (a) As soon as it is known that the operation will temporarily cease for more than 30 days, the operator shall submit a notice of intention, in writing, to temporarily cease the operation. The notice shall include a statement of the exact number of acres that will have been affected in the permit area, the extent and kind of reclamation of those areas, and identification of the disposal, regrading, revegetation, monitoring and water treatment activities which will continue during the temporary cessation.
- (b) Temporary cessation of an operation may not exceed 90 days unless the Department approves a longer period for reasons of seasonal shutdown or labor strike.
- (c) Temporary cessation does not relieve the operator of the obligation to comply with any provisions of the permit.
- (d) The operator shall install the system for preventing precipitation from contacting the coal refuse when the temporary cessation exceeds 90 days. The Department may approve a longer period, not to exceed 1 year, for reasons of a labor strike or business necessity.

Subchapter E. SITE SELECTION

Sec.

90.201. Definitions.

90.202. General requirements.

90.203. Proposing a preferred site.

90.204. Proposing an alternate site.90.205. Alternatives analysis.

90.206. Disapproval of a proposed site.

90.207. Approval of a selected site.

§ 90.201. Definitions.

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

Preferred site—A watershed polluted by acid mine drainage; a watershed containing an unreclaimed surface mine but which has no mining discharge; a watershed containing an unreclaimed surface mine with discharges that could be improved by the proposed coal refuse disposal operation; unreclaimed coal refuse disposal piles that could be improved by the proposed coal refuse disposal operation; or other unreclaimed areas previously affected by mining activities.

Search area—The geographic area within a 1-mile radius of an existing coal preparation facility or the 25-square mile geographic area encompassing a proposed coal preparation facility.

Selected site—A location selected by the applicant and approved by the Department under this subchapter for which the applicant can then apply for a permit to conduct coal refuse disposal activities.

§ 90.202. General requirements.

- (a) A preferred site shall be used for coal refuse disposal unless the applicant demonstrates to the Department that an alternate site is more suitable based upon engineering, geology, economics, transportation systems, and social factors and is not adverse to the public interest.
- (b) The applicant is required to determine whether the search area contains a preferred site.
- (1) For a new coal refuse disposal area that will support an existing coal preparation facility, the applicant shall examine the geographic area within a 1-mile radius of the existing coal preparation facility.
- (2) For a proposed coal refuse disposal area that will support a proposed coal preparation facility, the applicant shall examine a 25-square mile geographic area encompassing the proposed coal preparation facility. In defining the 25-square mile area, consideration shall be given to environmental, technical, transportation, economic and social factors where applicable.
- (c) If there are no preferred sites located within the search area, the applicant shall conduct a comparative analysis of the potential coal refuse disposal sites in accordance with § 90.204(b) (relating to proposing an alternate site).
- (d) The Department will not approve a site proposed by the applicant for coal refuse disposal activities when the Department finds that the adverse environmental impacts of using the site for coal refuse disposal activities would clearly outweigh the public benefits.
- (e) Except on preferred sites, the Department will not approve coal refuse disposal on or within any of the following areas:
 - (1) Prime farmlands.
- (2) An exceptional value watershed as defined under Chapter 93 (relating to water quality standards).
- (3) Sites known to contain threatened or endangered animals listed exclusively under the Commonwealth's protection programs.
- (4) An area that is hydrologically connected to and contributes at least 5% of the drainage to wetlands designated as exceptional value under Chapter 105 (relating to dam safety and waterway management) unless a larger percentage contribution is authorized by the Department after consultation with the Fish and Boat Commission.
- (5) A watershed less than 4 square miles in area upstream of the intake of a public water supply.
- (6) A watershed less than 4 square miles in area upstream of the upstream limit of a public recreational impoundment.
- (7) Sites known to contain Federally listed threatened or endangered plants or animals. At preferred sites known to contain Federally listed threatened or endangered species, approval will be granted only when the

Department concludes and the United States Fish and Wildlife Service concurs that the proposed activity is not likely to adversely affect Federally listed threatened or endangered species or result in the take of Federally listed threatened or endangered species in violation of section 9 of the Endangered Species Act of 1973 (16 U.S.C.A. § 1538).

(f) As part of the site selection process, an applicant may request approval for more than one site. The Department will evaluate each site proposed for coal refuse disposal and, if the Department finds that a proposed site meets the requirements of this subchapter, it will designate it as an approved site. The applicant will then have the option of choosing a selected site from among the approved sites and submitting an application for coal refuse disposal for that site.

§ 90.203. Proposing a preferred site.

If the applicant proposes to use a preferred site, the Department will approve the proposed site subject to § 90.202(c) (relating to general requirements) provided the applicant demonstrates that the attendant adverse environmental impacts will not clearly outweigh the public benefits.

§ 90.204. Proposing an alternate site.

- (a) Where a preferred site exists within the search area, but the applicant proposes an alternate site, the applicant shall:
- (1) Demonstrate that the alternate site is more suitable, using criteria in § 90.202(a) (relating to general requirements), than all preferred sites within the search area.
- (2) Identify other alternate sites considered and provide the basis for the rejection of these sites.
- (3) Based on reasonably available data, demonstrate that it is the most suitable site based on environmental, economic, technical, transportation and social factors.
- (b) If a preferred site does not exist within the search area, the applicant shall:
- (1) Identify all the sites considered within the search area and provide the basis for their consideration.
- (2) Provide the basis for the rejection of considered sites.
- (3) Based on reasonably available data, demonstrate to the Department that the proposed site is the most suitable based on environmental, economic, technical, transportation and social factors.

§ 90.205. Alternatives analysis.

The alternatives analysis required by §§ 90.202(b) and 90.204 (relating to general requirements; and proposing an alternate site) satisfies the requirement for an alternatives analysis under the Dam Safety and Encroachments Act (32 P. S. §§ 693.1—693.27) and regulations promulgated thereunder. See Chapter 105 (relating to dam safety and waterway management).

§ 90.206. Disapproval of a proposed site.

If the Department disapproves the applicant's proposed site, the applicant may submit a new proposal supporting the selection of another site located either within or outside of the search area.

§ 90.207. Approval of a selected site.

Department approval of a selected site does not indicate the Department will approve an application for coal refuse disposal activities for the selected site.

Subchapter F. COAL REFUSE DISPOSAL ACTIVITIES ON AREAS WITH PREEXISTING POLLUTIONAL DISCHARGES

30.301.	Scope.
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90.303.	Applicability.
90.304.	Application for authorization.
90.305.	Application approval or denial.
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90.307.	Treatment of discharges.
90.308.	Request for bond release.
90.309.	Criteria and schedule for release of bonds on pollution abate-

§ 90.301. Scope.

ment areas

Scope

- (a) This subchapter specifies procedures and rules applicable to those who seek authorization to engage in coal refuse disposal activities on an area on which there are preexisting pollutional discharges resulting from previous mining and describes the terms and conditions under which the Department may release bonds to operators who have received authorization.
- (b) Chapter 86 (relating to surface and underground coal mining: general) and Subchapters A—D apply to authorizations to mine areas with preexisting pollutional discharges except as specifically modified by this subchapter.

§ 90.302. Definitions.

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

Abatement plan—Any individual technique or combination of techniques, the implementation of which will result in reduction of the base line pollution load. Abatement techniques include, but are not limited to: Addition of alkaline material, special plans for managing toxic and acid-forming material, regrading, revegetation and relocating coal refuse to a coal refuse disposal area that includes systems to prevent adverse impacts to surface and groundwater and to prevent precipitation from contacting the coal refuse.

Actual improvement—The reduction of the baseline pollution load resulting from the implementation of the approved abatement plan; except that any reduction of the baseline pollution load achieved by water treatment may not be considered as actual improvement provided that treatment approved by the Department of the coal refuse before, during or after placement in the coal refuse disposal area will not be considered to be water treatment.

Baseline pollution load—The characterization of the pollutional material being discharged from or on the pollution abatement area, described in terms of mass discharge for each parameter deemed relevant by the Department, including seasonal variations and variations in response to precipitation events. The Department will establish in each authorization the specific parameters it deems relevant for the baseline pollution load, including, at a minimum, iron and acid loadings.

Best professional judgment—The highest quality technical opinion forming the basis for the terms and conditions of the treatment level required after consideration of all reasonably available and pertinent data. The treatment levels shall be established by the Department under sections 301 and 402 of the Federal Water Pollution Control Act (33 U.S.C.A. §§ 1311 and 1342).

Best technology—Measures and practices which will abate or ameliorate, to the maximum extent possible,

discharges from or on the pollution abatement area. These measures include engineering, geochemical or other applicable practices.

Coal refuse disposal activities—The storage, dumping or disposal of any waste coal, rock, shale, slurry, culm, gob, boney, slate, clay, underground development wastes, coal processing wastes, excess soil and related materials, associated with or near a coal seam, that are either brought above ground or otherwise removed from a coal mine in the process of mining coal or are separated from coal during the cleaning or preparation operations. The term does not include the removal or storage of overburden from surface mining activities.

Excess soil and related material—Rock, clay or other material located immediately above or below a coal seam and which are extracted from a coal mine during the process of mining coal. The term does not include topsoil or subsoil.

Pollution abatement area—The part of the permit area that is causing or contributing to the baseline pollution load. The term includes adjacent and nearby areas that must be affected to bring about significant improvements of the baseline pollution load and may include the immediate locations of the discharges.

§ 90.303. Applicability.

- (a) Authorization may be granted under this subchapter when the authorization is part of the following:
- (1) A permit issued after February 6, 1995, but only if the authorization request is made during one of the following periods:
- (i) At the time of the submittal of the permit application for the coal refuse disposal activities, including the proposed pollution abatement area.
- (ii) Prior to a Department decision to issue or deny that permit.
- (2) A permit revision under § 86.52 (relating to permit revisions), but only if the operator affirmatively demonstrates to the satisfaction of the Department that:
- (i) The operator has discovered pollutional discharges within the permit area that came into existence after its permit application was approved.
- (ii) The operator has not caused or contributed to the pollutional discharges.
- (iii) The proposed pollution abatement area is not hydrologically connected to an area where coal refuse disposal activities have been conducted under the permit.
- (iv) The operator has not affected the proposed pollution abatement area by coal refuse disposal activities.
- (v) The Department has not granted a bonding authorization and mining approval for the area under \S 86.37(b) (relating to criteria for permit approval or denial).
- (b) Notwithstanding subsection (a), authorization will not be granted under this subchapter for repermitting under §§ 86.12 and 86.14 (relating to continued operation under interim permits; and permit application filing deadlines), permit renewals under § 86.55 (relating to permit renewals: general requirements) or permit transfers under § 86.56 (relating to transfer of permit).

§ 90.304. Application for authorization.

(a) An operator who requests authorization under this subchapter shall comply with the permit application requirements of Chapter 86 (relating to surface and

- underground coal mining: general) and Subchapters A—D, except as specifically modified by this subchapter. The operator shall also:
- (1) Delineate on a map the proposed pollution abatement area, including the location of the preexisting discharges.
- (2) Provide a description of the hydrologic balance for the proposed pollution abatement area that includes:
- (i) Results of a detailed water quality and quantity monitoring program, including seasonal variations, variations in response to precipitation events and modeled baseline pollution loads using this monitoring program.
- (ii) Monitoring for pH, alkalinity, acidity, total iron, total manganese, aluminum, sulfates, total suspended solids and other water quality parameters the Department deems relevant.
- (3) Provide a description of the abatement plan that represents best technology and includes the following:
- (i) Plans, cross-sections and schematic drawings describing the abatement plan proposed to be implemented.
- (ii) A description and explanation of the range of abatement level that is anticipated to be achieved, costs and each step in the proposed abatement plan.
- (iii) A description of the standard of success for revegetation necessary to ensure success of the abatement plan.
- (b) The operator seeking this authorization shall continue the water quality and quantity monitoring program required by subsection (a)(2) after making the authorization request. The operator shall submit the results of this continuing monitoring program to the Department on a monthly basis until a decision on the authorization request is made.

§ 90.305. Application approval or denial.

- (a) Authorization may not be granted under this subchapter unless the operator seeking the authorization affirmatively demonstrates the following to the satisfaction of the Department on the basis of information in the application:
- (1) Neither the operator, nor an officer, principal shareholder, agent, partner, associate, parent corporation, subsidiary or affiliate, sister corporation, contractor or subcontractor, or a related party as defined in § 86.1 (relating to definitions) has either of the following:
- (i) Legal responsibility or liability as an operator for treating the water pollution discharges from or on the proposed pollution abatement area.
- (ii) Statutory responsibility or liability for reclaiming the proposed pollution abatement area.
- (2) The proposed abatement plan will result in significant reduction of the baseline pollution load and represents best technology.
- (3) The land within the proposed pollution abatement area can be reclaimed.
- (4) The coal refuse disposal activities on the proposed pollution abatement area will not cause additional surface water pollution or groundwater degradation.
- (5) The standard of success for revegetation will be achieved. The standard of success for revegetation for sites previously reclaimed to the standards of Chapters 87, 88 and 90 shall be the standards set forth in § 90.159 (relating to revegetation: standards for successful

revegetation). The standard of success for revegetation for sites not previously reclaimed to the standards of Chapters 87, 88 and 90 shall be, at a minimum, the following, provided the site is not a bond forfeiture site where the forfeited money paid into the fund is sufficient to reclaim the forfeited site to the applicable standards:

- (i) A ground cover of living plants not less than can be supported by the best available topsoil or other suitable material in the reaffected area.
- (ii) A ground cover no less than that existing before disturbance of the area by coal refuse disposal activities.
- (iii) Adequate vegetation to control erosion. Vegetation may be no less than that necessary to ensure the success of the abatement plan.
- (6) The coal refuse disposal activities on permitted areas other than the proposed pollution abatement area will not cause surface water pollution or groundwater degradation.
- (7) Requirements of § 86.37(a) (relating to criteria for permit approval or denial) that are consistent with this section have been met.
- (b) An authorization may be denied under this subchapter if granting the authorization will, or is likely to, affect a legal responsibility or liability under The Clean Streams Law (35 P. S. §§ 691.1—691.1001), the Surface Mining Conservation and Reclamation Act (52 P. S. §§ 1396.1—1396.19a), Chapter 86 (relating to surface and underground coal mining: general) or Subchapters A—D, for the proposed pollution abatement area or other areas or discharges in the vicinity of the proposed pollution abatement area.
- (c) Authorization may not be granted under this subchapter unless there are one or more preexisting discharges from or on the pollution abatement area.
- (d) The authorization allowed under this subchapter is only for the pollution abatement area and does not apply to other areas of the permit.

§ 90.306. Operational requirements.

- (a) An operator who receives an authorization under this subchapter shall comply with Chapter 86 (relating to surface and underground coal mining: general) and Subchapters A—D except as specifically modified by this subchapter. The operator shall also:
- (1) Implement the approved water quality and quantity monitoring program for the pollution abatement area until the requirements of § 90.309 (relating to criteria and schedule for release of bonds on pollution abatement areas) are met.
 - (2) Implement the approved abatement plan.
- (3) Notify the Department immediately prior to the completion of each step of the abatement plan.
- (4) Provide a progress report to the Department within 30 days after the completion of each step of the abatement program that includes a statement signed by the operator, and if required by the Department, a statement signed by the supervising engineer, that all work has been performed in accordance with the terms and conditions of the pollution abatement authorization, the approved maps, plans, profiles and specifications.

§ 90.307. Treatment of discharges.

(a) Except for preexisting discharges that are not encountered during coal refuse disposal activities or the implementation of the abatement plan, the operator shall

- comply with § 90.102 (relating to hydrologic balance: water quality standards, effluent limitations and best management practices).
- (b) The operator shall treat the preexisting discharges that are not encountered during coal refuse disposal activities or implementation of the abatement plan to comply with the effluent limitations established by best professional judgment. The effluent limitations established by best professional judgment may not be less than the baseline pollution load. If the baseline pollution load, when expressed as a concentration for a specific parameter, satisfies the effluent limitation in § 90.102 for that parameter, the operator shall treat the preexisting discharge for that parameter to comply with either effluent limitations established by best professional judgment or the effluent limitations in § 90.102.
- (c) For purposes of subsections (a) and (b), the term encountered may not be construed to mean diversions of surface water and shallow groundwater flow from areas undisturbed by the implementation of the abatement plan that would otherwise drain into the affected area, as long as the diversions are designed, operated and maintained under § 90.104 (b)—(h) (relating to hydrologic balance: diversions).
- (d) An operator required to treat preexisting discharges will be allowed to discontinue treating the discharges under subsection (b) when the operator affirmatively demonstrates the following to the Department's satisfaction:
- (1) The preexisting discharges are meeting the effluent limitations established by subsection (b) as shown by groundwater and surface water monitoring conducted by the operator or the Department.
- (2) Coal refuse disposal activities under the permit—including the pollution abatement area—are being or were conducted under the requirements of the permit and the authorization, and Chapter 86 (relating to surface and underground mining: general) and this chapter except as specifically modified by this subchapter.
- (3) The operator has implemented each step of the abatement plan as approved in the authorization.
- (4) The operator did not cause or allow additional surface water pollution or groundwater degradation by reaffecting the pollution abatement area.
- (e) If after discontinuance of treatment of discharges under subsection (d) the discharges fail to meet the effluent limitations established by subsection (b), the operator shall reinstitute treatment of the discharges under subsection (b). An operator who reinstitutes treatment under this subsection will be allowed to discontinue treatment if the requirements of subsection (d) are met.
- (f) Discontinuance of treatment under subsection (d) may not be deemed or construed to be or to authorize a release of bond under § 90.309 (relating to criteria and schedule for release of bonds on pollution abatement areas).

§ 90.308. Request for bond release.

Sections 86.172(c) and 90.309 (relating to criteria for release of bond; and criteria and schedule for release of bonds on pollution abatement areas) apply to the release of bonds for pollution abatement areas authorized by this subchapter. Section 86.172(a), (b) and (d) is not applicable to the release of bonds.

§ 90.309. Criteria and schedule for release of bonds on pollution abatement areas.

- (a) The Department will release up to 50% of the amount of bond for the authorized pollution abatement area if the applicant demonstrates and the Department finds the following:
- (1) The coal refuse disposal activities were conducted on the permit area, including the pollution abatement area, under the requirements of the permit and the authorization, Chapter 86 (relating to surface and underground mining: general) and this chapter except as specifically modified by this subchapter.
- (2) The operator has satisfactorily completed backfilling, grading, installing the water impermeable cover and drainage control in accordance with the approved reclamation plan.
- (3) The operator has properly implemented each step of the pollution abatement plan approved and authorized under this subchapter.
- (4) The operator has not caused degradation of the baseline pollution load at any time during the 6 months prior to the submittal of the request for bond release under this subsection and until the bond release is approved as shown by all groundwater and surface water monitoring conducted by the permittee under § 90.306(a)(1) (relating to operational requirements) or conducted by the Department.
- (5) The operator has not caused or contributed to surface water pollution or groundwater degradation by reaffecting the pollution abatement area.
- (b) The Department will release up to an additional 35% of the amount of bond for the authorized pollution abatement area but retain an amount sufficient to cover the cost to the Department of reestablishing vegetation if completed by a third party if the operator demonstrates and the Department finds the following:
- (1) The operator has replaced the topsoil or material conserved under § 90.97 (relating to topsoil: removal), completed final grading, planting and established revegetation under the approved reclamation plan and achieved the standards of success for revegetation in § 90.305(a)(5) (relating to application approval or denial).
- (2) The operator has not caused or contributed to groundwater or surface water pollution by reaffecting the pollution abatement area.
 - (3) The operator has achieved the following standards:
- (i) Achieved the actual improvement of the baseline pollution load described in the approved abatement plan as shown by groundwater and surface water monitoring conducted by the permittee for the time provided in the abatement plan after completion of backfilling, final grading, drainage control, topsoiling and establishment of revegetation to achieve the standard for success in § 90.305(a)(5).
 - (ii) Achieved the following:
- (A) At a minimum has not caused degradation of the baseline pollution load as shown by groundwater and surface water monitoring conducted by the operator or the Department for one of the following:
- (I) For 12 months from the date of initial bond release under subsection (a), if backfilling, final grading, drainage control, placement of impermeable cover, topsoiling and

- establishment of revegetation to achieve the standard of success for revegetation in $\S 90.305(a)(5)$ have been completed.
- (II) If treatment has been initiated at any time after initial bond release under subsection (a) and § 90.307(e) (relating to treatment of discharges), for 12 months from the date of discontinuance of treatment under § 90.307(d), if backfilling, final grading, drainage control, placement of impermeable cover, topsoiling and establishment of revegetation to achieve the standard of success for revegetation in § 90.305(a)(5) have been completed.
- (B) Conducted all the measures provided in the approved abatement plan and additional measures specified by the Department in writing at the time of initial bond release under subsection (a) for the area requested for bond release.
- (C) Caused aesthetic or other environmental improvements and the elimination of public health and safety problems by engaging in coal refuse disposal activities and reaffecting the pollution abatement area.
 - (D) Stabilized the pollution abatement area.
- (c) The Department will release the remaining portion of the amount of bond on the authorized pollution abatement area if the operator demonstrates and the Department finds the following:
- (1) The operator has successfully completed the approved abatement and reclamation plans, and the pollution abatement area is capable of supporting the postdisposal land use approved under § 90.166 (relating to postdisposal land use).
- (2) The operator has complied with the permit and the authorization, Chapter 86 and this chapter, except as specifically modified by this subchapter.
- (3) The operator has not caused degradation of the baseline pollution load from the time of bond release under subsection (b) or, if treatment has been initiated after bond release under subsection (b) in accordance with \S 90.307(e) for 5 years from the discontinuance of treatment under \S 90.307(d).
- (4) The applicable liability period has expired under § 86.151 (relating to period of liability).

Subchapter G. EXPERIMENTAL PRACTICES

Sec.

90.401. General.

§ 90.401. General.

- (a) To encourage advances in coal refuse disposal practices, coal refuse site reclamation and advances in technology or practices that will enhance environmental protection with respect to coal refuse disposal activities, the Department may grant permits approving experimental practices and demonstration projects. The Department may grant these permits under the following circumstances:
- (1) The environmental protection provided will be potentially more protective or at least as protective as required by this chapter, the Coal Refuse Disposal Control Act (52 P. S. §§ 30.51-30.66) and Chapter 86 (relating to surface and underground coal mining: general).
- (2) The coal refuse disposal activities approved under the permits are not larger or more numerous than necessary to determine the effectiveness and economic feasibility of the experimental practices or demonstration projects.

- (3) The experimental practices or demonstration projects do not reduce the protection afforded public health and safety below that provided by this chapter, the Coal Refuse Disposal Control Act and Chapter 86.
- (b) Experimental practice permits issued under this subchapter shall meet the provisions, standards and information requirements of the 30 CFR 785.13 (relating to experimental practices mining).

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[25 PA. CODE CHS. 210 AND 211]

Licensing of Blasters and Storage, Handling and Use of Explosives

The Environmental Quality Board (Board) by this order amends Chapters 210—211 (relating to blasters' licenses; and storage, handling and use of explosives). These amendments modernize and clarify the Department of Environmental Protection's (Department) blasting regulations. As more fully explained in this Preamble, the amendments to Chapter 210 significantly improve the process and criteria for obtaining and retaining a blaster's license. The amendments to Chapter 211 are a comprehensive modernization of the standards and procedures for handling, storing and using explosives.

These amendments were adopted by order of the Board at its meeting of April 17, 2001.

A. Effective Date

These amendments are effective upon publication in the *Pennsylvania Bulletin*.

B. Contact Persons

For further information contact J. Scott Roberts, P.G., Director, Bureau of Mining and Reclamation, Rachel Carson State Office Building, 5th floor, 400 Market Street, P.O. Box 8461, Harrisburg, PA 17105-8461, (717) 787-5103, or Marc A. Roda, Assistant Counsel, Bureau of Regulatory Counsel, Rachel Carson State Office Building, 9th floor, 400 Market Street, P.O. Box 8646, Harrisburg, PA 17105-8464, (717) 787-7060. Persons with a disability may use the AT&T Relay Service by calling (800) 654-5984 (TDD users) or (800) 654-5988 (voice users). These amendments are available electronically through the Department's website (http://www.dep.state.pa.us).

C. Statutory Authority

The final-form rulemaking is being made under the authority of:

- (1) Sections 3 and 7 of the act of July 1, 1937 (P. L. 2681, No. 537) (73 P. S. §§ 157 and 161); section 3 of the act of July 10, 1957 (P. L. 685, No. 362) (73 P. S. §§ 157, 161 and 166); and Reorganization Plan No.8 of 1981 (71 P. S. § 751-35), which authorize the Department to promulgate implementing regulations for the licensing of blasters and the storage, handling and use of explosives in most contexts other than mining.
- (2) Section 2(f) of the act of May 18, 1937 (43 P. S. § 25-2(f)) and Reorganization Plan No.2 of 1975 (71 P. S. § 751-22), which authorize the promulgation of regulations addressing, inter alia, the storage, handling and use of explosives in underground noncoal mining.
- (3) Section 4(b) of the Surface Mining Conservation and Reclamation Act (52 P. S. § 1396.4(b)) and section

- 11(e) of the Noncoal Surface Mining Conservation and Reclamation Act (52 P.S. § 3311(e)), which direct the Department to promulgate regulations concerning the handling and use of explosives at coal and noncoal surface mine sites, as well as the licensing of blasters.
- (4) Sections 1917-A and 1920-A(b) of The Administrative Code of 1929 (71 P. S. §§ 510-17 and 510-20(b)), which authorize the Board to adopt regulations to prevent the occurrence of a nuisance and to formulate, adopt and promulgate regulations that are necessary for the Department to perform its work.

D. Background and Summary

This regulatory package revises the current explosives regulatory program. The regulation of explosives presents a unique blend of health, safety and environmental concerns. Chapter 210 ensures that only qualified individuals are authorized to use explosives. The chapter name has been changed from "use of explosives" to "blasters' licenses." Chapter 211 contains provisions for the safe storage of explosives, including standards for storage containers and structures, and distances from railways, buildings and highways. Public and private buildings and structures are protected from the adverse effects of blasting by limits placed on ground vibration and air-overpressure. Finally, safety procedures are established for the benefit of the general public, those working in the vicinity of a blast and the blasters themselves.

This rulemaking establishes minimal standards for explosives used in all aboveground operations including coal and noncoal mining, construction and demolition. The rulemaking does not apply to the storage, handling and use of explosives in underground mines.

Currently, separate blasting regulations exist for anthracite surface coal mining, bituminous surface coal mining and noncoal surface mining. To the extent that these separate regulations contain requirements that are comparable to, but less stringent than, provisions in Chapter 211, they will be superseded by the more stringent provisions in Chapter 211. In addition to complying with Chapters 210 and 211, persons using explosives shall comply with other applicable provisions of the Commonwealth law or implementing regulations. For example, persons planning to use explosives in the waters of this Commonwealth for engineering purposes shall obtain a permit from the Fish and Boat Commission. See 30 Pa.C.S. § 2906 (relating to permits for use of explosives)

The Federal government regulates some aspects of explosives. The Federal Bureau of Alcohol, Tobacco and Firearms (ATF) regulates the storage and interstate sale and purchase of explosives. The Office of Surface Mining has the authority to regulate the use of explosives at surface coal mines. The Department has received general primacy authority to regulate surface coal mining in this Commonwealth, including the use of explosives. Finally, the Federal Highway Administration regulates the transportation of explosives on public roads.

The Mining and Reclamation Advisory Board (MRAB) was involved in the development of the proposed rule-making. The regulatory changes were reviewed and discussed with the MRAB's Regulation, Legislation and Technical Committee on August 10, 1999. The MRAB recommended that the Board approve the amendments as proposed rulemaking at its meeting on October 21, 1999. During the meeting, the MRAB asked the Department to clarify two issues. The Department discussed these issues with the MRAB at its meeting on January 6, 2000. The

MRAB first asked if seismic monitoring could occur between the blast location and the closest dwelling instead of at the closest dwelling. The Department explained that it normally requires monitoring at the structure to be protected, which is typically the closest dwelling, but in unusual cases the Department will allow monitoring at other locations. The other issue concerned a possible conflict with the requirements for analyzing seismic records in the mining regulations. The Department explained that it intends to make appropriate revisions to the mining regulations once the Board has taken final action on this rulemaking. Following this discussion, the MRAB unanimously approved the proposed rulemaking. The Board adopted the proposed regulations at its March 21, 2000, meeting.

Chapters 210 and 211 were published as proposed rulemaking at 30 Pa.B. 2768 (June 3, 2000). There was a 60-day comment period, and four public hearings were held. The Department has considered all comments received and has prepared a comment and response document. The comment and response document is available on the Department's website and from the contact persons listed in Section B of this Preamble. The MRAB reviewed and unanimously approved the draft final rulemaking at its January 4, 2001, meeting.

E. Summary of Comments and Responses on the Proposed Rulemaking and Changes Made in the Final Rulemaking

General

A commentator noted that a reference to sections 1-6 of the act of December 19, 1996 (P. L. 1460, No. 187) (73 P. S. §§ 176—182.7) should be included to clearly establish that blasters are also required to comply with this State law and to notify the Pennsylvania One Call System. The Board has determined that sections 2 and 3 of the act of December 19, 1996 (P. L. 1460, No. 187) (73 P. S. §§ 179 and 180) apply to the contractor and designer. Blasting activities are subordinate to excavation activities. Furthermore, blasters are not considered primary contractors or designers. To avoid confusion over who contacts Pennsylvania One Call, the entity who is responsible for the excavation, normally the contractor, should contact Pennsylvania One Call and inform them of the anticipated blasting activities. No changes were made to the final-form regulations as a result of this comment.

Some commentators were concerned that information on where to obtain applications and other forms should be included in the regulations. Copies of all applications will be available on the effective date of these regulations through the Bureau of Mining and Reclamation, any of the District Mining Offices and electronically on the Department's web site. In addition, the Department will provide the necessary forms to all licensed blasters through direct mailing.

Chapter 210. Blasters' Licenses

§ 210.11. Definitions.

The definition "demolition activity" has been deleted from § 211.101 (relating to definitions) and added to § 210.11 as "demolition and demolition blasting" because these references appear only in Chapter 210.

§ 210.13. General.

A commentator noted that § 210.13(b) states that certain individuals may be exempted from obtaining a blaster's license if they are detonating "extremely small amounts of explosives" and wanted clarification on what qualifies as "extremely small amounts of explosives." The

applicable statutes do not obligate the Department to license all persons conducting blasting activities. The Department has found that in most industrial and research applications, the quantities of explosives and blasting operations are such that limited risk is posed to the blaster or anyone in the vicinity of the blasting activity. Due to many variables, it is impossible to set an arbitrary limit on what constitutes "extremely small amounts of explosives." Exemptions from the licensing requirement will be based on the level of risk rather than an arbitrarily established amount of explosives. The Department will evaluate the blasting activity and determine the level of risk. No changes were made to the regulation as a result of this comment, although a minor grammatical change was made for readability.

§ 210.14. Eligibility requirements.

Several commentators suggested that the term "good moral character" found in § 210.14(b)(1) is vague. The Board agrees that the term is vague and difficult to determine, and has deleted the requirement that an applicant for a blaster's license or renewal of a blaster's license be of "good moral character" from the final rulemaking.

Two commentators suggested that the grammatical structure of § 210.14(b)(1) should be changed. The Board revised this paragraph and added the phrase "as indicated by past or continuing violations, has demonstrated a lack of ability or intention."

§ 210.15. License application.

In § 210.15(a), the Board added the word "provided" and deleted the word "prepared" for clarity.

A commentator suggested that the Board revise the language in $\S 210.15(b)$ to ensure the notarized statement confirming experience is from a person who has direct knowledge of the applicant's expertise. The Board agrees and has added the language "a person who has direct knowledge of the applicant's expertise" to $\S 210.15(b)$.

§ 210.17. Issuance and renewal of licenses.

One commentator stated that demolition has always been an activity that was authorized by holding a general blaster's license, and § 210.17(a) should not require that a blaster be licensed specifically to conduct demolition blasting. The Board disagrees. Demolition blasting is a specialty field that differs greatly from construction, mining or other categories of blasting. The demolition of structures requires analysis of the support members of the structure to determine where to place explosive charges. However, the Board recognizes that individuals have been conducting demolition blasting under the existing regulations. A new subsection (g) has been added to provide for reclassification to a demolition blaster's license without examination or application fee based on 3 years of experience in demolition blasting.

Chapter 211. Storage, Handling And Use Of Explosives § 211.101. Definitions.

"Blast site"

A commentator noted that use of the term "area" in the definition of "blast site" could cause confusion. The Board, for clarity, added the language "the specific location where the explosives charges are loaded into the blast holes" and deleted the language "the area where the explosive charges are located."

"Building"

A commentator asked what is meant by the term "regularly occupied" when referring to buildings. To avoid confusion on this point, the Board has changed the definition of building to "a structure that is designed for human habitation, employment or assembly."

"Flyrock"

Several commentators indicated that the definition of "flyrock" in the proposed regulations caused confusion by using the term "blast site." They noted that the term "blast site" is the area directly affected by the blast. The Board agrees and has changed the definition of "flyrock" by using the term "blast area."

"Person"

A commentator stated that the definition of "person" in the proposed Chapter 211 may imply liability that exceeds the boundaries of the law. The Board agrees and has changed the definition of "person" by deleting the reference to fines, penalties or imprisonment.

"Scaled distance"

The Board has revised this definition to clarify that "scaled distance" can apply to buildings or structures.

§ 211.102. Scope.

A commentator indicated that § 211.102 states that there are provisions of the proposed rulemaking more stringent than mining regulations. The commentator suggested that this will lead to confusion and may result in inconsistent regulation of explosives usage. The commentator noted that the language should be revised to specifically identify the regulatory provisions that are more stringent than those of the mining regulations. The Board does not believe that listing these provisions is necessary or practical. Chapter 211 deals exclusively with blasting. Since Chapter 211 contains a number of detailed provisions not found in the mining regulations, any attempt to list these provisions would be confusing.

The commentator suggested that implementation of the provisions that are more stringent than the current mining regulations should be deferred until the mining regulations are amended to be consistent with the requirements of this chapter. The primary purpose of these regulations is to provide uniform standards for all blasting in this Commonwealth. The Board feels that deferring the application of some provisions of the proposed rulemaking until the mining regulations are amended delays attaining that goal. There were no changes made to the final-form rulemaking as a result of this comment.

§ 211.113. Application contents.

The Board has modified the wording in several subsections for clarity.

§ 211.121. General requirements.

A commentator suggested that the proposed rulemaking should indicate that the Department will notify applicants for blasting activity permits of an incomplete application and identify the missing items necessary to complete the application. The Board agrees and has added the appropriate language to the final-form rulemaking.

§ 211.122. Permits to sell explosives.

The word "number" has been added so that § 211.121(a)(2) reads "... telephone number."

§ 211.133. Blast report.

The title of this section has been revised to read "blast reports."

A commentator suggested the Department should develop a standardized blast report form. The Board agrees. The Department has developed a standardized blast report which is available on the Department's website and from the district mining offices.

Another commentator noted that the first sentence in § 211.133(a) should correctly read "shall prepare a report of each blast...." The Board agrees and has revised subsection (a) accordingly.

Two commentators noted that § 211.133(a)(3) needs to specify which permit number is to be included in the blast report. The Board agrees and has reworded this paragraph to specify "blasting activity permit or appropriate mining permit."

Two commentators suggested that the requirement to describe the height or length of stemming and deck separation on the shot report needs to be more specific. They asked if these requirements are for each hole, collectively or average. For clarity the Board has added "for each hole" to § 211.133(a)(9).

The Board has added "not owned or leased by the blasting activity permittee or its customer" to § 211.133(a)(15) to further clarify the building of concern.

Two commentators suggested that it is not always reasonable to require the seismograph monitoring to be part of the blast record within 7 days and that the requirement should be extended to 14 days. The Board agrees that 14 days is acceptable under normal circumstances and has changed § 211.133(a)(23) accordingly. The Board also added additional flexibility by inserting two provisions. The first allows the Department to grant waivers to allow the seismograph report to be made a part of the blast record within 30 days. The second provision gives the Department the authority to require the blast report be made part of the record within 7 days.

A commentator suggested that § 211.133(a)(24) include a reference to § 211.157(e) which describes the appropriate actions to take when there is a misfire. The Board has inserted the suggested reference.

Three commentators noted that § 211.133(b) allows the Department to require monthly summaries. They asked the Department to explain the necessity for monthly summaries, the circumstances when monthly summaries would be required and how the blaster will be notified. In the Board's opinion, monthly summaries are appropriate when blasting is being conducted in an area where there is considerable public concern or potential for property damage. This information would be in addition to the blast reporting requirements. The Department's Blasting and Explosives Inspector will notify the blaster of the need to provide a monthly summary.

§ 211.141. General requirements.

Commentators noted that the proposed § 211.141(6) required the permittee to only load explosives into a closed body vehicle if the load is 2,000 pounds or more. They suggested language to improve clarity. The Board agrees and has made the appropriate changes.

Paragraph (11) of this section, which deals with fire extinguishers, has been revised to be consistent with the Department of Transportation's regulations based on the recommendations of three commentators.

§ 211.151. Prevention of damage.

One commentator noted that Chapter 87 (relating to surface mining of coal) appears to be effective in preventing damage from the use of explosives in connection with surface mining. The commentator asked for an explanation of why the mining regulations need to be superseded by more stringent regulations. The best science available, United States Bureau of Mines Report of Investigations R.I. 8507, "Structure Response and Damage Produced by Ground Vibration from Surface Mine Blasting," concludes that damage can occur to homes at ground vibration levels lower than the requirements in the present mining regulations. The adoption of more stringent ground vibration limits provides better protection of all structures. There have been situations when the limits in the proposed rulemaking have been applied to mining activities in order to be more protective of specific structures. Also, if necessary, these regulations allow the Department to establish alternative particle velocity or airblast limits. This change in limits would be based upon site-specific factors such as the population density, age and type of structures and geology of the area.

Two commentators felt that § 211.151(c) provides an unnecessary increase of 61% over the current standard (scaled distance of 55) by requiring that blasts be designed at a scaled distance of 90. They felt that the change would put an unnecessary burden on the blasting industry. They also suggested that the former United States Bureau of Mines Safe Blasting Criteria (Z-Curve) should not be the regulatory limit as current standards are adequate. The Board feels that the current regulations do not adequately protect all buildings. The best available science, the former United States Bureau of Mines Study, R.I. 8507, "Structure Response and Damage Produced by Ground Vibration From Surface Mine Blasting," concluded that damage could possibly occur to some structures at peak particle velocities as low as .5 inch per second. The United States Bureau of Mines Study, R.I. 8507, predicts the highest probable ground vibration from a blast designed at a scaled distance of 90 is .5 inch per second peak particle velocity. The practical application of this requirement is to prevent property damage.

A commentator noted that § 211.151(c) requires a blast to achieve either a scaled distance of 90 or the maximum peak particle velocity as indicated in Figure 1. The commentator believes that these standards may be too restrictive when applied to unconsolidated materials in the vicinity of a blast, and questioned if geologic variation should be considered in the determination of vibration limits. Geology influences the character of the ground vibration; it does not affect dynamics of a structure's response. Designing a blast at the scaled distance of 90 insures that ground vibration will not exceed .5 inches per second under any circumstances. The scaled distance limit of 90 was derived from a large number of blasts under a variety of geologic conditions. While the scaled distance of 90 may be conservative in some areas, the blaster may elect to use Figure 1 as the standard in those areas.

Figure 1, in § 211.151(c), was changed to add .50 in./sec. on the graph. This change was made for clarity.

In § 211.151(c), the language was changed by adding "at the closest building or other structure designated by the Department" and by replacing the word "based" with "leased" in § 211.151(d). These changes were made to maintain consistency with other provisions of this section and to correct a typographical error.

In response to comments on § 211.151, subsections (c) and (e) have been changed to allow the Department to establish an alternative peak particle velocity or airblast level instead of just reducing these levels. Commentators expressed concern that the limits may be too stringent. The Department recognizes that some structures may be adequately protected by applying less stringent limits.

§ 211.153. General requirements for handling explosives.

In § 211.153(b), relating to prohibiting matches, lighters and smoking within a specified distance of a blast site or area where explosives are stored or used, "30.48 meters" was added and "30.84" was deleted. The language change was made to correct a typographical error.

§ 211.154. Preparing the blast.

In response to a number of comments, the Board has revised \S 211.154(c), (f)(2), (4) and (5) and (k) for clarity, readability and consistency.

§ 211.171. General provisions for monitoring.

A commentator noted that the proposed rulemaking should be revised to specify the circumstances under which the Department may require ground vibration and air blast monitoring at scaled distance above 90 or at a structure other than the building closest to the blast. The Board does not agree that the regulations should specify when the Department may require additional monitoring. Blasting is an ultra-hazardous activity and occasionally has unintentional impacts on the public. It is impossible to articulate in the regulations all the circumstances under which the Department should require additional monitoring.

In response to these comments, the language in § 211.171(d) has been changed by revising the minimum trigger to be .25 inch per second rather than 50% of the compliance limit.

Two commentators noted that the older model and brick seismographs do not record the date and time when the instrument was turned on or off. They felt that a 3-year phase-in period should be included in § 211.171(e) as was done in § 211.133(a)(23). They suggested that language can be added which would allow a blaster to supply the on/off times for the instrument on a signed statement. The Department has revised the regulation to allow the blaster to supply on/off times on a signed statement when using an instrument that doesn't provide a print out. This revision allows blasters to continue using existing seismographs, thereby eliminating the need for a phase-in period.

§ 211.173. Monitoring records.

Language changes in § 211.173(b) were made for clarification and accuracy.

A commentator suggested that § 211.173(c), which authorizes the Department to require a ground vibration or airblast recording to be analyzed or certified by an independent qualified consultant, should specify what circumstances would exist to require this type of analysis or certification. The Board agrees. The section has been revised by adding "If the Department questions the validity of a ground vibration or airblast record or the interpretation of the record" to § 211.173(c).

§ 211.182. General provisions.

Several commentators suggested that the Board consider adding language to the proposed rulemaking to allow the use of measures for protecting the lines other than those specified in the regulations upon approval of the Department as well as the owner of the utility. The

Board agrees and has changed the language of § 211.182(e) to include this provision.

F. Benefits, Costs and Compliance

Benefits

These final-form regulations are designed to modernize an outdated explosives regulatory program. The explosives industry will benefit because current products and technologies are addressed in a manner that is consistent with their current use. Citizens will benefit because the regulations establish new limits on ground vibration and airblast that are designed to prevent damage to structures. In addition, annoyance from unexpected blasts will be reduced because the public will be notified prior to the commencement of most blasting operations. Additionally, the public and blasting industry will benefit from the continuing education that is required for renewing a blaster's license.

Compliance Costs

The explosives industry will see an increase in the cost of compliance because of the requirement for continuing education for blasters. The new requirement for general liability insurance is not expected to create a significant increase in costs, since most blasting companies currently carry liability insurance. This final-form rulemaking requires more monitoring than previously required. However, because monitoring records are no longer required to be analyzed or verified by an independent third party, cost savings will be realized. There is no change to the current fee structure.

Compliance Assistance Plan

The Department will provide written notification of this rulemaking to all blasters in this Commonwealth. The Department will also hold outreach sessions with the Commonwealth chapters of the International Society of Explosive Engineers and various mining organizations.

Paperwork Requirements

This final-form rulemaking will result in a slight increase in paperwork. Licensed blasters will be required to document their continuing education. The new blasting activity permit will require a new application form that will be available on the effective date of these regulations. The form will be available from the Bureau of Mining and Reclamation, any of the District Mining Offices, and electronically on the Department's website. In addition, the form will be provided to all licensed blasters through direct mailing. Additional information will be required in the blast report.

G. Sunset Review

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

H. Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), on May 17, 2000, the Department submitted a copy of the notice of proposed rulemaking published at 30 Pa.B. 2768 to the Independent Regulatory Review Commission (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, IRRC and the Committees were provided with copies of the comments received during the public comment period, as well as other documents when requested. In preparing

these final-form regulations, the Department has considered all comments from IRRC and the public. The Committees did not submit comments on the proposed rulemaking.

Under section 5.1(d) of the Regulatory Review Act (71 P. S. § 745.5a(d)), on May 29, 2001, these final-form regulations were deemed approved by the House and Senate Committees. Under section 5.1(e) of the Regulatory Review Act, IRRC met on June 7, 2001, and approved the final-form regulations.

I. Findings of the Board

The Board finds that:

- (1) Public notice of the 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 in 1 Pa. Code §§ 7.1 and 7.2.
- (2) A public comment period was provided as required by law and all comments were considered.
- (3) These final-form regulations do not enlarge the purpose of the proposed amendments published at 30 Pa.B. 2768.
- (4) These final-form regulations are necessary and appropriate for administration and enforcement of the authorizing acts identified in Section C of this Preamble.

J. Order of the Board

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

- (a) The regulations of the Department, 25 Pa. Code Chapters 210 and 211, are amended by deleting \$\$ 210.1—210.6, 211.1, 211.2, 211.31—211.44, 211.51—211.56, 211.61, 211.62, 211.72—211.76 and 211.81—211.88; and by adding \$\$ 210.11—210.19, 211.101—211.103, 211.111—211.115, 211.121—211.125, 211.131—211.133, 211.141, 211.151—211.162, 211.171—211.173, 211.181 and 211.182 to read as set forth in Annex A.
- (b) The Chairperson 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 Environmental Resources and Energy 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 upon publication in the *Pennsylvania Bulletin*.

DAVID E. HESS, Chairperson

Fiscal Note: (1) General Fund; (2) Implementing Year 2000-01 is \$74,000; (3) 1st Succeeding Year 2001-02 is \$88,000; 2nd Succeeding Year 2002-03 is \$88,000; 3rd Succeeding Year 2003-04 is \$88,000; 4th Succeeding Year 2004-05 is \$88,000; 5th Succeeding Year 2005-06 is \$88,000; (4) Fiscal Year 1999-00 \$40,200,000; Fiscal Year 1998-99 \$33,123,000; Fiscal Year 1997-98 \$31,139,000; (7) Environmental Program Management; (8) recommends adoption.

(*Editor's Note*: For the text of the order of the Independent Regulatory Review Commission relating to this document, see 31 Pa.B. 3370 (June 23, 2001).)

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 210. BLASTERS' LICENSES GENERAL PROVISIONS

§§ 210.1-210.6. (Reserved).

§ 210.11. Definitions.

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

Blaster—A person who is licensed by the Department under this chapter to detonate explosives and supervise blasting activities.

Blaster learner—An individual who is learning to be a blaster and who participates in blasting activities under the direct supervision of a blaster.

Blaster's license—A license to detonate explosives and supervise blasting activities issued by the Department under this chapter.

Demolition and demolition blasting—The act of wrecking or demolishing a structure with explosives.

Person—A natural person.

§ 210.12. Scope.

This chapter applies to persons engaging in the detonation of explosives within this Commonwealth. This chapter does not apply to persons authorized to detonate explosives or to supervise blasting activities under:

- (1) The Pennsylvania Anthracite Coal Mine Act (52 P. S. §§ 70.101—70.1405).
- (2) The Pennsylvania Bituminous Coal Mine Act (52 P. S. §§ 701-101—701-706).

§ 210.13. General.

- (a) A person may not detonate explosives or supervise blasting activities unless the person has obtained a blaster's license.
- (b) The Department may exempt certain individuals from needing a blaster's license if the person is detonating extremely small amounts of explosives for industrial or research purposes. The Department will consider a written request for an exemption from the person seeking the exemption.
- (c) Upon request, a blaster shall exhibit a blaster's license to the following:
 - (1) An authorized representative of the Department.
- (2) The blaster's employer or an authorized representative of the employer.
 - (3) A police officer acting in the line of duty.
 - (d) A blaster's license is not transferable.

§ 210.14. Eligibility requirements.

- (a) To be eligible for a blaster's license, a person shall:
- (1) Be 21 years of age or older.

- (2) Have at least 1 year of experience as a blaster learner in preparing blasts in the classification for which a license is being sought.
- (3) Have taken the Department's class on explosives. It is not necessary for a blaster to retake the class when adding an additional classification to a license.
- (4) Have successfully passed the Department's examination for a blaster's license.
- (b) The Department will not issue or renew a license if the applicant, as indicated by past or continuing violations, has demonstrated a lack of ability or intention to comply with the Department's regulations concerning blasting activities.

§ 210.15. License application.

- (a) The license application shall be on forms provided by the Department and be accompanied by a check for \$50 payable to the Commonwealth of Pennsylvania. The complete application shall be submitted to the Department at least 2 weeks prior to the examination.
- (b) The license application shall include a signed notarized statement from a person who has direct knowledge of the applicant's expertise, such as the blaster who supervised the applicant, or the applicant's employer. The statement shall:
- (1) Describe the applicant's experience in blasting. In particular, the statement shall describe in detail how the applicant assisted in the preparation of the blasts and for how long.
- (2) State whether the applicant is competent to prepare and detonate blasts in the classification for which the license is being sought.

§ 210.16. Examinations.

- (a) The Department will conduct examinations for specific types of blasting, as specified in § 210.17(a) (relating to issuance and renewal of licenses).
- (b) The Department will schedule and conduct examinations as needed.
- (c) An applicant failing to appear for a scheduled examination forfeits the application fee unless the applicant provides written notice to the Department prior to the examination date or submits a valid medical excuse in writing.
- (d) Refund of the fee or admittance to a subsequent examination without a reapplication fee will be at the discretion of the Department.

§ 210.17. Issuance and renewal of licenses.

- (a) A blaster's license is issued for a specific classification of blasting activities. The classifications will be determined by the Department and may include general blasting (which includes all classifications except demolition and underground noncoal mining), trenching and construction, seismic and pole line work, well perforation, surface mining, underground noncoal mining, industrial, limited and demolition.
- (b) A person may apply to amend the blaster's license for other classifications by meeting the requirements of § 210.14 (relating to eligibility requirements) and by submitting a complete application.
 - (c) A blaster's license will be issued for 3 years.
- (d) A blaster's license is renewable if the blaster can demonstrate that he has had 8 hours of continuing

education in Department-approved courses related to blasting and safety within the 3 year period.

- (e) The blaster's license may be renewed for a 3-year term by submitting a renewal application to the Department and a check for \$30, payable to the Commonwealth of Pennsylvania.
- (f) A person who intends to be a blaster and whose blaster's license was not renewed within 1 year of its expiration date shall apply for a new license under §§ 210.14—210.16 (relating to eligibility requirements; license application; and examinations).
- (g) A person who conducted demolition blasting under a general blaster's license may conduct demolition blasting after July 14, 2001, by applying for and receiving a demolition blaster's license. The Department may waive the examination required by § 210.14 (relating to eligibility requirements) and the application fee if the blaster demonstrates at least 3 years of experience in demolition blasting. The demonstration shall be in the form of a notarized statement from the blaster's employer that describes the blaster's experience.

§ 210.18. Recognition of out-of-State blaster's license.

- (a) The Department may license a person who holds a blaster's license or its equivalent in another state. The Department may issue the license if, in the opinion of the Department, that state's licensing program provides training on the storage, handling and use of explosives and an examination that is equivalent to the requirements of this chapter.
- (b) A request for a license under this section shall be made in writing. Copies of the other state's explosives training and examination material and proof that the applicant holds a license in the other state shall be provided to the Department in order to make a proper evaluation.

§ 210.19. Suspension, modification and revocation.

The Department may issue orders suspending, modifying or revoking a blaster's license. Before an order is issued, the Department will give the blaster an opportunity for an informal meeting to discuss the facts and issues that form the basis of the Department's determination to suspend, modify or revoke the license. The Department may suspend, modify or revoke a blaster's license for violations of this chapter and Chapter 211 (relating to storage, handling and use of explosives in surface applications).

CHAPTER 211. STORAGE, HANDLING AND USE OF EXPLOSIVES

§ 211.101. Definitions.

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

Airblast—An airborne shock wave resulting from an explosion, also known as air overpressure, which may or may not be audible.

Blast area—The area around the blast site that should be cleared to prevent injury to persons and damage to property.

Blast site—The specific location where the explosives charges are loaded into the blast holes.

Blaster—An individual who is licensed by the Department under Chapter 210 (relating to blasters' licenses) to detonate explosives and supervise blasting activities.

Blaster-in-charge—The blaster designated to have supervision and control over all blasting activities related to a blast.

Blasting activity—The actions associated with the use of explosives from the time of delivery of explosives to a worksite until all postblast measures are taken, including priming, loading, stemming, wiring or connecting, detonating, and all necessary safety, notification and monitoring measures.

Building—A structure that is designed for human habitation, employment or assembly.

Charge weight—The weight in pounds of an explosive charge.

Delay interval—The designed time interval, usually in milliseconds, between successive detonations.

Detonator—A device containing an initiating or primary explosive that is used for initiating detonation of explosives. The term includes electric blasting caps of instantaneous and delay types, blasting caps for use with safety fuses, detonating cord, delay connectors and nonelectric instantaneous and delay blasting caps.

Explosive—A chemical compound, mixture or device that contains oxidizing and combustible materials or other ingredients in such proportions or quantities that an ignition by fire, friction, concussion, percussion or detonation may result in an explosion.

- (i) The term includes safety fuse, squibs, detonating cord and igniters.
 - (ii) The term does not include the following:
- (A) Commercially manufactured black powder, percussion caps, safety and pyrotechnic fuses, matches and friction primers, intended to be used solely for sporting, recreational or cultural purposes in antique firearms or antique devices, as defined in 18 U.S.C.A. § 921 (relating to definitions).
- (B) Smokeless powder, primers used for reloading rifle or pistol cartridges, shot shells, percussion caps and smokeless propellants intended for personal use.

Flyrock—Overburden, stone, clay or other material ejected from the blast area by the force of a blast.

Magazine—A structure used for the storage of explosives.

Misfire—Incomplete detonation of explosives.

Particle velocity—A measure of the intensity of ground vibration, specifically the time rate of change of the amplitude of ground vibration.

Peak particle velocity—The maximum intensity of particle velocity.

Person—A natural person, partnership, association, or corporation or an agency, instrumentality or entity of state government.

Primer—A cartridge or package of high explosives into which a detonator has been inserted or attached.

 $\ensuremath{\textit{Purchase}}\xspace\xspace$ To obtain ownership of explosives from another person.

Sale or sell—To transfer ownership of explosives to another person.

Scaled distance (Ds)—A value calculated by using the actual distance (D) in feet, measured in a horizontal line from the blast site to the nearest building or structure, neither owned nor leased by the blasting activity permittee or its customer, divided by the square root of the

maximum weight of explosives (W) in pounds, that is detonated per delay period of less than 8 milliseconds.

$$Ds = D \div \sqrt{W}$$

Stemming—Inert material placed in a blast hole after an explosive charge for the purpose of confining the explosion gases to the blast hole, and inert material used to separate explosive charges in decked holes.

Structure—A combination of materials or piece of work built or composed of parts joined together in some definite manner for occupancy, use or ornamentation. The term includes everything that is built or constructed, including bridges, offices, water towers, silos and dwellings.

Utility lines—An electric cable, fiber optic line, pipeline or other type of conduit used to transport or transmit electricity, gases, liquids and other media including information.

§ 211.102. Scope.

- (a) This chapter applies to persons using, storing, purchasing and selling explosives and engaging in blasting activities within this Commonwealth. Persons using and storing explosives at underground mines are exempt from this chapter. The storage of explosives in magazines on the surface at an underground noncoal mine is subject to the applicable requirements of this chapter. The provisions of this chapter that are more stringent than the blasting provisions in Chapters 77, 87 and 88 (relating to noncoal mining; surface mining of coal; and anthracite coal) apply to blasting activities at coal or noncoal surface mines.
- (b) Compliance with this chapter does not relieve a person who is engaged in the purchase or sale of explosives, or blasting activities, from compliance with other applicable laws or regulations of the Commonwealth.

§ 211.103. Enforcement.

- (a) The Department may issue orders necessary to implement this chapter including an order to suspend, modify or revoke a license or permit authorized by this chapter.
- (b) Before issuing an order modifying peak particle velocity or airblast limits in a blasting activity permit, the Department will first provide the permittee with an opportunity to meet and discuss modifications.

Subchapter B. STORAGE AND CLASSIFICATION OF EXPLOSIVES

§ 211.111. Scope.

This subchapter applies to the classification and storage of explosives. It establishes the requirements, procedures and standards for licensing, constructing, siting and maintaining magazines.

§ 211.112. Magazine license and fees.

- (a) A person storing explosives shall do so in a magazine licensed by the Department. A person may not construct, install or modify a magazine until the Department has issued or amended the license in writing. The licensee shall store explosives in accordance with the approved application, the license and this chapter.
- (b) The license specifies the types and quantities of explosives to be stored in the magazine and any other condition necessary to ensure that the proposed activity complies with applicable statutes and this chapter.
- (c) Licenses expire annually on December 31 of each year. If the Department receives a complete renewal application by December 31, the licensee may continue to

operate under the current license until the Department acts on the renewal application.

- (d) License fees are as follows:
- (1) License:
- (i) Application—\$50
- (ii) Site inspection—\$50
- (2) License modifications—\$50
- (3) License renewals—\$50
- (4) License transfers—no fee

§ 211.113. Application contents.

- (a) An application to obtain, renew, modify or transfer a magazine license shall be on forms approved by the Department. Before the Department issues, renews, transfers or modifies a license, the application must demonstrate that the applicant has complied with the applicable requirements of this chapter.
 - (b) A completed license application shall include:
- (1) The applicant's name, address and telephone number.
- (2) A contact person, including name, title and telephone number.
- (3) The types and quantities of explosives to be stored within the magazine.
- (4) A map, plan or a sketch of the site location showing the nearest buildings, nearest railways, nearest highways, and existing barricades, if any, and proposed barricades.
- (5) A plan showing the design and specifications of the magazine to be licensed.
 - (c) A license renewal application shall include:
- (1) The applicant's name, address and telephone number.
- (2) A contact person, including name, title and telephone number.
- (3) The maximum amount and type of explosives for which the magazine is currently licensed.

§ 211.114. Displaying the license.

The magazine license, or a legible copy of the license, shall be conspicuously displayed. If possible, the license shall be displayed inside the magazine. In all other cases, the license shall be displayed at the site and adjacent to the magazine to which it applies.

§ 211.115. Standards for classifying and storing explosives and constructing, maintaining and siting magazines.

- (a) The provisions of 27 CFR Part 55, Subpart K (relating to storage), are incorporated herein by reference. These provisions shall be used to:
 - (1) Classify explosives.
- (2) Determine which class of explosives may be stored in each type of magazine.
- (3) Determine the quantity of explosives that may be stored.
- (4) Determine the applicable construction standards for each type of magazine.
 - (5) Site the magazine.
- (6) Specify maintenance and housekeeping standards for a magazine.

- (7) Grant variances.
- (b) For purposes of incorporation by reference of 27 CFR Part 55 Subpart K, the term "Department" is substituted for the term "director," and the term "representatives of the Department" is substituted for the term "ATF Official."

Subchapter C. PERMITS

§ 211.121. General requirements.

- (a) Except as otherwise provided in this subchapter, a person may not engage in blasting activities, or sell or purchase explosives in this Commonwealth without first obtaining the appropriate permit from the Department issued under this chapter.
- (b) Permits under this chapter are not required for the sale, purchase or use of fireworks governed by the act of May 15, 1939 (35 P. S. §§ 1271—1277).
- (c) A permit issued under the Surface Mining Conservation and Reclamation Act (52 P. S. §§ 1396.1—1396.19a), or the Noncoal Surface Mining and Conservation and Reclamation Act (52 P. S. §§ 3301—3326), and the regulations promulgated thereunder, authorizing blasting activity shall act as a blasting activity permit issued under this chapter.
- (d) An application for a permit for the sale or purchase of explosives or to conduct blasting activities shall be on a form provided by the Department. A permit will not be issued unless the application is complete and demonstrates that the proposed activities comply with the applicable requirements of this chapter. The Department will notify applicants of an incomplete application and identify the items necessary to complete the application. The permittee shall comply with the approved application, the permit and this chapter.
- (e) The Department will not issue a permit to any person who has either:
- (1) Failed and continues to fail to comply with this chapter or a condition of a permit issued under this chapter or an order issued to enforce this chapter.
- (2) Demonstrated an inability or lack of intention to comply with this chapter as indicated by past or continuing violations.

§ 211.122. Permits to sell explosives.

- (a) An application for a permit to sell explosives shall:
- (1) Identify the applicant's name, address, telephone number and type of business.
- (2) Identify a contact person, including name, title and telephone number.
 - (3) Specify the type of explosives to be sold.
- (4) State whether the applicant will purchase or manufacture the explosives to be sold.
- (5) For in-State sellers, include the applicant's magazine license number, if applicable.
 - (b) Permits to sell explosives are not transferable.
- (c) Permits to sell explosives expire on April 30 of each year. If the Department receives a complete renewal application by April 30, the permittee may continue to operate under the current permit until the Department acts on the renewal application.

- (d) A permit to sell explosives shall:
- (1) Identify the permittee.
- (2) Specify the type of explosives that the permittee may sell.
- (3) Contain conditions, as necessary, to ensure that the proposed activity complies with applicable statutes and this chapter.

§ 211.123. Permits to purchase explosives.

- (a) An application for a permit to purchase explosives shall:
- (1) Identify the applicant's name, address, telephone number and type of business.
- (2) Identify a contact person, including name, title and telephone number.
- (3) Identify the location and license number of the magazine to be used for storing the explosives, if applicable.
- (4) Specify the type of explosives that will be purchased.
- (5) Specify whether the explosives are being purchased for sale or use by the permittee.
 - (b) Permits to purchase explosives are not transferable.
- (c) Permits to purchase explosives expire on April 30 of each year. If the Department receives a complete renewal application by April 30, the permittee may continue to operate under the current permit until the Department acts on the renewal.

§ 211.124. Blasting activity permits.

- (a) An application for a blasting activity permit shall be prepared by a blaster and shall include:
- (1) The applicant's name, address, telephone number and type of business.
- (2) A contact person's name, title and telephone number.
- (3) The identity of independent subcontractors who will be performing the blasting activities.
 - (4) The type of explosives to be used.
- (5) The maximum amount of explosives that will be detonated per delay interval of less than 8 milliseconds.
- (6) The maximum amount of explosives that will be detonated in any one blast.
- (7) A map indicating the location where the explosives will be used.
- (8) The purpose for which the explosives will be used.
- (9) The location and license number of the magazine that will be used to store the explosives, if applicable.
- (10) A description of how the monitoring requirements of Subchapter G (relating to requirements for monitoring) will be satisfied.
- (11) Proof of third party general liability insurance in the amount of \$300,000 or greater per occurrence. This requirement is not applicable if the permittee is a noncoal surface mine operator who produces no more than 2,000 tons (1,814 metric tons) of marketable minerals per year from all its noncoal surface mining operations.
- (12) The anticipated duration of the blasting activity for which the permit is needed.

- (13) The anticipated days of the week and times when blasting may occur.
- (14) The distance and direction to the closest building not owned by the permittee or its customer.
- (15) Other information needed by the Department to determine compliance with applicable laws and regulations.
- (16) The printed name, signature and license number of the blaster who prepared the application.
- (17) Proof that residents within 200 feet (65.61 meters) of the blast site were informed of the proposed blasting operation. This notification could be a personal notification, written material left at each residence, or first class mail. The notification will provide general information about the blasting operation including the duration of the operation.
 - (b) Blasting activity permits are not transferable.
 - (c) The blasting activity permit shall specify:
 - (1) The blasting activity permittee.
- (2) Any independent subcontractors performing work under this permit.
 - (3) Limits on particle velocity and airblast.
 - (4) The types of explosives that may be used.
 - (5) The duration of the permit.
- (6) Other conditions necessary to ensure that the proposed blasting activity complies with the applicable statutes and this chapter.
- (d) The permittee may request extensions and modifications by submitting an amended application.

§ 211.125. Blasting activity permit-by-rule.

- (a) A person shall be deemed to have a permit for a blasting activity if:
- (1) The blasts are designed and performed for a scaled distance of 90 or greater.
- (2) No more than 15 pounds (6.81 kilograms) of explosives are detonated per delay interval of less than 8 milliseconds.
- (3) The total charge weight per blast does not exceed 150 pounds (68.18 kilograms).
- (4) The person notifies the Department either verbally, in writing, or by other means approved by the Department prior to the initial blast. If the person gives verbal notification, a written notice shall be received by the Department within 5 working days. The notification shall indicate the following information for all blasts that will occur under this permit:
 - (i) The identity of the person.
 - (ii) The location where the blasting will occur.
 - (iii) The purpose of the blasting.
- (iv) The distance to the nearest building not owned or leased by the person or its customer.
- (v) The days of the week and times when blasting may occur.
- (vi) The duration of blasting activities under this permit by rule.
 - (vii) The minimum scaled distance.

- (viii) The maximum weight of explosives detonated per delay period of less than 8 milliseconds.
 - (ix) The maximum total weight of explosives per blast.
 - (x) A contact person and telephone number.
- (5) Blast reports are completed in accordance with § 211.133 (relating to blast report).
- (6) The other monitoring and performance standards of this chapter are met.
- (b) The Department may revoke a blasting activity permit by rule under one of the following:
- (1) The permittee has demonstrated an unwillingness or inability to comply with the applicable regulations.
- (2) The blasting activity possesses a sufficient risk of harm to the public or the environment to warrant an individual blasting activity permit.

Subchapter D. RECORDS OF DISPOSITION OF EXPLOSIVES

§ 211.131. Sales records.

The seller shall keep an accurate record of every sale of explosives for 3 years. The record shall identify the purchaser's name and address, the Department purchase permit number, the date of the sale and the amount and types of explosives.

§ 211.132. Purchase records.

The purchaser shall keep a record of all purchases of explosives for 3 years. The record shall identify the date, types and amounts of explosives purchased and the name and address of the seller.

§ 211.133. Blast reports.

- (a) The blaster-in-charge shall prepare a report of each blast to provide the Department with sufficient information to reconstruct the conditions and events surrounding a blast. The Department may develop and require a blast report form to be used. The blasting activity permittee shall retain the blast report for at least 3 years and shall make the blast report available to the Department upon request. Blast reports shall contain, at a minimum, the following:
 - (1) The locations of the blast and monitoring readings.
 - (2) The name of the blasting activity permittee.
- (3) The blasting activity permit or appropriate mining permit number.
 - (4) The date and time of the blast.
- (5) The printed name, signature and license number of the blaster-in-charge.
 - (6) The type of material blasted.
- (7) A sketch showing the number of blast holes, burden, spacing, pattern dimensions and point of initiation.
 - (8) The diameter and depth of blast holes.
- (9) The height or length of stemming and deck separation for each hole.
- (10) The types of explosives used and arrangement in blast holes.
- (11) The total weight in pounds of explosives and primer cartridges used.
- (12) The maximum weight in pounds of explosives detonated per delay period of less than 8 milliseconds.
 - (13) The type of circuit, if electric detonation was used.

- (14) The direction and distance in feet from the blast site to the nearest building not owned by the blasting activity permittee or its customer.
- (15) A description of the nearest building location not owned or leased by the blasting activity permittee or its customer based upon local landmarks.
 - (16) The scaled distance.
 - (17) The weather conditions.
 - (18) The direction from which the wind was coming.
- (19) The measures taken to control flyrock, including whether or not mats were used.
- (20) The total quantity and type of detonators used and delays used.
 - (21) The number of individuals in the blasting crew.
- (22) The maximum number of blast holes or portions of blast holes detonated per delay period less than 8 milliseconds.
- (23) The monitoring records required by § 211.173 (relating to monitoring records). Monitoring records shall be made part of the blast report within 30 days of the blast. Beginning July 14, 2004, monitoring records shall be made part of the blast report within 14 days of the blast. The Department may grant a waiver to allow monitoring records to be made part of the blasting record within 30 days of the blast if all blasts, regardless of scaled distance, are monitored and monthly summaries of these reports, including the information required in subsection (b), are provided. Monitoring records shall be made part of the blast report within 7 days, if requested by the Department.
- (24) If a misfire occurred, the actions taken to make the site safe as specified in § 211.157 (relating to postblast measures).
- (b) The Department may require monthly summaries of these reports. The summaries shall include the date and time of the blasts, scaled distance, peak particle velocity, airblast, monitoring location, amount and types of explosives used and other information the Department deems necessary to ensure compliance with this chapter.

Subchapter E. TRANSPORTATION OF EXPLOSIVES

§ 211.141. General requirements.

The blasting activity, purchase or sale permittee shall:

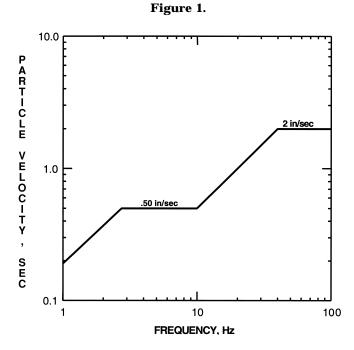
- (1) Immediately unload a vehicle carrying explosives upon reaching a magazine location. The unloaded vehicle shall be removed from the site. The only exception to this requirement is if the vehicle is a licensed magazine under Subchapter B (relating to the storage and classification of explosives).
- (2) Load or unload explosives from a vehicle only after the engine is turned off, unless power is needed for the loading or unloading operation. The permittee shall take all precautions necessary, such as blocking the wheels, to prevent the movement of the vehicle while it is being loaded or unloaded.
- (3) Load explosives only into a vehicle that is marked in accordance with the Department of Transportation standards for placarding vehicles transporting explosives.
- (4) Prohibit smoking within 100 feet of a vehicle used for transporting explosives. "NO SMOKING" signs shall be posted when a vehicle containing explosives is parked at a blast site or magazine.

- (5) Load no more than 2,000 pounds (908 kilograms) of explosives into an open body vehicle for transporting. The ends and sides shall be high enough to prevent explosives from falling off, and the load shall be covered with a fire-resistant tarpaulin, unless the explosives are transported in a magazine securely attached to the vehicle.
- (6) Load explosives into a closed body vehicle if the load is more than 2,000 pounds (908 kilograms) of explosives.
- (7) Only load explosives into a vehicle with a bed made of wood or other nonsparking material.
- (8) Load explosives into a vehicle which is also transporting metal, metal tools, blasting machines or other articles or materials likely to damage the explosives, only if these items are separated from the explosives by substantial nonsparking bulkheads constructed to prevent damage to the explosives.
- (9) Load detonators and other explosives into the same vehicle only if the detonators are in containers that conform to the current version of the *Institute of Makers of Explosives Safety Library Publication # 22* available from the Institute of Makers of Explosives, 1120 Nineteenth Street, N. W., Suite 310, Washington, DC 20036-3605.
- (10) Not load explosives into the same vehicle with materials such as matches, firearms, electric storage batteries, corrosive compounds, flammable substances, acids, oxidizing agents and ammonium nitrate not in the original containers.
- (11) Only load explosives into vehicles equipped with a fire extinguisher having a National Board of Underwriters Laboratories rating of 10 B:C or more. The fire extinguisher shall be easily accessible and ready for immediate use.
- (12) Load explosives into a vehicle so that explosives containers are not exposed to sparks or hot gases from the exhaust tailpipe. Exhaust systems that discharge upwards are recommended to avoid possible exposure of sparks or hot gases to explosives.
- (13) Only load explosives into vehicles that have passed the State safety inspection or certification.

Subchapter F. BLASTING ACTIVITIES

§ 211.151. Prevention of damage.

- (a) Blasting may not damage real property except for real property under the control of the permittee. If damage occurs, the blaster-in-charge shall notify the Department within 4 hours of learning of the damage.
- (b) Blasting may not cause flyrock. If flyrock occurs, the blaster-in-charge shall notify the Department within 4 hours of learning of the flyrock.
- (c) Blasts shall be designed and conducted in a manner that achieves either a scaled distance of 90 or meets the maximum allowable peak particle velocity as indicated by Figure 1 at the closest building or other structure designated by the Department. However, blasting activities authorized prior to July 14, 2001, may continue as authorized unless the authorization is modified, suspended or revoked by the Department. The scaled distance and maximum allowable peak particle velocity does not apply at a building or other structure owned or leased by the permittee or its customer.



(d) Blasts shall be designed and conducted to control airblast so that it does not exceed the noise levels specified in Table 1 at a building or other structure designated by the Department unless the building is owned or leased by the permittee or its customer.

Table 1			
Lower frequency limits of measuring System in Hz(+3dB)	Maximum allowable levels in dBL		
0.1 Hz or lower — flat response*	134 peak		
2.0 Hz or lower — flat response	133 peak		
6.0 Hz or lower — flat response	129 peak		
C - weighted — slow response*	105 peak		

*only when approved by the Department

(e) The Department may establish an alternative peak particle velocity or airblast level if it determines that an alternative standard is appropriate because of density of population, land use, age or type of structure, geology or hydrology of the area, frequency of blasts or other factors.

§ 211.152. Control of noxious gases.

A blast shall be conducted so that the gases generated by the blast do not affect the health and safety of individuals. Effects from gases may be prevented by taking measures such as venting the gases to the atmosphere, interrupting the path along which gases may flow, and evacuating people from areas that may contain gases.

§ 211.153. General requirements for handling explosives.

(a) Only a nonferrous, nonsparking tool shall be used to open containers of explosives.

- (b) Matches, lighters and smoking are prohibited within 100 feet (30.48 meters) of the blast site and areas where explosives are used or stored.
- (c) If it becomes necessary to destroy damaged or deteriorated explosives, the permittee shall immediately contact the manufacturer for technical advice and assistance.
- (d) Detonators may not be forced into cartridges of explosive or cast boosters. Detonators shall be completely inserted into a hole in an explosive cartridge made with an approved powder punch or into the detonator well of a cast booster.
- (e) Explosives may not be left unattended. They are to be stored in a licensed magazine or kept under the permittee's supervision and control.
- (f) A loaded blast shall always be under the continuous observation of the blaster-in-charge or a designee.
- (g) Shooting or carrying ammunition or firearms on a blast site and in areas where explosives are used or stored is prohibited, except for material needed to initiate the blast.
- (h) If blasting activities are conducted in the vicinity of electric lines such as transmission lines or electrified railways, a test shall be made for presence of stray electric currents. Electric blasting caps may not be used if stray electric currents in excess of 50 milliamperes are present.
- (i) A package of explosives may not be thrown, slid along floors or over other packages of explosives, or handled roughly.
- (j) If an electrical storm approaches an area where there is an activity involving explosives, the area shall be cleared by the permittee or licensee, who shall post guards at all approaches to prevent trespass of unauthorized persons.
- (k) Explosives and equipment that are obviously damaged or deteriorated may not be used.
 - (l) Explosives may not be abandoned.

§ 211.154. Preparing the blast.

- (a) The blasting activity permittee shall designate a blaster-in-charge for each blast. The blaster-in-charge shall control and supervise the blasting activity. The blaster-in-charge is responsible for all effects of the blast.
- (b) Only equipment necessary for loading blast holes may be allowed to operate within 50 feet (15.24 meters) of the blast site. The Department may establish, in writing, a different distance limitation.
- (c) A blaster-in-charge may not prepare or detonate a blast unless another person is present, able and ready to render assistance in the event of accident or injury.
- (d) The blaster-in-charge shall make every effort to determine the condition of the material to be blasted from the individual who drilled the blast holes or from the drill log.
- (e) Only the blaster-in-charge, other blasters, and up to six assistants per blaster may be at a blast site once loading of blast holes begins.
- (f) While loading a blast hole, the following measures shall be followed:
- (1) Ferrous material may not be used in the blast hole unless the use is approved by the Department in writing. This includes the use of steel casings, ferrous tools and retrieving equipment.

- (2) Only nonferrous, nonsparking tamping sticks may be used in loading a blast hole. Sectional poles connected by brass fittings are permitted, if only the nonferrous, nonsparking end of the pole is used for tamping. Retrieving hooks shall be made from nonsparking metal such as brass or bronze.
- (3) When using a pneumatic loading device, every precaution shall be taken to prevent an accumulation of static electricity. A loading operation shall be stopped immediately if static electricity or stray electrical currents are detected. The condition shall be remedied before loading may be resumed.
- (4) The blast hole shall be carefully checked for obstructions with a nonferrous, nonsparking tamping pole, a tape, a light or a mirror before it is loaded. The use of magnifying mirrors is prohibited. Explosives may not be forced past an obstruction in a blast hole.
- (5) Each blast hole shall be logged throughout the leading process to measure the amount and location of explosives placed in the blast hole. The information is to be recorded on the blast report required by § 211.133 (relating to blast report).
- (6) A blast hole containing loose dynamite shall be stemmed but not tamped.
- (7) The Department may specify the type and amount of stemming.
- (g) Before connecting one loaded blast hole to another, all activity within the blast area shall cease, and all nonessential persons shall retreat to a safe place. The blaster-in-charge shall determine the blast area.
- (h) Primers shall be prepared only at the hole to be loaded, immediately prior to loading. The components of the primer are to be kept separated at the collar of the blast hole. The primer may not be slit, dropped, deformed or carelessly handled and may not be tamped or forced into the blast hole.
- (i) Immediately upon completing the loading of a blast hole, any wood, paper or other materials used to pack explosives shall be inspected for the presence of explosives and removed to an isolated area. These materials may be burned after the blast has been fired. Persons may not be within 100 feet (30.48 meters) of these burning materials.
- (j) Measures shall be taken to reduce the chance of flyrock including:
- (1) The use of blasting mats or other protective devices, if, in the opinion of the blaster-in-charge, the measures are necessary to prevent injuries to persons or damage to property.
- (2) When blasting to an open, vertical face, checking the face for loose, hanging material or other faults prior to loading the blast holes.
- (k) Explosives may not be brought to a blast site in greater quantities than are expected to be needed for that blast. Surplus explosives may not be stored in the blast area.
- (l) Before a blast hole is loaded, it shall be checked to ensure that it is cool and does not contain any hot metal or smoldering material remaining from drilling the hole.
- (m) The use of abrasive or sharp-edged constituents in stemming material shall be avoided if tamping is necessary and the tamping may sever blasting cap leg wires, shock tubes or detonating cords.

(n) Blasting activities may not be conducted within 800 feet (243.84 meters) of a public roadway unless precautionary measures are taken to safeguard the public. Precautionary measures include stopping or slowing of traffic and posting signs.

§ 211.155. Preblast measures.

Prior to detonating a blast, the blaster-in-charge shall:

- (1) Ensure that all excess explosives have been removed from the blast area and are located in a safe area.
- (2) Inspect the blast site to ensure that connections are proper and adequate.
- (3) Ensure that the blast area is cleared and safe-guarded.
- (4) In addition to the warning signal, notify all persons who may be in danger.
- (5) Ensure that the necessary precautions are in place to protect the public on public roads.
- (6) At least 1 minute but no more than 2 minutes prior to detonation, sound a warning signal of three blasts, each lasting approximately 5 seconds. The warning signal shall be of sufficient power to be heard 1,000 feet (304.80 meters) from the blast site.

§ 211.156. Detonating the blast.

- (a) A blast may be detonated only between sunrise and sunset unless the Department authorizes a blast at another time of day.
 - (b) Only the blaster-in-charge may detonate a blast.

§ 211.157. Postblast measures.

- (a) After a blast has been detonated, no one may return to the blast area until all smoke and fumes have dissipated.
- (b) After the smoke and fumes have cleared, the blaster-in-charge shall return to the blast site and closely inspect the blast site to ensure that it is safe with respect to the blasting activity.
- (c) After the blaster-in-charge has determined the blast area is safe, the blaster-in-charge shall sound an all-clear signal, consisting of one long blast, lasting approximately 10 seconds. This all-clear signal shall be of sufficient power to be heard 1,000 feet (304.80 meters) from the blast site.
- (d) The blaster-in-charge shall determine if a misfire occurred and shall take all actions necessary to render the blast site safe. The blast site shall be made safe before drilling or muck removal begins.
- (e) If the blaster-in-charge suspects that undetonated ammonium nitrate/fuel mixture remains in the muck pile, the muck pile shall be thoroughly wetted down with water before any digging is attempted. Special attention shall be given to determine if primers, other explosives or detonators are present in the muck pile.
- (f) The blaster-in-charge shall immediately complete the blast report as required by \S 211.133 (relating to blast report).
- (g) The blaster-in-charge shall notify the Department within 24 hours of the occurrence of a misfire. A copy of the blast report shall be forwarded to the Department.

§ 211.158. Mudcapping.

Mudcapping in blasting activities is allowed only if the blaster-in-charge determines that drilling the material to be blasted would endanger the safety of the workers. If mudcapping is necessary, no more than 10 pounds (4.53 kilograms) of explosives shall be used for a blast.

§ 211.159. Electric detonation.

- (a) Electric blasting caps shall be tested for continuity with a blaster's galvanometer or blaster's multimeter specifically designed for testing blasting circuits. Testing shall be done:
 - (1) Before the primers are made up.
- (2) After the blast hole has been loaded but prior to stemming.
 - (3) As the final connecting of the circuit progresses.
- (b) When a shunt is removed from electric blasting cap leg wires, the exposed wires shall be reshunted.
- (c) Electric blasting caps may not be employed in a blast if there is any possibility of wires from the circuit being thrown against overhead or nearby electric lines.
- (d) An effort may not be made to reclaim or reuse electric blasting caps if the leg wires have been broken off near the top of the cap.
- (e) Leg wires on electric blasting caps shall extend above the top of the blast hole. Wire connections and splices are not allowed in the blast hole.
- (f) Only solid wire shall be used in a blasting circuit. The use of stranded wire is prohibited.
- (g) When electric detonation is used near public roads, signs shall be erected at least 500 feet (152.40 meters) from the blast areas reading: "BLAST AREA SHUT OFF ALL TWO-WAY RADIOS."
- (h) A blasting machine is the only permissible source of electrical power for a detonation.
- (i) The blasting circuit shall remain shunted until the time for detonation unless the circuit is being tested or connections are being made.
- (j) A sticker shall be displayed on blasting machines that shows they have been tested within the last 30 days by procedures recommended by the manufacturer or supplier to ensure performance at rated capacity. If blasting caps are used in the test, they shall be covered with earth or sand.
- (k) When electronic detonation is used, the blaster-incharge shall determine that adequate current, as specified by the manufacturer of the detonators, is available to properly energize the detonators in the circuit.

§ 211.160. Nonelectric detonation.

Nonelectric initiation systems shall be checked and tested for secure connections in accordance with recommendations of the manufacturer of the system in use.

§ 211.161. Detonating cords.

- (a) Detonating cord shall be cut from the supply roll immediately after placement in the blast hole. A sufficient length of downlines shall be left at the top of the blast hole for connections to trunk lines. The supply roll shall be immediately removed from the site. Scrap pieces of detonating cord shall be destroyed after connections are made
- (b) A trunk line shall be covered with at least 12 inches (0.30 meter) of earth or sand, unless otherwise authorized by the Department.
- (c) Detonating cord may not be spliced if the resulting splice will fall within a blast hole.

§ 211.162. Safety fuse.

- (a) When safety fuse is used in blasting, it shall be long enough to provide a burn time of 120 seconds or longer.
- (b) Prior to using safety fuse, the blaster-in-charge shall conduct a test burn. The test burn will utilize at least a 12-inch (0.30-meter) section of fuse which is lit, then timed to determine actual burn time.
- (c) A blasting cap shall only be crimped to a safety fuse with a proper crimping tool. A blasting cap may not be attached to a safety fuse in or within 10 feet (3.05 meters) of a magazine.

Subchapter G. REQUIREMENTS FOR MONITORING

§ 211.171. General provisions for monitoring.

- (a) If the scaled distance of a blast is 90 or numerically less at the closest building not owned or leased by the blasting activity permittee or its customer, ground vibration and airblast monitoring shall be conducted. The Department may require the permittee to conduct ground vibration and airblast monitoring at other buildings or structures even if the scaled distance is greater than 90.
- (b) Blasting activities without monitoring may be considered in compliance with this chapter if at a specified location, on at least five blasts, monitoring has demonstrated that the maximum peak particle velocity at the specified location represents more than a 50% reduction from the limit in the permit and this chapter. Future blasts shall maintain a scaled distance equal to or greater than the scaled distance for the monitored blasts.
- (c) If monitoring is required, a ground vibration and airblast record of each blast shall be made part of the blast report.
- (d) If monitoring is performed with instruments that have variable "trigger levels," the trigger for ground vibration shall be set at a particle velocity of no more than .25 inches per second unless otherwise directed by the Department.
- (e) If the peak particle velocity and airblast from a blast are below the set trigger level of the instrument, a printout from the instrument shall be attached to the blast report. This printout shall provide the date and time when the instrument was turned on and off, the set trigger levels and information concerning the status of the instrument during the activation period. When an instrument is used that does not provide this information, the Department will allow the permittee to supply on/off times on a signed statement.

§ 211.172. Monitoring instruments.

- If monitoring is required, the monitoring instrument shall provide a permanent record of each blast.
- (1) A monitoring instrument for recording ground vibration, at a minimum, shall have:
 - (i) A frequency range of 2 Hz to 100 Hz.
- (ii) Particle velocity range of .02 to 4.0 inches (5.08 x 10^{-4} to 0.10 meters) per second or greater.
 - (iii) An internal dynamic calibration system.
- (2) A monitoring instrument used to record airblast shall have:
 - (i) A lower frequency limit of 0.1, 2.0 or 6.0 Hz.
- (ii) An upper end flat-frequency response of at least $200\ Hz$.

- (iii) A dynamic range that, at a minimum, extends from $106\ to\ 142\ dBL$.
- (3) A monitoring instrument shall be calibrated annually and when an instrument is repaired and the repair may effect the response of the instrument. Calibration shall be done by the manufacturer of the equipment, or by an organization approved by the manufacturer, or by an organization having verifiable knowledge of the calibration procedures developed by the manufacturer. The calibration procedure shall include testing the response of the entire system to externally-generated dynamic inputs. These inputs shall test the entire monitoring system at a sufficient number of discrete frequency intervals to assure flat response throughout the frequency ranges specified by this chapter. Dynamic reference standards used for calibration shall be traceable to the National Institute of Standards and Technology (NIST). Calibration procedures and documentation of calibration shall be made available for review by the Department.
- (4) A nonalterable sticker that is clearly visible shall be firmly affixed to the instrument. The sticker shall indicate the name of the calibration facility, the calibration technician, the date of calibration and frequency range of the airblast monitor.

§ 211.173. Monitoring records.

- (a) Anyone using a monitoring instrument shall be trained on the proper use of that instrument by a representative of the manufacturer or distributor, or other competent individual. A record of that training is to be maintained and available for review by the Department.
 - (b) Monitoring records, at a minimum, shall contain:
- (1) A calibration pulse on each of the mutually-perpendicular ground vibration traces. These pulses shall represent the dynamic response of the entire recording system to an internally-generated calibration signal, and shall allow the Department to verify that the seismograph is recording ground vibration to its specific accuracy.
- (2) The time history of particle velocities for three mutually perpendicular ground vibration traces and one air-overpressure trace, including time base, amplitude scales and peak values for all traces.
- (3) The results of a field calibration test for each channel.
- (4) The frequency content of all vibration signals using either single degree of freedom (SDF) response spectrum or half-cycle zero-crossing analysis methods.
- (5) Frequency versus particle velocity plots as indicated in \S 211.151(c), Figure 1 (relating to prevention of damage).
- (6) The name and signature of the individual taking the recording.
- (7) The location of the monitoring instrument, date and time of the recording.
- (8) The last calibration date of the monitoring instru-
- (c) If the Department questions the validity of a ground vibration or airblast record, or the interpretation of the record, the Department may require a ground vibration or airblast recording to be analyzed or certified by an independent, qualified consultant who is not related to the blasting activity permittee or its customer. When the

Department requires that a recording be analyzed or certified, it shall be performed and included with the blast report within 30 days.

Subchapter H. BLASTING ACTIVITIES NEAR UTILITY LINES

§ 211.181. Scope.

This subchapter applies to buried or underground utility lines and utility lines making contact with the surface of the ground.

§ 211.182. General provisions.

- (a) Blasts shall be designed and conducted so that they provide the greatest relief possible in a direction away from the utility line and to keep the resulting vibration and actual ground movement to the lowest possible level.
- (b) Blasting shall use a type of explosive specifically designed to minimize the likelihood of propagation between explosive charges.
- (c) When blasting within 200 feet (60.96 meters) of a utility line, blast holes may not exceed 3 inches (7.62 x 10^{-2} meters) in diameter.
- (d) Blasting in the vicinity of a utility line shall be conducted as follows:
- (1) Excavation from the ground surface to a depth corresponding to the elevation of the top of the buried utility line may proceed at the discretion of the blaster-incharge, using safe, accepted techniques.
- (2) Once the excavation has attained a depth equal to the elevation of the top of the buried utility line or if the line is exposed, or makes solid contact with the surface, the vertical depth of subsequent blast holes shall be restricted to one half the horizontal distance from the closest portion of the utility line.
- (e) If one or more of the requirements listed in this section are not feasible or creates a potential safety problem, the permittee may apply to the Department for a waiver of the provision or provisions in question. This waiver will be granted if, in the judgment of the Department and the utility owning the lines, the alternate procedure does not endanger the utility line.

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Title 34—LABOR AND INDUSTRY

DEPARTMENT OF LABOR AND INDUSTRY [34 PA. CODE CH. 231]

Food-Service Employee Incentive Program

The Department of Labor and Industry (Department), by this order, amends Chapter 231 (relating to minimum wage) by adding §§ 231.91—231.99.

A. Statutory Authority

These final-form regulations implement section 3 of the act of December 21, 1998 (P. L. 1290, No. 168) (43 P. S. § 333.105a note) (Act 168), which requires the Department to adopt regulations to enforce and carry out the newly added provisions of section 5.1 of the Minimum Wage Act of 1968 (MWA) (43 P. S. § 333.105a).

B. Background and Purpose

Section 2 of Act 168 amended the MWA by establishing a Food-Service Employee Incentive Program (Program) for new employees hired by restaurant and food-service employers. Section 3 of Act 168, in turn, requires the Department to develop regulations to implement the Program, and postpones the effective date of section 2 of Act 168 until that time. The Program will be in effect for 3 years following the Department's promulgation of regulations. At that time, section 2 of Act 168 will expire under its own terms unless renewed by the General Assembly. The Department is required to prepare and submit a report to the Senate Labor and Industry Committee and the House Labor Relations Committee within 30 months after section 2 of Act 168 takes effect.

Under the Program, new employees in the restaurant and food-service industries and their employers may voluntarily agree to a training program during which the employees will receive a training wage. The training wage may not be less than the statutory minimum wage. The employees covered under these regulations are dishwashers, bus-persons, servers, sales staff, cooks, hostesses/hosts and cashiers.

While the employee is being trained, the difference between the employee's training wage and the entry-level wage that the employee is entitled to upon completion of the employer's training period, will be deposited by the employer into an escrow account referred to as the Employee Incentive Account (Account). Upon completion of the training program, or the employee's promotion, these escrow payments are to be remitted to the employee in equal installments over a period equal to the period of training. However, if the employee quits or is fired for willful misconduct before the end of the training period, the employee forfeits the moneys deposited for them in the Account.

C. Summary of Comments

The Department published a notice of proposed rule-making at 30 Pa.B. 5152 (October 7, 2000), with an invitation for public comment. No public comments were received by the Department. However, the Independent Regulatory Review Commission (IRRC) recommended four changes to the proposed rulemaking in the interests of clarity and consistency with the statute.

- 1. Enforcement. IRRC recommended adding a section incorporating the Department's enforcement procedures under the Wage Payment and Collection Law (WPCL) (43 P. S. §§ 260.1—260.12), since Act 168 expressly adopts the WPCL for resolution of claims. See 43 P. S. § 333.105a(j).
- 2. Accounts. IRRC further suggested insertion of the phrase "no less than" between the phrases "consisting of" and "the difference" in § 231.95(b) (relating to employee incentive account) to ensure consistency with the statute.
- 3. *Records Access*. In § 231.95(f), employers are required to grant the Department access to records within 7 days following written or verbal notice. IRRC requested clarification as to who will give the notice.
- 4. Distribution of Form. In § 231.96(d) (relating to writing required), the Department proposed to make a recommended notification/acknowledgement form available on its Internet website and through other means. IRRC asked that the other means be set forth in the final-form regulations.

The Department accepted all of these comments and recommendations when adopting final-form regulations, as discussed.

- D. Summary of Changes from Proposed Rulemaking
- 1. Section 231.91(d). This section was added to inform or remind wage employees of their rights under the WPCL, as incorporated in Act 168, to assign their claims to the Secretary of Labor and Industry (Secretary) for investigation and possible collection action. Information about wage-claim assignments can be accessed from the Department's Internet website http://www.li.state.pa.us/PWAGE/summary.pdf, or by contacting any of the district offices of the Department's Bureau of Labor Law Compliance. Employees, however, are not required to assign their claims to the Secretary. The WPCL authorizes recovery of plaintiff's attorney fees for employees that successfully sue to recover unpaid wages on their own. See 43 P. S. § 260.9a(f).
- 2. Section 231.95(b). The phrase "no less than" was inserted under IRRC's specific recommendation to achieve statutory consistency.
- 3. Section 231.95(f). Consistent with section 231.31(c) of the MWA's existing regulations, the Secretary and authorized representatives have been designated as the persons empowered to issue notices for records. This type of notice is usually issued by either a labor investigator or supervisor in the Department's Bureau of Labor Law Compliance. The Bureau's Director or legal counsel may also issue this notice.
- 4. Section 231.96(d). The Department defined the "other means" of making available the notification/acknowledgement form to be e-mail, fax or regular mail.

E. Fiscal Impact

These final-form regulations will have no impact on local government. Even if a unit of local government, such as a school district, has food-service employees, they are exempt from both the MWA and the WPCL. The Commonwealth and its political subdivisions are not included in either statute's definition of the term "employer." See 1976 Op. Atty. Gen. No. 29 (MWA); *Philipsburg-Osceola Educ. Ass'n. v. Philipsburg-Osceola Area School District*, 633 A.2d 220 (Pa. Cmwlth. 1993) (WPCL). Similarly, these final-form regulations do not affect employers or employees outside the restaurant and food-service industries, or employers or employees in those industries that choose not to participate.

Any costs to the Commonwealth will result from the increased enforcement duties assigned to the Department by Act 168, and not by these final-form regulations. These duties will be undertaken by existing Department staff, and are perceived to be minimal.

No precise estimate can be made as to increased costs, if any, to participating employers and employees, since their actual costs are dependent on several variables, including the number of participating employees and the agreed-upon training and entry-level wages. The objective of Act 168, however, is to create an incentive for new employees in the restaurant and food-service industries to remain at their jobs, and thereby produce mutual benefits that exceed any initial costs. If the costs exceed the benefits in the long run, employers and employees will refrain from participating.

The Department estimates the following average training costs and employer savings when employees leave prior to completing their training:

Estimated Training	Average Savings per Early Separation
\$328.80	\$219.30
\$251.16	\$107.07
\$341.46	\$384.42
\$269.64	\$163.83
\$290.88	\$117.39
\$352.32	\$282.51
	Training \$328.80 \$251.16 \$341.46 \$269.64 \$290.88

F. Paperwork Requirements

These final-form regulations will require written notification and acknowledgement to and from participating employees. One record of this notification and acknowledgment will suffice for both purposes. Additionally, the Department recommends that the schedule for installment payments from the Account be revised if the employee is promoted before completing the employee's training period. These records must be maintained with other payroll records required to be kept by employers under the MWA, and are considered to be important to the protection of both employers and employees who participate in the Program. The Department will develop, and make available, a sample form for use by participating employers and employees to further reduce this already minimal burden.

G. Compliance with Executive Order 1996-1

In accordance with Executive Order 1996-1, the Department, in developing these final-form regulations, sent preliminary drafts to the Majority and Minority Chairpersons of the Senate Labor and Industry and the House Labor Relations Committees, as well as employee and employer organizations. Additionally, Department personnel met with a representative of the Pennsylvania Restaurant Association and staff from the House Labor Relations Committee in the developmental phase.

H. Sunset Date

Act 168, by its own terms, provides that section 5.1 of the MWA will expire 3 years after the effective date of these final-form regulations (July 14, 2004). Accordingly, § 231.91(b) (relating to authority and effective date) provides that §§ 231.91—231.99 will expire within 3 years unless section 5.1 of the MWA is extended by the General Assembly. The Department is required to prepare and submit a report to the Senate Labor and Industry Committee and the House Labor Relations Committee within 30 months after section 2 of Act 168 takes effect.

I. Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), the Department submitted copies of the notice of proposed rulemaking, published at 30 Pa.B. 5152, to IRRC, the House Labor Relations Committee and the Senate Labor and Industry Committee for review and comment.

In adopting final-form regulations, the Department considered the comments received from IRRC. The Department did not receive comments from the public or the House or Senate Committees.

Under section 5.1(d) of the Regulatory Review Act (71 P. S. § 745.5a(d)), on May 16, 2001, these final-form regulations were deemed approved by the House and Senate Committees. Under section 5.1(e) of the Regulatory Review Act, IRRC met on May 17, 2001, and approved the final-form regulations.

J. Additional Information

Information about these final-form regulations can be obtained from Robert E. Moore, Director, Bureau of Labor Law Compliance, Department of Labor and Industry, Room 1301, Labor and Industry Building, Seventh and Forster Streets, Harrisburg, PA 17120, (717) 787-4763; fax (717) 787-0517; e-mail robmoore@state.pa.us.

K. Findings

The Department finds that:

- (1) Public notice of the Department's intention to adopt Chapter 231 by this order has been 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 the regulations thereunder, 1 Pa. Code §§ 7.1 and 7.2.
- (2) The final-form regulations adopted by this order are necessary and appropriate for the administration of Act 168.

L. Order

The Department, acting under its authorizing statute, orders that:

- (a) The regulations of the Department, 34 Pa. Code Chapter 231, are amended by adding §§ 231.92-231.94 and 231.97-231.99 to read as set forth at 30 Pa.B. 5152; and by adding §§ 231.91, 231.95 and 321.96 to read as set forth in Annex A.
- (b) The Department shall submit this order, 30 Pa.B. 5152 and Annex A to the Office of Attorney General and the Office of General Counsel for approval, as required by law.
- (c) The Department shall certify this order, 30 Pa.B. 5152 and Annex A and deposit them with the Legislative Reference Bureau, as required by law.
- (d) The regulations shall take effect upon publication in the *Pennsylvania Bulletin*.

JOHNNY J. BUTLER, Secretary

(*Editor's Note*: For the text of the order of the Independent Regulatory Review Commission, relating to this document, see 31 Pa.B. 2855 (June 2, 2001).)

Fiscal Note: Fiscal Note 12-55 remains valid for the final adoption of the subject regulations.

Annex A

TITLE 34. LABOR AND INDUSTRY PART XII. BUREAU OF LABOR STANDARDS CHAPTER 231. MINIMUM WAGE

FOOD-SERVICE EMPLOYEE INCENTIVE PROGRAM

§ 231.91. Authority and effective date.

- (a) This section and §§ 231.92—231.99 set forth the rules governing the Food-Service Incentive Employee Program for participating restaurant and food-service operations employers and their employees in this Commonwealth under section 5.1 of the Minimum Wage Act of 1968 (act) (43 P. S. § 333.105a).
- (b) This section and §§ 231.92—231.99 will expire, along with section 5.1 of the act on July 14, 2004, unless section 5.1 is extended by the General Assembly.
- (c) Under section 5.1(j) of the act (43 P. S. § 333.105a(j)), a claim arising under the Food-Service

Employee Incentive Program provisions shall be brought under the Wage Payment and Collection Law (43 P. S. §§ 260.1—260.12).

(d) Any employee, labor organization or party to whom wages are payable under the Food-Service Employee Incentive Program may request the Secretary, or an authorized representative, to take an assignment in trust and to bring legal action to collect the wages, as provided by section 9.1 of the Wage Payment and Collection Law (43 P. S. § 260.9a).

§ 231.95. Employee incentive account.

- (a) The employer shall maintain at least one escrow or restricted account designated as an Employee Incentive Account (Account) in accordance with section 5.1 of the Minimum Wage Act of 1968 (43 P. S. § 333.105a).
- (b) The employer shall deposit sums consisting of no less than the difference between the training wage and the entry-level wage into the Account on each regular payday during the training period. The employer shall credit the deposit in the name of each participating employee.
- (c) Funds in the Account shall be the property of the employer until the employer is required to make payments to the employee. Funds in the Account are non-transferable and nonassignable.
- (d) The employer shall maintain complete, detailed payroll records. The records shall include a listing of all deposits and withdrawals from the Account.
- (e) The employer shall maintain the records at the place of employment or at a central recordkeeping office within or outside this Commonwealth. The employer shall maintain these records for 3 years in accordance with § 231.31 (relating to contents of record).
- (f) Access to records maintained by the employer under this section shall be provided to the Department's repre-

sentatives within 7 days following written or verbal notice by the Secretary or an authorized representative.

§ 231.96. Writing required.

- (a) The employer shall provide written notification to the employee prior to the commencement of the training program of the following:
 - (1) The training wage and the starting date of training.
- (2) The length of the training period and the position for which the employee is being trained.
- (3) The entry-level wage which the employee will receive upon completion of the training period.
- (4) The financial institution where the employer maintains the Food-Service Employee Incentive Account.
- (5) The installment-payment schedule to be following after the employee completes the training period, provided that the employer shall revise this schedule with the employee's written consent when the employee is promoted prior to completion of the training period.
- (b) The employer shall obtain a signed acknowledgement that the employee has read and understands the written notification.
- (c) The employer shall maintain a copy of the signed acknowledgement for 3 years, along with other records required to be kept under §§ 231.31—231.35.
- (d) The Department will prepare a recommended notification and acknowledgement form that an employer may use. The Department will make these forms available on its Internet website and by electronic mail, facsimile transmission or regular mail, upon request.

[Pa.B. Doc. No. 01-1272. Filed for public inspection July 13, 2001, 9:00 a.m.]