RULES AND REGULATIONS

Title 25—ENVIRONMENTAL PROTECTION

ENVIRONMENTAL QUALITY BOARD [25 PA. CODE CH. 109] Lead and Copper Rule Short Term Revisions

The Environmental Quality Board (Board) amends Chapter 109 (relating to safe drinking water) to read as set forth in Annex A. The amendments incorporate provisions of the Federal Lead and Copper Rule: Short Term Regulatory Revisions to retain primary enforcement authority (primacy). These amendments will provide for increased protection against, and consumer awareness of, exposure to lead in public water systems. The Lead and Copper Rule Short Term Revisions (LCRSTR) build upon the existing Lead and Copper Rule (LCR) and strengthen implementation of the monitoring, public education, customer awareness and lead service line (LSL) replacement provisions.

This order was adopted by the Board at its meeting of September 21, 2010.

A. Effective Date

This final-form rulemaking will go into effect upon publication in the *Pennsylvania Bulletin*.

B. Contact Persons

For further information, contact Lisa Daniels, Chief, Division of Operations Monitoring and Training, P. O. Box 8467, Rachel Carson State Office Building, Harrisburg, PA 17105-8467, (717) 772-4018; or William Cumings, Assistant Counsel, Bureau of Regulatory Counsel, P. O. Box 8464, Rachel Carson State Office Building, Harrisburg, PA 17105-8464, (717) 787-7060. Persons with a disability may use the Pennsylvania AT&T Relay Service, (800) 654-5984 (TDD users) or (800) 654-5988 (voice users). The final-form rulemaking is available on the Department of Environmental Protection's (Department) web site at http://www.depweb.state.pa.us.

C. Statutory Authority

This final-form rulemaking is being made under the authority of section 4 of the Pennsylvania Safe Drinking Water Act (35 P. S. § 721.4), which grants the Board the authority to adopt rules and regulations governing the provision of drinking water to the public, and sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P. S. §§ 510-7 and 510-20).

D. Background and Purpose

This final-form rulemaking amends the LCR in §§ 109.1102—109.1104 and 109.1107. The final-form LCR was published at 24 Pa.B. 6404 (December 24, 1994). The primary goal of the LCR is to reduce lead and copper levels at consumers' taps, thereby reducing the health risks associated with lead and copper. The pervasiveness of lead contamination in public drinking water systems is well documented. Lead and copper leach into the drinking water from solder, pipes and fixtures. The severity of contamination depends on the amount of lead or copper in the distribution system and the consumers' home plumbing and the corrosiveness of the water. The original LCR established comprehensive monitoring requirements for lead and copper at the consumer's tap and treatment

technique requirements for optimal corrosion control, which include public education and LSL replacement.

This final-form rulemaking incorporates the provisions of the Federal Lead and Copper Rule: Short Term Regulatory Revisions that was promulgated by the United States Environmental Protection Agency (EPA) at 72 FR 57781 (October 10, 2007). This final-form rulemaking amends the Department's safe drinking water regulations as follows:

- Clarify the definition of "tap" for lead and copper sampling to be a tap that provides water for drinking.
- Rescind the provision that allows water systems to remain on a reduced monitoring frequency if either the lead or copper action level is exceeded. Water systems must meet both water quality parameter ranges and the lead and copper action levels to remain on a reduced monitoring schedule.
- Require water suppliers to provide a "consumer tap notice" to consumers whose taps are sampled. This notice must include the lead results for the tap that was sampled, an explanation of the health effects of lead and a list of steps consumers can take to reduce exposure to lead in drinking water.
- Revise the public education and Consumer Confidence Report (CCR) provisions (with respect to lead) to clarify the mandatory language, expand delivery requirements and require an informational statement in all CCRs.
- Require water systems to reevaluate LSLs previously deemed "replaced" through testing if the system resumes an LSL replacement program.

One provision of the expanded delivery requirements for a public education program is that water suppliers are required to contact the local public health agency even if the agency is located outside of the water system's service area. The local public health agency is the local board or department of public health that has jurisdiction over the water system's service area. To assist public water systems in identifying the local public health agencies that they shall contact as part of a public education program, following is a list of the individual county health departments (CHD) and the Department of Health district offices.

CHD Offices

Allegheny CHD
Public Drinking Water Program
Frank B. Clack Health Center
3901 Penn Avenue, Building 5
Pittsburgh, PA 15224-1318
(412) 578-8047

Bucks CHD 1282 Almshouse Road Doylestown, PA 18901 (215) 345-3318

Chester CHD Government Services Center 601 Westtown Road, Suite 090 P. O. Box 2747 West Chester, PA 19380-0990 (610) 344-6225 Erie CHD 606 West 2nd Street Erie, PA 16507 (814) 451-6700

Montgomery CHD Human Services Building P. O. Box 311 1430 DeKalb St. Norristown, PA 19404 (610) 278-5117

Philadelphia CHD 1101 Market St. Philadelphia, PA 19107 (215) 685-5670

Department of Health district offices

Southeast District

Berks, Delaware, Lancaster, Montgomery, Philadelphia, Schuylkill

442 Reading State Office Building

625 Cherry Street Reading, PA 19602 (610) 378-4352

Northeast District

Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Susquehanna, Wayne, Wyoming 665 Carey Avenue, Suite 5
Wilkes Barre, PA 18706-5485
(570) 826-2062

Southcentral District

Adams, Bedford, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lebanon, Mifflin, Perry, York

30 Kline Plaza Harrisburg, PA 17104 (717) 787-8092

Northcentral District

Bradford, Centre, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga, Union Water Tower Square, Suite 109 1000 Commerce Park Drive

Williamsport, PA 17701-5475

 $(570)\ 327-3400$

Southwest District

Armstrong, Beaver, Butler, Cambria, Fayette, Greene, Indiana, Somerset, Washington, Westmoreland 514 Pittsburgh State Office Building

300 Liberty Avenue

Pittsburgh, PA 15222

 $(412)\ 565-5101$

Northwest District

Cameron, Clarion, Clearfield, Crawford, Elk, Forest, Jefferson, Lawrence, McKean, Mercer, Venango, Warren 19 McQuiston Drive
Jackson Center, PA 16133
(724) 662-6068

The draft final-form rulemaking was submitted to the Small Water Systems Technical Assistance Center Advisory Board (TAC) for review and discussion on June 18, 2010. The TAC's only comment was to support the final-form rulemaking.

E. Summary of Changes to the Proposed Rulemaking

Although no comments were received during the official public comment period, the Independent Regulatory Review Commission (IRRC) did comment on the proposed rulemaking. IRRC requested additional justification for the provision that is more stringent and clarification on the term "local public health agency" and the requirement for water systems to contact organizations outside the water system's service area.

Lead and copper in drinking water is usually the result of corrosion of household plumbing. Treatment options for lead are often different than those for copper. When water suppliers adjust treatment to reduce the levels of one parameter, they may actually increase the levels of the other parameter. Additionally, treatment for other regulated contaminants will often cause simultaneous compliance issues with corrosion control treatment. Therefore, a lead or copper action level exceedance is a good indication that the treatment system is not operating effectively and should be re-evaluated to determine whether the current treatment system is the most appropriate. Additional lead and copper monitoring will ensure that any adjustments made to the treatment system will not adversely affect lead and copper levels in the water.

The public education delivery requirements are consistent with, and no more stringent than, the Federal provisions of the LCRSTR. The EPA believes that the local health agencies play an important role in making sure consumers who are most vulnerable receive the information they need to reduce their exposure to lead in drinking water. If the local public health agency can identify organizations that potentially serve target populations, then a water system should deliver public education materials to this organization even if it is not within the water system's service area. Additional language has been added to clarify the term "local public health agency" and the CHDs and Department of Health offices have been identified in Section D.

Following is a list of the specific changes that were made to the proposed rulemaking.

Section 109.1103(d)(2) (relating to monitoring requirements), regarding water quality parameter performance monitoring, was amended to correct a cross-reference.

Section 109.1103(d)(3), regarding source water monitoring, was amended to correct a cross-reference.

Section 109.1103(e)(1)(ii)(B)(I) was amended to clarify that 3 consecutive years of monitoring is required to qualify for a reduced triennial frequency. This phrase was inadvertently deleted during proposed rulemaking.

Section 109.1103(e)(1)(iii), regarding sample site and timing, was amended to clarify that the Department will approve an alternate 4-month sampling period in writing for systems on a reduced monitoring frequency that do not operate from June 1 to September 30.

Section 109.1103(e)(3)(ii)(A)(I) and (II) was amended to be consistent with the Legislative Reference Bureau's language rules.

Section 109.1103(g)(2)(iii), regarding site selection for community and nontransient noncommunity water systems that have fewer than five taps, was amended for clarity.

Section 109.1103(g)(2)(iv), regarding site selection for community and nontransient noncommunity facilities that operate continuously, was amended in response to a comment from IRRC to clarify where nonfirst-draw samples should be collected and that the Department will approve, in writing, nonfirst-draw sample sites.

Section 109.1104(a)(2)(i)(B) and (D) (relating to public education and notification) was amended in response to a

comment from IRRC and to clarify the public education delivery requirements to local health departments.

Section 109.1104(a)(2)(i)(J)(III) was amended to be consistent with the Legislative Reference Bureau's language rules.

Section 109.1104(b)(1)(v), regarding content, was added to be consistent with 40 CFR 141.85(d)(3) (relating to public education and supplemental monitoring requirements).

Section 109.1104(b)(3), regarding delivery, was amended to be consistent with the Legislative Reference Bureau's language rules.

Section 109.1107(a)(1)(i) (relating to system management responsibilities) was edited because it referenced language that was deleted in a 2002 rulemaking and is no longer necessary.

F. Benefits, Costs and Compliance

Benefits

The intent of this final-form rulemaking is to improve implementation of the lead and copper regulations by clarifying monitoring requirements, improving customer awareness and modifying LSL "test-out" procedures. The increase in the administrative activities resulting from these amendments will generate new information which may prompt public water systems to take measures to further abate lead and copper exposure and thus reduce the associated risk, resulting in additional health benefits to consumers.

Because the precise impact of this final-form rulemaking on the behavior of individual consumers and public water systems is not known, the EPA has not quantified the changes in associated health benefits for these amendments. However, the overall benefits from the LCR will increase as a result of the indirect effects of these revisions on public water systems and individual consumers.

Compliance Costs

Some of the cost increases estimated by the EPA will not apply to public water systems in this Commonwealth because they already implement similar provisions under the existing LCR. However, there are four provisions of the LCRSTR included in this final-form rulemaking that are likely to increase costs for public water systems in this Commonwealth:

- (1) Return to routine monitoring frequency if an action level is exceeded (larger systems will have higher costs because more samples are required than for the smaller systems).
 - (2) Consumer tap notice requirements.
 - (3) Public education content and delivery requirements.
 - (4) CCR content requirements.

The number of systems in this Commonwealth affected by this final-form rulemaking is based on the total number of community and nontransient, noncommunity water systems as well as LCR monitoring information from 2007. Not all systems will need to implement each provision each year, so the number of systems likely to be affected by each provision and an average cost per system have been estimated. There is an additional one-time, up-front cost for reviewing, training and implementing the LCRSTR that will be incurred by all water systems affected by this final-form rulemaking. The cost estimates per system for each of these provisions are based on costs estimated by the EPA for public water systems Nationwide

The direct annual costs to implement each of these provisions for public water systems in this Commonwealth, based on estimates from the EPA, are as follows.

Provision No.	No. of Systems Affected	Annual Cost/System	Total Annual Costs
1	140	(up to) \$2,930	\$410,200
2	3,226	\$20	\$64,520
3	107	(average of) \$134.47	\$14,388
4	2,069	\$6.79	\$14,049
		Total	\$503,157

The one-time, upfront cost for public water systems is estimated to be \$152.33 for each of the 3,226 public water systems, for a total cost of \$491,417.

For this Commonwealth, there are costs associated with oversight and costs to State-owned public water systems. Of the 3,226 public water systems affected by this final-form rulemaking, 42 (or 1.3%) are State-owned facilities, so 1.3% of the public water system costs previously detailed could be incurred by this Commonwealth if all 42 systems implement all of these provisions each year. The details for the Commonwealth costs are as follows:

	One- $Time$	Annual	
	Cost	Costs	Total
Oversight costs	\$28,948	\$5,404	\$34,352
State-owned water systems costs	\$6,388	\$6,543	\$12,931
To	otal \$35,336	\$11,947	\$47,283

Compliance Assistance Plan

The final-form rulemaking clarifies and strengthens existing regulations. As a result, financial assistance should not be necessary.

The Bureau of Water Standards and Facility Regulation has staff dedicated to providing both training and outreach support services to public water system operators. The Department web site contains the Drinking Water and Wastewater Treatment System Operator Information Center, which provides a bulletin board of timely, useful information for treatment plant operators. Additionally, Department staff will provide educational, technical and compliance assistance through newsletters, guidance documents, training sessions and surveillance activities.

Paperwork Requirements

The requirements of the existing LCR include monitoring, reporting, public education and public notice. The only additional requirement of the LCRSTR is for water suppliers to provide a notice of the monitoring results to those consumers whose taps were sampled and a certification to the Department that this notice was delivered.

G. Sunset Review

These 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 September 9, 2009, the Department submitted a copy of the notice of proposed rulemaking,

published at 39 Pa.B. 5581 (September 26, 2009), to IRRC and the Chairpersons of the House and Senate Environmental Resources and Energy Committees for review and comment.

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

Under section 5.1(j.2) of the Regulatory Review Act (71 P. S. \$745.5a(j.2)), on November 3, 2010, the final-form rulemaking was deemed approved by the House and Senate Committees. Under section 5.1(e) of the Regulatory Review Act, IRRC met on November 4, 2010, and approved the final-form rulemaking.

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 thereunder, 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) This final-form rulemaking does not enlarge the purpose of the proposed rulemaking published at 39 Pa.B. 5581.
- (4) This final-form rulemaking is 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 Chapter 109, are amended by amending §§ 109.1102—109.1104 and 109.1107 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.

JOHN HANGER, Chairperson

(*Editor's Note*: For the text of the order of the Independent Regulatory Review Commission relating to this document, see 40 Pa.B. 6752 (November 20, 2010).)

Fiscal Note: Fiscal Note 7-437 remains valid for the final adoption of the subject regulations.

Annex A

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

Subpart C. PROTECTION OF NATURAL RESOURCES

ARTICLE II. WATER RESOURCES CHAPTER 109. SAFE DRINKING WATER Subchapter K. LEAD AND COPPER

§ 109.1102. Action levels and treatment technique requirements.

* * * * *

- (b) Treatment technique requirement for corrosion control.
- (1) Optimal corrosion control treatment. A community water system or nontransient noncommunity water system shall provide optimal corrosion control treatment which minimizes the lead and copper concentrations at users' taps while ensuring that the treatment does not cause the system to violate a primary MCL. Water systems deemed to have optimized corrosion control treatment under this subsection shall operate in compliance with Department designated water quality parameters and continue to conduct lead and copper tap monitoring. A system may achieve optimal corrosion control treatment in one of the following ways:
- (i) A small or medium water system is deemed to have optimized corrosion control if the system does not exceed either the lead or copper action level during each of two consecutive 6-month monitoring periods conducted in accordance with § 109.1103. If the system thereafter exceeds an action level during a monitoring period, the system shall complete applicable compliance activities under paragraph (2). The Department may require a system to repeat compliance activities previously completed when the Department determines that this is necessary for the system to achieve optimal corrosion control treatment.
- (ii) A water system is deemed to have optimized corrosion control if the system demonstrates to the Department that for two consecutive 6-month monitoring periods conducted in accordance with \$ 109.1103 that the system does not exceed a lead or copper action level and the difference between the 90th percentile tap water lead level and the highest source water lead concentration is less than 0.005 mg/L, which is the Practical Quantitation Level for lead.
- (A) To make this demonstration, the system shall collect one sample for lead from each entry point during a monitoring period prior to initiation of construction or modification of corrosion control treatment facilities. If the system thereafter exceeds an action level during a monitoring period, the system shall complete applicable compliance activities under paragraph (2). The Department may require a system to repeat compliance activities previously completed when the Department determines that this is necessary for the system to achieve optimal corrosion control treatment.
- (B) A water system deemed to have optimized corrosion control in accordance with this subparagraph shall continue monitoring for lead and copper at the tap no less frequently than once every 3-calendar years using the

reduced number of sites specified in § 109.1103(e), and collecting the samples at times and locations specified in § 109.1103(e)(1)(iii).

- (iii) A system is deemed to have optimized corrosion control if the system installs new corrosion control treatment facilities or modifies existing treatment in accordance with paragraph (2) and operates in compliance with water quality parameter performance requirements specified by the Department in a permit issued under § 109.1105(c) (relating to permit requirements).
- (2) Corrosion control treatment compliance schedule. A system shall comply with the following schedule unless the system achieves optimal corrosion control treatment under paragraph (1)(i) or (ii) prior to initiation of construction or modification of corrosion control treatment facilities.
 - (i) An existing large water system shall:
- (A) Submit a corrosion control treatment feasibility study that complies with paragraph (3) by June 30, 1994.
- (B) Submit a permit application for construction or modification of corrosion control treatment facilities by March 31, 1995.
- (C) Initiate construction or modification of corrosion control treatment facilities by December 31, 1995.
- (D) Complete construction or modification of corrosion control treatment facilities and begin operation of these facilities by January 1, 1997.
- (E) Submit a request for a Department designation of optimal corrosion control treatment performance requirements by January 31, 1998.
- (ii) A large water system triggered into corrosion control because it is no longer deemed to have optimized corrosion control under paragraph (1), or any medium or small water system that exceeds an action level shall:
- (A) Submit a corrosion control treatment feasibility study that complies with paragraph (3) within 18 months of the end of the monitoring period in which the action level was exceeded.
- (B) Submit a permit application or otherwise comply with the permit application requirements under § 109.1105(b) for construction or modification of corrosion control treatment facilities within 30 months of the end of the monitoring period in which the action level was exceeded.
- (C) Initiate construction or modification of corrosion control treatment facilities within 48 months of the end of the monitoring period in which the action level was exceeded.
- (D) Complete construction or modification of corrosion control treatment facilities and begin operation of these facilities within 60 months of the end of the monitoring period in which the action level was exceeded.
- (E) Submit a request for Department designation of optimal corrosion control treatment performance requirements within 30 days of the end of the second follow-up monitoring period required under § 109.1103(c)(1)(ii) following completion of construction or modification of corrosion control treatment facilities.

§ 109.1103. Monitoring requirements.

(a) Initial monitoring.

* * * * *

- (3) Initial source water monitoring. A system which exceeds either the lead or copper action level shall collect one source water sample from each entry point within 6 months after the end of the monitoring period in which the action level was exceeded. Monitoring is required only for the parameter for which the action level was exceeded
 - (b) Special lead and copper tap monitoring.
- (1) After completing initial monitoring and prior to initiation of construction or modification of corrosion control treatment facilities, a system may collect special lead and copper tap samples at its option.
- (2) Special lead and copper tap monitoring shall be conducted in accordance with subsection (a), including compliance with the requirements resulting from an action level exceedance.
- (3) If a medium or small water system meets the lead and copper action levels during two consecutive 6-month special monitoring periods, the system is deemed to have optimized corrosion control and may discontinue the compliance activities under § 109.1102(b)(2) and proceed directly to reduced monitoring in accordance with subsection (e).
- (4) If a medium or small water system exceeds an action level during a monitoring period after discontinuing compliance activities under paragraph (3), the system shall complete the applicable compliance activities under § 109.1102(b)(2).
- (5) If a system meets the lead action level during a special monitoring period, the system may discontinue public education in accordance with § 109.1104(a)(3) (relating to public education and notification).
- (c) Follow-up monitoring after construction or modification of corrosion control treatment facilities. A system which completes construction or modification of corrosion control treatment facilities in accordance with § 109.1102(b)(2) shall conduct the applicable monitoring specified in this subsection. A system which exceeds the lead action level after construction or modification of corrosion control treatment facilities shall begin lead service line replacement in accordance with § 109.1107(d) (relating to system management responsibilities).

* * * * *

- (3) Source water monitoring. A system which installs source water treatment under § 109.1102(b)(4) shall monitor the source water at source water treatment entry points for the parameters for which the source water treatment was installed. The system shall monitor source water during the two consecutive 6-month monitoring periods specified in paragraph (1). Other systems which exceed either the lead or copper action level while conducting lead and copper tap monitoring in accordance with paragraph (1) shall collect one source water sample from each entry point within 6 months after the end of the monitoring period in which the action level was exceeded for the parameters exceeding the action level.
- (d) Monitoring after performance requirements are established. A system shall conduct the applicable monitoring under this subsection beginning no later than the next 6-month monitoring period that begins on January 1 or July 1 following the Department's designation of optimal corrosion control treatment water quality parameter performance requirements under § 109.1102 (b)(5) or source water performance requirements under § 109.1102(b)(4).

- (1) Lead and copper tap monitoring. A system shall monitor for lead and copper at the tap during each monitoring period at the number of sample sites specified in subsection (a)(1)(v) until the system qualifies for reduced monitoring under subsection (e)(1).
- (2) Water quality parameter performance monitoring. A system shall measure the applicable water quality parameters specified in subsection (c)(2)(iii) in the distribution system during each monitoring period at the number of sites specified in subsection (a)(2)(ii) and at each entry point at least once every 2 weeks. The results of this monitoring will be used by the Department in determining compliance with the water quality parameter performance requirements established under § 109.1102(b)(5). A system that is not in compliance with the water quality parameter performance requirements established under § 109.1102(b)(5) shall provide public notification in accordance with § 109.1104(c)(2).
- (i) A large water system shall conduct the monitoring during each monitoring period until the system qualifies for reduced monitoring under subsection (e)(2).
- (ii) A small or medium water system which is conducting lead and copper tap monitoring in accordance with paragraph (1), shall measure the water quality parameters during each 6-month monitoring period in which the system exceeds either the lead or copper action level. Distribution system monitoring shall be conducted at least once during the monitoring period and biweekly entry point monitoring shall continue as long as the system exceeds the action level.
- (iii) A system is out of compliance with the requirements of § 109.1102(b)(5) for a 6-month period if it has excursions for any Department specified water quality parameter on more than any 9 days during the 6-month monitoring period. An excursion occurs whenever the daily value for one or more of the water quality parameters is below the minimum value or outside the range of values designated by the Department. The Department has the discretion to delete results of sampling errors from this calculation. Daily values are calculated as follows:
- (A) On days when more than one sample for the water quality parameter is collected at a sampling location, the daily value shall be the average of all results collected during the day including continuous monitoring or grab samples, or both.
- (B) On days when only one sample for the water quality parameter is collected at a sampling location, the daily value shall be the result of that sample.
- (C) On days when no sample is collected for the water quality parameter at a sampling location, the daily value shall be the most recent calculated daily value for which a water quality parameter was sampled at a sample location.
- (3) Source water monitoring. A system which is conducting lead and copper tap monitoring in accordance with paragraph (1) shall monitor for the parameters exceeding the action level at each entry point within 6 months of the end of the monitoring period in which the action level was exceeded. For systems which have installed source water treatment, the results of this monitoring will be used by the Department in determining compliance with source water treatment performance requirements established under § 109.1102(b)(4). The Department may require additional source water monitoring if the Department determines that the additional monitoring is necessary to assure compliance with the source

water treatment performance requirements. A system that is not in compliance with the source water treatment performance requirements established under § 109.1102 (b)(4) shall provide public notification in accordance with § 109.1104(c)(2).

- (e) Reduced monitoring.
- (1) Reduced lead and copper tap monitoring. A system conducting reduced lead and copper tap monitoring shall collect one sample from the number of sample sites listed in the following column.

System size (# of people served)	# of Sample Sites	
> 100,000	50	
10,001 to 100,000	30	
3,301 to 10,000	20	
501 to 3,300	10	
500 or fewer	5	

- (i) Annual lead and copper tap monitoring.
- (A) A small or medium water system that does not exceed the lead and copper action levels during each of two consecutive 6-month monitoring periods or a system which has optimized corrosion control treatment under § 109.1102(b)(1)(ii) may reduce the number of sample sites and reduce the frequency of sampling to once per year.
- (B) A system that has installed or modified corrosion control treatment facilities in accordance with § 109.1102(b)(2) may reduce the number of lead and copper sample sites and reduce the frequency of monitoring to once per year if the following conditions are met:
- (I) The system does not exceed the lead and copper action levels during each of two consecutive 6-month monitoring periods.
- (II) The system maintains the range of values for the optimal corrosion control treatment water quality parameter performance requirements specified by the Department under $\S 109.1102(b)(5)$ during each of two consecutive 6-month monitoring periods in accordance with subsection (d)(2).
- (C) Annual monitoring shall begin during the calendar year immediately following the end of the second consecutive 6-month monitoring period.
 - (ii) Triennial lead and copper tap monitoring.
- (A) A small or medium water system that does not exceed the lead and copper action levels during 3 consecutive years of monitoring, including initial monitoring, may reduce the frequency of monitoring for lead and copper to once every 3 years.
- (B) A system that has installed or modified corrosion control treatment facilities in accordance with § 109.1102(b)(2) may reduce the frequency of lead and copper tap monitoring from annually to once every 3 years if the following conditions are met:
- (I) The system does not exceed the lead and copper action levels during 3 consecutive years of 6-month or annual monitoring.
- (II) The system maintains the range of values for the optimal corrosion control treatment water quality parameter performance requirements specified by the Department under § 109.1102(b)(5) during 3 consecutive years of monitoring.
- (C) Triennial monitoring shall be conducted during the last year of each 3-year compliance period—for example 1998, 2001, 2004 and so forth.

- (D) A system that demonstrates for two consecutive 6-month monitoring periods that the tap water lead level as determined under § 109.1102(a)(3) is less than or equal to 0.005 mg/L and the tap water copper level as determined under § 109.1102(a)(3) is less than 0.65 mg/L may reduce the number of samples in accordance with § 109.1103(e)(1) and reduce the frequency of sampling to once every 3 years.
- (iii) Sample sites and timing. A system that reduces the number of sample sites and frequency of sampling shall collect samples from sample sites included in the pool of targeted sampling sites identified in subsection (g)(2). Systems sampling annually or less frequently shall conduct the lead and copper tap sampling between June 1 and September 30. The Department may approve, in writing, a different period for conducting lead and copper tap monitoring sampling for systems on annual or less frequent monitoring. The period may be no longer than 4 consecutive months and shall represent a time of normal operation when the highest levels of lead are most likely to occur.
- (2) Reduced water quality parameter monitoring for large water systems. A large water system conducting reduced water quality parameter monitoring shall collect two sets of distribution samples from the following reduced number of sample sites. The sets of samples shall be collected from the same sample sites on different days and analyzed for the applicable water quality parameters.

- (i) Reduced sites. A large water system that maintains the range of values for water quality parameter performance requirements reflecting optimal corrosion control treatment specified by the Department under \S 109.1102(b)(5) during each of two consecutive 6-month monitoring periods conducted in accordance with subsection (d)(2) may collect distribution samples from the reduced number of sites during subsequent 6-month monitoring periods until the system qualifies for reduced frequency under subparagraph (ii). The system shall continue monitoring at each entry point as specified in subsection (d)(2).
 - (ii) Reduced water quality parameter monitoring.
- (A) A large water system that maintains the range of values for water quality parameter performance requirements reflecting optimal corrosion control treatment specified by the Department under § 109.1102(b)(5) during 3 consecutive years of monitoring at the reduced number of sites under subparagraph (i) may reduce the frequency with which it collects sets of water quality parameter distribution samples from every 6 months to annually. Annual monitoring begins during the next calendar year. A system conducting annual sampling shall collect these sets of samples evenly throughout the year to reflect seasonal variability. The system shall continue monitoring at each entry point as specified in subsection (d)(2).
- (B) A large water system may reduce the frequency with which it collects tap water samples for applicable water quality parameters specified in § 109.1102(b)(5) to every 3 years if it demonstrates during two consecutive monitoring periods that its tap water lead level at the 90th percentile is less than or equal to the PQL for lead of 0.005 mg/L, that its tap water copper level at the 90th percentile is less than or equal to 0.65 mg/L, and that it also has maintained the range of values for the water

- quality parameters reflecting optimal corrosion control treatment specified by the Department under § 109.1102(b)(5). Triennial monitoring shall be conducted during the last year of each 3-year compliance period—for example 1998, 2001, 2004 and so forth.
 - (3) Reduced monitoring revocation.
- (i) Reduced monitoring revocation for large water systems. A large water system authorized to conduct reduced monitoring under this subsection that fails to meet the lead or copper action level during any 4-month monitoring period or that fails to operate within the range of performance requirements for the water quality parameters specified by the Department under § 109.1102(b)(5) on more than any 9 days in a 6-month period shall comply with the following:
- (A) The water supplier shall resume lead and copper tap monitoring in accordance with subsection (d)(1).
- (B) The water supplier shall resume water quality parameter distribution sampling in accordance with the number and frequency requirements specified in subsection (d)(2).
- (I) A large system may resume annual monitoring for water quality parameters at the tap at the reduced number of sites specified in paragraph (2) after it has completed two subsequent consecutive 6-month rounds of monitoring that meet the criteria of paragraph (2)(i).
- (II) A large system may resume triennial monitoring for water quality parameters at the tap at the reduced number of sites specified in paragraph (2) after it demonstrates through subsequent rounds of monitoring that it meets the criteria of paragraph (2)(ii).
- (C) The water supplier shall conduct source water monitoring in accordance with subsection (d)(3). Monitoring is required only for the parameter for which the action level was exceeded. For systems on annual or less frequent monitoring, the end of the monitoring period is September 30 of the calendar year in which sampling occurs, or, if the Department has designated an alternate monitoring period, the end of the monitoring period is the last day of the 4-month period in which sampling occurs.
- (ii) Reduced monitoring revocation for small or medium water systems. A small or medium water system authorized to conduct reduced lead and copper tap monitoring under this subsection that fails to meet the lead or copper action level during any 4-month monitoring period, or a small or medium system that has installed corrosion control treatment in compliance with § 109.1102(b)(2) and that fails to operate within the range of performance requirements for the water quality parameters specified by the Department under § 109.1102(b)(5) on more than any 9 days in a 6-month period, shall comply with the following:
- (A) The water supplier shall conduct water quality parameter monitoring during the monitoring period in which the action level is exceeded. The start of the 6-month monitoring period for the water quality parameter monitoring required under this clause must coincide with the start of the annual or triennial tap monitoring period in which the action level was exceeded.
- (I) If the system has installed corrosion control treatment in compliance with $\S 109.1102(b)(2)$, water quality parameter monitoring shall be conducted in accordance with subsection (c)(2).
- (II) If the system has not installed corrosion control treatment, water quality parameter monitoring shall be

conducted in accordance with subsection (a)(2) and the system shall conduct corrosion control treatment activities in accordance with § 109.1102(b)(1)(i).

- (B) The water supplier shall collect one source water sample from each entry point within 6 months of the end of the monitoring period in which the action level was exceeded. Monitoring is required only for the parameter for which the action level was exceeded. For systems on annual or less frequent monitoring, the end of the monitoring period is September 30 of the calendar year in which sampling occurs, or, if the Department has designated an alternate monitoring period, the end of the monitoring period is the last day of the 4-month period in which sampling occurs.
- (C) If a system has installed corrosion control treatment in compliance with § 109.1102(b)(2), the water supplier shall resume lead and copper tap monitoring in accordance with subsection (d)(1).
- (f) Additional monitoring by systems. The results of monitoring conducted at specified sites during specified monitoring periods in addition to the minimum requirements of this section shall be considered by the system and the Department in making determinations—such as calculating the 90th percentile lead or copper action level or determining concentrations of water quality parameters—under this subchapter.
- (g) Sample site location plan. The water supplier shall complete a sample site location plan which includes a materials evaluation of the distribution system, lead and copper tap sample site locations, water quality parameter sample site locations, and certification that proper sampling procedures are used. The water supplier shall complete the steps in paragraphs (1)—(3) by the applicable date for commencement of lead and copper tap monitoring under subsection (a)(1) and the step in paragraph (4) following completion of the monitoring. The water supplier shall keep the sample site location plan on record and submit the plan to the Department in accordance with § 109.1107(a)(1).
- (1) Materials evaluation. A system shall review the following sources of information in order to identify a sufficient number of lead and copper tap sampling sites.
- (i) Plumbing codes, permits and records in the files of the building departments of each municipality served by the system which indicate the plumbing materials that are installed within structures connected to the distribution system.
- (ii) Inspections and records of the distribution system that indicate the material composition of the service connections that connect a structure to the distribution system.
- (iii) Existing water quality information, which includes the results of prior analyses of the system or individual structures connected to the system, indicating locations that may be particularly susceptible to high lead or copper concentrations.
- (2) Lead and copper tap sample site selection. Lead and copper tap sampling sites are classified as tier 1, tier 2 or tier 3. Tier 1 sites are the highest priority sample sites.
- (i) Site selection for community water systems. The water supplier shall select all tier 1 sample site locations, if possible. A community water system with an insufficient number of tier 1 sampling sites shall complete its sampling pool with tier 2 sites. Tier 3 sites shall be used to complete the sampling pool if the number of tier 1 and tier 2 sites is insufficient. If the system has an insuffi-

- cient number of tier 1, tier 2 and tier 3 sites, the water supplier shall sample from other representative sites throughout the distribution system in which the plumbing materials used at the site would be commonly found at other sites served by the system.
- (A) Tier 1 sampling sites shall consist of single family structures that have one or more of the following:
 - (I) Copper pipes with lead solder installed after 1982.
 - (II) Lead pipes.
 - (III) Lead service line.
- (B) When multiple-family residences comprise at least 20% of the structures served by a water system, the system may consider a representative number of these types of structures as tier 1 sites in its sampling pool, if they meet the other criteria in clause (A).
- (C) Tier 2 sampling sites shall consist of buildings, including multifamily residences, that have one or more of the following:
 - (I) Copper pipes with lead solder installed after 1982.
 - (II) Lead pipes.
 - (III) Lead service line.
- (D) Tier 3 sampling sites shall consist of single family structures, constructed as a single family residence and currently used as either a residence or business, that contain copper pipes with lead solder installed before 1983.
- (ii) Site selection for nontransient noncommunity water systems.
- (A) The water supplier shall select all tier 1 sample site locations, if possible. A nontransient noncommunity water system with an insufficient number of tier 1 sampling sites shall complete its sampling pool with sampling sites that contain copper pipes with lead solder installed before 1983. If additional sites are needed to complete the sampling pool, the system shall use representative sites throughout the distribution system in which the plumbing materials used at the site would be commonly found at other sites served by the system.
- (B) Tier 1 sampling sites shall consist of buildings that have one or more of the following:
 - (I) Copper pipes with lead solder installed after 1982.
 - (II) Lead pipes.
 - (III) Lead service line.
- (iii) Site selection for community and nontransient nonommunity water systems that have fewer than five taps. A system that has fewer than five taps that can be used for drinking water that meet the sample site criteria specified in this paragraph shall collect at least one sample from each tap and then collect additional samples from those taps on different days during the monitoring period to meet the required number of sites.
- (iv) Site selection for community and nontransient nonommunity facilities that operate continuously. A community water system meeting the conditions in § 109.1104(a)(2)(i)(I) (relating to public education and notification), or a nontransient noncommunity water system, that operates continuously and that has an insufficient number of taps commonly used for drinking water to take each first-draw sample from a different tap, may apply to the Department, in writing, to substitute nonfirst-draw samples. Upon approval by the Department in writing, these systems shall collect as many first-draw

samples as possible from taps that can be used for drinking water that meet the sample site criteria specified in this paragraph. The remaining samples shall be collected at the times and from the sites identified with the longest standing times. Nonfirst-draw samples must be 1-liter in volume and collected from an interior tap that is typically used to provide water for human consumption.

- (v) Sample sites with lead service lines. A system that has a distribution system containing lead service lines shall draw 50% of the samples it collects during each monitoring period from sites that contain lead pipes or copper pipes with lead solder, and 50% of those samples from sites served by a lead service line. If a water system cannot identify a sufficient number of sampling sites served by a lead service line, the system shall collect first draw samples from each site identified as being served by a lead service line.
- (vi) Sample sites with point-of-use or point-of-entry devices. Samples may not be taken from taps that have point-of-use or sites that have point-of-entry treatment devices designed to remove inorganic contaminants.
 - (3) Water quality parameter sample site selection.
- (i) Water quality parameter distribution samples. Water quality parameter distribution samples shall be representative of water quality throughout the distribution system taking into account the number of persons served, the different sources of water, the different treatment methods employed by the system and seasonal variability. Distribution sampling is not required to be conducted at sites targeted for lead and copper tap sampling under subsection (a)(1). Systems may find it convenient to conduct distribution sampling for water quality parameters at sites used for coliform sampling under § 109.303(a) (relating to sampling requirements).
- (ii) Water quality parameter entry point samples. Samples collected at entry points shall be from locations representative of each source after treatment. If a system draws water from more than one source and the sources are combined before distribution, the system shall sample at an entry point during periods of normal operating conditions—that is, when water is representative of all sources being used.
- (4) Sample procedure certification. A water supplier shall certify that sample collection methods identified in subsection (h)(1) were used to collect lead and copper tap samples. This certification shall be included in the sample site location plan. When a water supplier allows the residents to collect the samples, a copy of the material distributed to residents explaining the proper collection methods, and a list of the residents who performed sampling shall be included in the sample site location plan.
 - (h) Sample collection methods.
- (1) Lead and copper tap samples. Tap samples for lead and copper collected in accordance with this subchapter, with the exception of lead service line samples collected under § 109.1107(d)(3) and tap monitoring samples collected under § 109.1103(g)(2)(iv), shall be first-draw samples and the following sample collection methods shall be used:
- (i) Each first-draw tap sample for lead and copper shall be 1 liter in volume and have stood motionless in the plumbing system of each sampling site for at least 6 hours.

(ii) First-draw samples from residential housing shall be collected from the cold water kitchen tap or bathroom sink tap. First-draw samples from a nonresidential building shall be collected at an interior tap from which water is typically drawn for drinking.

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(k) Monitoring waivers for small systems. A small system that meets the criteria of this subsection may apply to the Department to reduce the frequency of monitoring for lead and copper under this section to once every 9 years if it meets all of the materials criteria specified in paragraph (1) and all of the monitoring criteria specified in paragraphs (2). A system that meets the criteria in paragraphs (1) and (2) only for lead, or only for copper, may apply to the Department for a waiver to reduce the frequency of tap water monitoring to once every 9 years for that contaminant only.

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- (4) Monitoring frequency for systems with waivers.
- (i) A system shall conduct tap water monitoring for the contaminant waived in accordance with subsection (e)(1)(iii) at the reduced number of sites identified in subsection (e) at least once every 9 years and provide the materials certification specified in paragraph (1) for the contaminants waived along with the monitoring results. Monitoring shall be conducted during the last year of each 9-year compliance cycle—for example 2010, 2019, 2028 and so forth.

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§ 109.1104. Public education and notification.

- (a) Public education program. The water supplier for a system that exceeds the lead action level based on tap monitoring conducted under § 109.1103 (relating to monitoring requirements) shall implement a public education program in accordance with this section. The public education program must remain in effect until the system qualifies for discontinuation under paragraph (3).
- (1) Content. The water supplier shall include mandatory language established by the EPA under 40 CFR 141.85 (relating to public education and supplemental monitoring requirements), which is incorporated by reference, in all of the printed and broadcast materials distributed through the lead public education program. Additional information presented by a system must be consistent with the information specified in this section and be in plain English that can be understood by laypersons. If appropriate or as designated by the Department, public education materials must be bilingual or multilingual. Systems may delete information pertaining to lead service lines, upon approval by the Department, if no lead service lines exist in the system's service area.
- (i) Content of written materials. Community water suppliers and nontransient noncommunity water suppliers shall include the mandatory language and other content requirements established under 40 CFR 141.85(a)(1) and (2), which is incorporated by reference.
- (ii) Information for non-English-speaking populations. For each non-English-speaking group that exceeds 10% of the residents for systems serving at least 1,000 people or 100 residents for systems serving less than 1,000 people, and speak the same language other than English, the written materials must contain information in the appropriate languages regarding the importance of the materials or contain a telephone number or address where

persons served may contact the water system to obtain a translated copy of the materials or to request assistance in the appropriate language.

- (iii) Submission of written materials. Water systems shall submit copies of all written public education materials to the Department prior to delivery.
 - (2) Delivery.
- (i) Community water system requirements. Within 60 days after the end of the monitoring period in which the lead action level was exceeded, unless it is already repeating public education tasks under this subsection, the water supplier for a community water system shall deliver the public education materials to its customers in accordance with clauses (A)—(G). The water supplier shall repeat the tasks contained in clauses (A)—(D) and (H) every 12 months, and in clause (G) every 6 months for as long as the system exceeds the lead action level. For systems that are required to conduct monitoring annually or less frequently, the end of the monitoring period is September 30 of the calendar year in which sampling occurs, or, if the Department has designated an alternate monitoring period, the end of the monitoring period is the last day of the 4-month period in which sampling occurs.
- (A) The water supplier shall deliver printed materials meeting the content requirements of paragraph (1) to all bill paying customers.
- (B) The water supplier shall deliver education materials meeting the content requirements of paragraph (1) to the local board or department of public health that has jurisdiction over the water system's service area, along with an informational notice that encourages distribution to all the potentially affected consumers. The water supplier shall contact the local board or department of public health directly by phone or in person. The local board or department of public health may provide a specific list of additional community based organizations serving target populations which may include organizations outside the service area of the water system. If a list is provided, the water supplier shall deliver education materials that meet the content requirements of paragraph (1) to all the organizations on the list.
- (C) The water supplier shall deliver education materials meeting the content requirements of paragraph (1) to the organizations listed in subclauses (I)—(VI) that are located within the water system's service area, along with an informational notice that encourages distribution to all the organization's potentially affected customers or water system's users:
- (I) Public and private schools or local school boards, or both.
- (II) Women, Infants, and Children or Head Start Programs whenever available.
 - (III) Public and private hospitals and medical clinics.
 - (IV) Pediatricians.
 - (V) Family planning clinics.
 - (VI) Local welfare agencies.
- (D) The water supplier shall make a good faith effort to locate the following organizations within the water system's service area and deliver education materials meeting the content requirements of paragraph (1) to them along with an informational notice that encourages distribution to all the organization's potentially affected customers or users. The good faith effort to contact at-risk customers must include requesting a specific contact list of the organizations in subclauses (I)—(III) from the local

board or department of public health that has jurisdiction over the water system's service area:

- (I) Licensed childcare centers.
- (II) Public and private preschools.
- (III) Obstetricians-gynecologists and midwives.
- (E) The water supplier shall provide information on or in each water bill at least quarterly. The message on the water bill must include the following statement exactly as written except for the text in brackets for which the water system must include system-specific information:
 - "[INSERT WATER SYSTEM NAME] found high levels of lead in drinking water in some homes. Lead can cause serious health problems. For more information please call [INSERT WATER SYSTEM NAME] (or visit [INSERT WEB SITE ADDRESS])."
- (F) The water supplier shall post education materials meeting the content requirements of paragraph (1) on the water system's web site if the system serves a population greater than 100,000 for as long as the system exceeds the lead action level.
- (G) The water supplier shall submit a press release to newspaper, radio and television stations.
- (H) In addition to the requirements of clauses (A)—(F), community water suppliers shall implement at least three activities from the categories listed in subclauses (I)—(IX). The educational content and selection of these activities shall be determined in consultation with the Department.
 - (I) Public service announcements.
 - (II) Paid advertisements.
 - (III) Public area information displays.
 - (IV) E-mails to customers.
 - (V) Public meetings.
 - (VI) Household deliveries.
 - (VII) Targeted individual customer contact.
- (VIII) Direct distribution of education materials to all multifamily homes and institutions.
 - (IX) Other methods approved by the Department.
- (I) A community water system may apply to the Department, in writing, to omit the text required in 40 CFR 141.85(a)(2) and to perform the tasks listed under subparagraph (ii) in lieu of the tasks under clauses (A)—(H) if the following apply:
- (I) The system is a facility, such as a prison or a hospital, where the population served is not capable of or is prevented from making improvements to the plumbing or installing point-of-use treatment devices.
- (II) The system provides water as part of the cost of services provided and does not charge for water consumption.
- (J) A community water system serving 3,300 or fewer persons may modify its public education program as follows:
- (I) The system may limit distribution of public education materials required under clauses (B) and (C) to facilities and organizations served by the system that are most likely to be visited by pregnant women and children.

- (II) The system may omit the task in clause (G) if notices meeting the content requirements of paragraph (1) are distributed to every household served by the system.
- (III) The system shall implement at least one of the tasks specified in clause (H).
- (ii) Nontransient noncommunity water system requirements. Within 60 days after the end of the monitoring period in which the lead action level was exceeded, the water supplier for a nontransient noncommunity water system shall deliver the public education materials contained in paragraph (1) to its consumers, unless it is already repeating public education tasks under this subsection. For systems that are required to conduct monitoring annually or less frequently, the end of the monitoring period is September 30 of the calendar year in which sampling occurs, or, if the Department has designated an alternate monitoring period, the end of the monitoring period is the last day of the 4-month period in which sampling occurs.
- (A) The water supplier shall post informational posters on lead in drinking water in a public place or common area in each of the buildings served by the system and distribute informational pamphlets or brochures, or both, on lead in drinking water to each person routinely served by the nontransient noncommunity water system. Systems may use electronic transmission in lieu of or combined with printed materials as long as it achieves at least the same coverage.
- (B) The water supplier shall repeat the tasks contained in clause (A) at least once during each calendar year in which the system exceeds the lead action level.
- (iii) Extension of the 60-day delivery deadline. Water systems may request an extension of the 60-day delivery deadline, but the water system must receive written approval from the Department prior to the 60-day deadline
- (3) Discontinuation of public education program. A water supplier may discontinue delivery of public education materials if the system does not exceed the lead action level during the most recent 6-month monitoring period conducted under § 109.1103. The system shall resume public education in accordance with this section if it exceeds the lead action level at any time during a future monitoring period.
- (4) Notification of customer monitoring. A water supplier that fails to meet the lead action level on the basis of tap monitoring conducted in accordance with § 109.1103 shall provide information regarding laboratories certified by the Department for lead and copper testing to any customer who requests it.
- (b) Notification of results. Water systems shall deliver a consumer tap notice of lead tap water monitoring results to persons served by the water at sites that are sampled under § 109.1103.
- (1) Content. The consumer notice must include the following:
- (i) The results of lead tap water monitoring for the tap that was sampled.
 - (ii) An explanation of the health effects of lead.
- (iii) A list of steps consumers can take to reduce exposure to lead in drinking water.
 - (iv) Contact information for the water system.

- (v) The maximum contaminant level goal and the action level for lead and the definitions for these two terms specified by the EPA in 40 CFR 141.153(c) (relating to content of the reports).
- (2) *Timing*. Water systems shall provide the consumer notice within 30 days after the system learns of the tap monitoring results.
- (3) *Delivery*. The consumer notice shall be delivered to persons served at the tap that was sampled either by mail or by another method approved by the Department. The system shall provide notice to all persons served by the tap that was sampled, including consumers who do not receive water bills.
- (c) Public notification requirements. A water supplier shall give public notification in accordance with Subchapter D (relating to public notification) when one of the following occurs:
- (1) The water supplier fails to perform monitoring and analyses as required by § 109.1103.
- (2) The water supplier is not in compliance with a treatment technique established under § 109.1102(b) (relating to action levels and treatment technique requirements).

§ 109.1107. System management responsibilities.

- (a) Reporting and recordkeeping. Systems shall comply with the following requirements and otherwise comply with § 109.701 (relating to reporting and recordkeeping):
- (1) Sample site location plan. The system shall prepare a sample site location plan in accordance with § 109.1103(g) (relating to monitoring requirements), maintain the plan on record and submit the plan to the Department prior to conducting initial lead and copper tap monitoring or upon request. The water supplier shall update the following information in the plan within the first 10 days following the end of each applicable monitoring period:
- (i) Selection of different lead and copper tap sample sites from sites sampled during previous monitoring periods.

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- (3) Corrosion control treatment reporting requirements.
- (i) A water supplier demonstrating optimal corrosion control treatment under § 109.1102(b)(1)(ii) (relating to action levels and treatment technique requirements) shall submit information in writing sufficient for the Department to evaluate and determine whether optimal treatment has been achieved.

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- (5) Consumer notice of lead tap monitoring results reporting requirements. The water supplier shall submit to the Department within 3 months of the end of the monitoring period in which lead tap monitoring was conducted a sample copy of the consumer notice of lead tap monitoring results along with a certification that the notices were distributed in accordance with § 109.1104(b).
 - (6) Lead service line replacement reporting.
- (i) A water system that is required to initiate lead service line replacement in accordance with subsection (d) shall, within the first 3 months of the first year of lead service line replacement, submit to the Department the following:
- (A) Evidence that a materials evaluation of the system has been conducted in accordance with § 109.1103(g)(1).

- (B) A schedule for replacing at least 7% of the lead service lines identified in the materials evaluation.
- (C) The initial number of lead service lines in its distribution system and the portions owned by the system based on a materials evaluation, including the evaluation required under § 109.1103(g) and relevant legal authorities regarding the portion owned by the system.
- (ii) For a system which is conducting lead service line replacement, the water supplier shall notify the Department in writing that the system has replaced at least 7% of the lead service lines identified in the materials evaluation, or that the results of lead sampling from individual lines scheduled for replacement do not exceed 0.015 mg/L. The notification shall be given by the end of each year of lead service line replacement and contain the following information:
- (A) The name, address and public water system identification number of the public water system.
- (B) The number of lead service lines scheduled for replacement during the previous year.
- (C) The number and location of lead service lines actually replaced during the year.
- (D) The date, location, the results of this sampling and method of sampling used, if lead service line sampling is completed in individual lead service lines.
- (7) Record maintenance. The water supplier shall retain on the premises of the system or at a convenient location near the premises the following:
- (i) Records of all monitoring results, which shall be kept for at least 12 years.
- (ii) A copy of a current sample site location plan, which shall be kept for the life of the facility.
- (iii) Copies of written correspondence with the Department relating to lead service line replacement, which shall be kept for at least 12 years after the completion of the replacement of applicable lead service lines.
- (iv) Copies of written correspondence with the Department relating to the implementation of a public education program, which shall be kept for at least 12 years after the completion of the public education program.
- (v) Copies of written correspondence with the Department relating to permitting, construction and operation of corrosion control treatment, including source water treatment, if applicable, which shall be kept for at least 12 years.
- (vi) Plans, specifications and permits for water system facilities, which shall be kept for the life of the facility.
 - (d) Lead service line replacement.
- (1) Initiation of lead service line replacement. A system that exceeds the lead action level when conducting lead and copper tap monitoring in accordance with § 109.1103(c)(1) or (d)(1) after construction or modification of corrosion control treatment facilities shall initiate lead service line replacement. The first year of lead service line replacement begins on the first day following the end of the monitoring period in which the action level was exceeded. If monitoring is required annually or less frequently, the end of the monitoring period is September 30 of the calendar year in which sampling occurred. If the Department has designated an alternate monitoring period in writing, the end of the monitoring period is the last day of the designated alternate monitoring period.

- (2) Replacement schedule. The water supplier shall replace annually at least 7% of the initial number of lead service lines in place at the beginning of the first year of replacement. The number of lead service lines shall be based on the materials evaluation conducted in accordance with § 109.1103(g)(1). The Department may require a system to replace lead service lines on a shorter schedule where, because of the number of lead service lines in the system, a shorter replacement schedule is feasible. The Department will notify the water supplier in writing within 6 months of the initiation of lead service line replacement of its decision to require a shorter replacement schedule.
- (3) Lead service line sampling. The water supplier may sample an individual lead service line to determine whether the line is contributing sufficient lead to warrant its replacement. Lead service lines shall be sampled in accordance with § 109.1103(h)(5). The water supplier is not required to replace a lead service line if none of the lead concentrations in any service line samples from that line exceeds 0.015 mg/L.
- (4) Conditions of replacement. The water supplier shall replace the portion of the lead service line that it owns. In cases where the system does not own the entire lead service line, the system shall notify the owner of the line, or the owner's authorized agent, that the system will replace the portion of the service line that the system owns and shall offer to replace the owner's portion of the line. A system is not required to replace the line if the owner refuses to pay for the cost of replacement of the privately owned portion of the line, or if any laws prohibit this replacement. A system that does not replace the entire length of service line shall complete the following tasks:
- (i) The system shall provide notice to residents of all buildings served by the line at least 45 days prior to commencing partial line replacement. The Department may allow a shorter time period for notification in the case of emergency repairs. The notice must explain that residents may experience a temporary increase of lead levels in their drinking water, along with information on measures consumers can take to minimize their exposure to lead. Residents shall be informed that the system will, at the system's expense, collect a sample from each partially-replaced lead service line that is representative of the water in the service line for analysis of lead content in accordance with § 109.1103(h)(5) within 72 hours after the completion of the partial replacement of the service line.
- (ii) The system shall collect the partial lead service line replacement sample and report the results of the analysis to the owner and the residents served by the line within 3 business days of receiving the results.
- (iii) Information required under subparagraphs (i) and (ii) shall be provided by mail to the residents of individual dwellings. Systems have the option to post this information in a conspicuous location in those instances where multifamily dwellings are served by the line.
- (5) Discontinuation of lead service line replacement. A water supplier may cease replacing lead service lines if the system meets the lead action level during two consecutive 6-month monitoring periods when conducting lead and copper tap monitoring. Thereafter, if the system exceeds the lead action level, the water supplier shall recommence replacing lead service lines in accordance with paragraph (6).
- (6) Resumption of lead service line replacement. Water systems that resume a lead service line replacement

program shall update their lead service line inventory to include those sites that were previously excluded under paragraph (3). Systems shall divide the updated number of remaining lead service lines by the number of remaining years in the replacement program to determine the number that must be replaced each year. If the system has completed a 15-year lead service line replacement program, the Department will determine a schedule for replacing or retesting lead service lines that were previously tested out under the replacement program (when the system reexceeds the lead action level).

[Pa.B. Doc. No. 10-2400. Filed for public inspection December 17, 2010, 9:00 a.m.]

ENVIRONMENTAL QUALITY BOARD [25 PA. CODE CHS. 121 AND 129]

Flat Wood Paneling Surface Coating Processes

The Environmental Quality Board (Board) amends Chapters 121 and 129 (relating to general provisions; and standards for sources) to read as set forth in Annex A.

The final-form rulemaking amends Chapter 129 to limit emissions of volatile organic compounds (VOCs) from the use and application of coatings and cleaning materials in flat wood paneling surface coating processes. The final-form rulemaking adds § 129.52c (relating to control of VOC emissions from flat wood paneling surface coating processes) and amends §§ 129.51 and 129.66 (relating to general; and compliance schedules and final compliance dates). The final-form rulemaking also amends § 121.1 (relating to definitions).

This order was adopted by the Board at its meeting on September 21, 2010.

A. Effective Date

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

B. Contact Persons

For further information, contact Arleen Shulman, Chief, Division of Air Resource Management, P. O. Box 8468, Rachel Carson State Office Building, Harrisburg, PA 17105-8468, (717) 772-3436; or Kristen Furlan, Assistant Counsel, Bureau of Regulatory Counsel, P. O. Box 8464, Rachel Carson State Office Building, Harrisburg, PA 17105-8464, (717) 787-7060. Persons with a disability may use the Pennsylvania AT&T Relay Service, (800) 654-5984 (TDD users) or (800) 654-5988 (voice users). This final-form rulemaking is available through the Department of Environmental Protection's (Department) web site at www.depweb.state.pa.us (Keyword: Public Participation).

C. Statutory Authority

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

D. Background and Purpose

The purpose of this final-form rulemaking is to reduce VOC emissions from flat wood paneling surface coating processes. VOCs are a precursor for ozone formation. Ground-level ozone is not emitted directly by surface coatings to the atmosphere, but is formed by a photochemical reaction between VOCs and nitrogen oxides (NOx) in the presence of sunlight. The final-form rulemaking adopts the emission limits and other requirements of the United States Environmental Protection Agency's (EPA) 2006 Control Techniques Guidelines (CTG) for flat wood paneling coatings to meet Federal CAA requirements.

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

When ground-level ozone is present in concentrations in excess of the Federal health-based 8-hour NAAQS for ozone, public health and welfare are adversely affected. Ozone exposure correlates to increased respiratory disease and higher mortality rates. Ozone can inflame and damage the lining of the lungs. Within a few days, the damaged cells are shed and replaced. Over a long time period, lung tissue may become permanently scarred, resulting in permanent loss of lung function and a lower quality of life. When ambient ozone levels are high, more people with asthma have attacks that require a doctor's attention or use of medication. Ozone also makes people more sensitive to allergens including pet dander, pollen and dust mites, all of which can trigger asthma attacks.

The EPA concluded that there is an association between high levels of ambient ozone and increased hospital admissions for respiratory ailments including asthma. While children, the elderly and those with respiratory problems are most at risk, even healthy individuals may experience increased respiratory ailments and other symptoms when they are exposed to high levels of ambient ozone while engaged in activities that involve physical exertion. High levels of ozone also affect animals in ways similar to humans.

In addition to causing adverse human and animal health effects, the EPA concluded that ozone affects vegetation and ecosystems, leading to reductions in agricultural crop and commercial forest yields by destroying chlorophyll; reduced growth and survivability of tree seedlings; and increased plant susceptibility to disease, pests and other environmental stresses, including harsh weather. In long-lived species, these effects may become evident only after several years or even decades and have the potential for long-term adverse impacts on forest ecosystems. Ozone damage to the foliage of trees and other plants can decrease the aesthetic value of ornamental species used in residential landscaping, as well as the natural beauty of parks and recreation areas. Through deposition, ground-level ozone also contributes to pollution in the Chesapeake Bay. The economic value of some welfare losses due to ozone can be calculated, such as crop yield loss from both reduced seed production and visible injury to some leaf crops, including lettuce, spinach and tobacco, as well as visible injury to ornamental plants, including grass, flowers and shrubs. Other types

of welfare loss may not be quantifiable, such as the reduced aesthetic value of trees growing in heavily visited parks.

High levels of ground-level ozone can also cause damage to buildings and synthetic fibers, including nylon, and reduced visibility on roadways and in natural areas. The implementation of additional measures to address ozone air quality nonattainment in this Commonwealth is necessary to protect the public health and welfare, animal and plant health and welfare and the environment.

In July 1997, the EPA established primary and secondary ozone standards at a level of 0.08 parts per million (ppm) averaged over 8 hours. See 62 FR 38855 (July 18, 1997). In 2004, the EPA designated 37 counties in this Commonwealth as 8-hour ozone nonattainment areas for the 1997 8-hour ozone NAAQS. This Commonwealth is meeting the 1997 standard in all areas except the five-county Philadelphia area. The areas in which the 1997 standard has been attained are required to have permanent and enforceable control measures to ensure violations do not occur for the next decade.

Furthermore, in March 2008, the EPA lowered the standard to 0.075 ppm averaged over 8 hours to provide even greater protection for children, other at-risk populations and the environment against the array of ozoneinduced adverse health and welfare effects. See 73 FR 16436 (March 27, 2008). The EPA is reconsidering the March 2008 ozone NAAQS and, on January 19, 2010, proposed to set a more protective 8-hour ozone primary standard between 0.060 and 0.070 ppm to provide increased protection for children and other at-risk groups. See 75 FR 2938 (January 19, 2010). The EPA also proposed that the secondary ozone standard, which was set identically to the revised primary standard in the 2008 final rule, should instead be a new cumulative, seasonal standard. See 75 FR 2938. This seasonal standard is designed to protect plants and trees from damage occurring from repeated ozone exposure, which can reduce tree growth, damage leaves and increase susceptibility to disease. The final revised ozone NAAQS is expected in 2011.

There are no Federal statutory or regulatory limits for VOC emissions from flat wood paneling surface coating processes. State regulations to control VOC emissions from flat wood paneling surface coating processes are required under Federal law, however, and will be reviewed by the EPA for whether they meet the "reasonably available control technology" (RACT) requirements of the CAA and its implementing regulations. See Consumer and Commercial Products, Group II: Control Techniques Guidelines in Lieu of Regulations for Flexible Packaging Printing Materials, Lithographic Printing Materials, Letterpress Printing Materials, Industrial Cleaning Solvents, and Flat Wood Paneling Coatings, 71 FR 58745, 58747 (October 5, 2006).

Section 172(c)(1) of the CAA (42 U.S.C.A. § 7502(c)(1)) provides that State Implementation Plans (SIPs) for nonattainment areas must include "reasonably available control measures," including RACT, for sources of emissions. Section 182(b)(2) of the CAA (42 U.S.C.A. § 7511a(b)(2)) provides that for moderate ozone nonattainment areas, states must revise their SIPs to include RACT for sources of VOC emissions covered by a CTG document issued by the EPA prior to the area's date of attainment. More importantly, section 184(b)(1)(B) of the CAA (42 U.S.C.A. § 7511c(b)(1)(B)) requires that states in the Ozone Transport Region (OTR), including this Com-

monwealth, submit a SIP revision requiring implementation of RACT for all sources of VOC emissions in the state covered by a specific CTG.

Section 183(e) of the CAA (42 U.S.C.A. § 7511b(e)) directs the EPA to list for regulation those categories of products that account for at least 80% of the VOC emissions from consumer and commercial products in ozone nonattainment areas. Section 183(e)(3)(C) of the CAA further provides that the EPA may issue a CTG in place of a National regulation for a product category when the EPA determines that the CTG will be "substantially as effective as regulations" in reducing emissions of VOC in ozone nonattainment areas.

In 1995, the EPA listed flat wood paneling coatings on its § 183(e) list and, in 2006, issued a CTG for flat wood paneling coatings. See 60 FR 15264 (March 23, 1995) and 71 FR 58745 (October 5, 2006). In the 2006 notice, the EPA determined that the CTG would be substantially as effective as a National regulation in reducing VOC emissions from these product categories in ozone nonattainment areas. See 71 FR 58745.

The CTG provides states with the EPA's recommendation of what constitutes RACT for the covered category. States can use the recommendations provided in the CTG to inform their own determination as to what constitutes RACT for VOC emissions from the covered category. State air pollution control agencies are free to implement other technically sound approaches that are consistent with the CAA requirements and the EPA's implementing regulations or guidelines.

The Department reviewed the recommendations included in the 2006 CTG for flat wood paneling coatings for their applicability to the ozone reduction measures necessary for this Commonwealth. The Department determined that the measures provided in the CTG for flat wood paneling coatings are appropriate to be implemented in this Commonwealth as RACT for this category.

This final-form rulemaking will assist in reducing VOC emissions locally as well as reducing the transport of VOC emissions and ground-level ozone to downwind states. Adoption of VOC emission requirements for flat wood paneling surface coating processes is part of the Commonwealth's strategy, in concert with other OTR jurisdictions, to further reduce transport of VOC ozone precursors and ground-level ozone throughout the OTR to attain and maintain the 8-hour ozone NAAQS. The final-form rulemaking is required under the CAA and is reasonably necessary to attain and maintain the health-based 8-hour ozone NAAQS and to satisfy related CAA requirements in this Commonwealth. This final-form rulemaking will be submitted to the EPA as a revision to the SIP.

The final-form rulemaking was discussed with the Air Quality Technical Advisory Committee (AQTAC) on June 17, 2010. The AQTAC concurred with the Department's recommendation to present the final-form amendments to the Board for approval for publication as a final regulation. The Department also consulted with the Citizens Advisory Council (CAC) on June 30, 2010, and the Small Business Compliance Advisory Committee (SBCAC) on July 28, 2010. Neither the CAC nor the SBCAC had concerns.

E. Summary of Regulatory Requirements and Changes to the Proposed Rulemaking

The final-form rulemaking adds definitions of the following terms to § 121.1 to support the addition of § 129.52c: "Class II hardboard paneling finish," "decora-

tive interior panel," "engineered wood panel product," "exterior siding," "exterior trim," "flat wood paneling coating," "flat wood paneling product," "hardboard," "hardwood plywood," "MDF—medium density fiberboard," "natural-finish hardwood plywood panel," "particleboard," "premium interior wall paneling product," "plywood," "printed interior panel," "thin particleboard," "tileboard" and "waferboard."

The final-form rulemaking amends § 129.51(a) to extend its coverage to flat wood paneling surface coating processes covered by this final-form rulemaking. Section 129.51(a) provides an alternative method for owners and operators of facilities to achieve compliance with air emission limits.

The final-form rulemaking adds § 129.52c to regulate VOC emissions from flat wood paneling surface coating processes. The applicability of this new section is described in subsection (a), which establishes that emission limits and other requirements of this section apply to the owner and operator of a flat wood paneling surface coating process if the total actual VOC emissions from all flat wood paneling surface coating operations in Table I (relating to emission limits of VOCs for flat wood paneling surface coatings), including related cleaning activities, at the facility are equal to or greater than 15 pounds (6.8 kilograms) per day, before consideration of controls. Subsection (a) specifies that § 129.52c does not apply to the following: (1) field-applied coating processes, because these are regulated under Chapter 130, Subchapter C (relating to architectural and industrial maintenance coatings); coating processes regulated under §§ 129.101— 129.107 (relating to wood furniture manufacturing operations); and (3) coating processes regulated under §§ 129.52(f) and 129.52, Table I, Category 11 (relating to surface coating processes; and wood furniture manufacturing operations).

Subsection (b) explains that the requirements of § 129.52c supersede the requirements of a RACT permit for VOC emissions from a flat wood paneling surface coating operation already issued to the owner or operator of a source subject to § 129.52c, except to the extent the RACT permit contains more stringent requirements.

Subsection (c) establishes VOC emission limits. The compliance date was changed based on the anticipated publication date of the final-form rulemaking. Beginning January 1, 2012, a person may not cause or permit the emission into the outdoor atmosphere of VOCs from a flat wood paneling surface coating process, unless one of two limitations is met. The first limitation is that the VOC content of each as applied coating is equal to or less than the limit specified in Table I in § 129.52c. The final-form rulemaking adds that the VOC content requirement of Table I for all materials used on a single process line may be met by using a daily, weighted-average approach. The final-form rulemaking includes an equation for calculating the weighted average. The second limitation is that the overall weight of VOCs emitted to the atmosphere is reduced through the use of vapor recovery, incineration or another method that is acceptable under § 129.51(a). This limitation also addresses the overall efficiency of a control system, as determined through the use of the sampling and testing methods in Chapter 139 (relating to sampling and testing).

Subsection (d) identifies daily records that shall be kept to demonstrate compliance with § 129.52c, including records of parameters and VOC content of each coating, thinner, component and cleaning solvent, as supplied, and the VOC content of each as applied coating or cleaning solvent.

Subsection (e) contains a change to the proposed recordkeeping and reporting requirements. The proposed rulemaking required that records be maintained for 2 years. The final-form rulemaking requires that records be maintained for 2 years unless a longer period is required under § 127.511(b)(2) (relating to monitoring and related recordkeeping and reporting requirements). Additionally, final-form § 129.52c(e) has been amended to clarify that records shall be submitted to the Department upon receipt of a written request.

Under subsection (f), an owner or operator subject to 129.52c may not cause or permit the emission into the outdoor atmosphere of VOCs from the application of flat wood paneling surface coatings, unless the coatings are applied using the methods listed in this subsection, except that an owner or operator may use another coating application method if a request is submitted in writing that demonstrates that the method is capable of achieving a transfer efficiency equivalent to, or better than, that achieved by the other methods in subsection (f) and approved in writing by the Department prior to use. Three coating application methods have been added to the list for clarity: airless spray coating, air-assisted airless spray coating and electrostatic coating. The other methods listed are rotogravure coating, curtain coating, direct roll coating, reverse roll coating, hand brush or hand roller coating, or high volume-low pressure spray coating.

Subsection (g) exempts coatings used exclusively for determining product quality and commercial acceptance and other small quantity coatings from the VOC coating content limits in § 129.52c, Table I, if the quantity of coating used does not exceed 50 gallons per year for a single coating and a total of 200 gallons per year for all coatings combined for the facility and if the owner or operator of the facility requests, in writing, and the Department approves, in writing, the exemption prior to use of the coating.

Subsection (h) establishes work practices that an owner or operator of a flat wood paneling surface coating process subject to § 129.52c shall comply with for coating-related activities.

Subsection (i) establishes work practices that an owner or operator of a flat wood paneling surface coating process subject to § 129.52c shall comply with for cleaning materials.

Table I establishes emission limits for VOCs for flat wood paneling surface coatings, expressed in weight of VOC per volume of coating solids, as applied.

This final-form rulemaking also amends § 129.66 to extend its coverage to this rulemaking and the two other recently published surface coating CTG rulemakings namely the large appliance and metal furniture surface coating processes final-form rulemaking published at 40 Pa.B. 5132 (September 11, 2010) and the paper, film and foil surface coating processes rulemaking published at 40 Pa.B. 6646 (November 20, 2010). The section will be similarly updated in later CTG rulemakings. Existing § 129.66 establishes a 1-year compliance date for owners or operators of a source newly subject to § 129.52, the existing surface coatings regulation, as a result of revised applicability requirements. The amendment in the final-form rulemaking is intended to ensure that this flexibility is extended to owners and operators of sources newly

subject to the expanding collection of surface coating regulations resulting from these CTG rulemakings. The amendment will allow compliance for sources newly subject to the requirements because of revised applicability requirements within 1 year or by the compliance date specified in the new regulation, whichever is later.

F. Summary of Major Comments and Responses

The Board approved publication of the proposed rule-making at its meeting of September 15, 2009. The proposed rulemaking was published at 39 Pa.B. 6061 (October 17, 2009). Three hearings were held on November 17, 19 and 20, 2009, in Harrisburg, Norristown and Pittsburgh, respectively. The public comment period closed on December 21, 2009.

Public comments were received from one commentator, CraftMaster Manufacturing, Inc. (CraftMaster). The Independent Regulatory Review Commission (IRRC) also provided comments.

Other regulatory programs

CraftMaster submitted several comments regarding concurrent applicability of the EPA's 2003 Wood Building Products (WBP) National Emission Standard for Hazardous Air Pollutants (NESHAP). The Board responds that the final-form rulemaking is based on the 2006 EPA CTG for Flat Wood Paneling Coatings; the WBP NESHAP does not guide or override this rulemaking, nor do the Maximum Available Control Technology (MACT), Best Available Technology (BAT) or the Commonwealth's New Source Review (NSR) programs. While there may be overlapping regulation of certain product subcategories, a facility's surface coating processes will be subject to the final-form rulemaking if the operation is for one of the product types that is defined in § 121.1 and has a limit set in § 129.52c, Table I. State regulations to control VOC emissions from flat wood paneling surface coating processes with RACT are required under the CAA. The EPA's WBP NESHAP is applicable only to major sources of hazardous air pollutants (HAP), and this final-form rulemaking is applicable to processes that have actual VOC emissions of 15 lbs/day or more from all flat wood paneling operations in Table I, including cleaning operations. Therefore, smaller facilities would be subject to the final-form rulemaking and, by reducing VOCs, may also be reducing a significant amount of HAPs.

CraftMaster also suggested that surface coating operations already subject to the MACT or BAT programs, or to the emissions offset provisions of the NSR program, should not be subject to the final-form rulemaking. The Board responds that MACT regulations are for controlling HAPs and VOCs that are HAPs, not for controlling all VOCs as precursors of ground-level ozone, as the finalform rulemaking does. With regard to BAT, surface coating operations that have been subject to BAT may also meet the requirements of the final-form rulemaking because the BAT determined at the time of the review may be as stringent as, or more stringent than, the requirements of this final-form rulemaking. However, if the BAT is less stringent than the requirements of this final-form rulemaking, the surface coating operation must comply with the more stringent requirements. With regard to NSR, the EPA accepts the Commonwealth's BAT determinations and recent NSR applicability determinations as fulfillment of RACT for facilities that are not covered by a CTG, for which controls are installed after December 9, 1997 (62 FR 64722), the date that the EPA approved the Department's NSR program, because this date draws the line between an existing source subject to RACT and a new source subject to NSR.

VOC content limit

CraftMaster commented that the "as applied" VOC limit in Table I should be applicable to an entire surface coating operation or category of Flat Wood Paneling Product processed on a surface coating operation, on a weighted-average basis of all coatings applied, rather than to each individual coating. The Board agrees that the weighted-average approach is acceptable. The finalform rulemaking has been revised to add a provision in § 129.52c(c)(1) that allows for calculating a daily weighted average within a single surface coating process line. Also, demonstrating equivalency with the requirements in § 129.52c is allowed under § 129.51(a) in the final-form rulemaking. This weighted-average approach could be specified in a plan approval application and memorialized in a permit under the equivalency provision if a company desires to proceed in that fashion and obtains permit approval.

CraftMaster commented that a facility should be able to use "as purchased" VOC data instead of calculating "as applied" data to demonstrate compliance with the VOC content limits of Table I. Calculation of "as applied" should be limited to a situation where one or more components of a blend are not a "complying coating" on its own. The Board agrees that "as purchased" VOC data can be used under specific circumstances instead of "as applied" data. If there is no thinning or mixing of additional regulated VOCs with the "as purchased" material, but only blending of two or more compliant coatings (each less than 2.9 lbs VOC/gal coating solids), the company could make a statement in its recordkeeping documents to this effect and not provide additional calculations. However, if mixing of thinners or other noncompliant VOC-containing coatings with the "as purchased" material occurs, the "as applied" coating content must be calculated. The Department reserves its right, of course, to sample a coating, even if the company has provided a written statement that the coating is compliant as mixed.

Recordkeeping

Both CraftMaster and IRRC commented on the daily recordkeeping requirement. CraftMaster stated that it is an unnecessary burden with no known benefit and that the company should be allowed to continue on its monthly recordkeeping basis. IRRC requested that the Board explain the basis and need for requiring daily recordkeeping. Both commented on the cost of daily recordkeeping. The Board disagrees with the commentators' comments regarding recordkeeping. The Board is requiring daily recordkeeping because the applicability for the final-form rulemaking is based on emissions equal to or greater than 15 lbs/day of VOC before control. Therefore, to demonstrate inclusion or exemption from the regulation, and to enable the Department to ascertain compliance at any time, daily records must be kept. Furthermore, since daily records will be necessary to satisfy the requirements for monthly records, the recordkeeping burden should be minimal. The Board disagrees that there are any additional costs associated with daily recordkeeping.

IRRC commented that subsection (e) is unclear as to what format the records should be maintained, and that this should be clarified in the final-form rulemaking. The Board respectfully disagrees. Requiring regulated facilities to maintain records is a standard requirement. This requirement is found in many Board-approved regulations, including § 129.52(g), for instance. The owners and operators of regulated sources have not had difficulty understanding or complying with this requirement. No

changes have been made to the final-form rulemaking concerning format in response to this comment.

IRRC commented that the Board should clarify whether submission of the records required under § 129.52c(e) will be requested by the Department in writing or orally. Final-form § 129.52c(e) has been revised to specify that the records shall be submitted to the Department upon receipt of a written request.

Compliance methods and related costs

CraftMaster stated that airless sprays are used in many instances and that, therefore, the requirements regarding coating application methods should be removed. IRRC requested that the Board consider adding airless sprays to the list of acceptable coating application methods. The Board agrees that airless sprays can be used for flat wood paneling surface coating processes. The proposed rulemaking would have allowed other coating application methods to be approved under § 129.52c(f)(7) with written requests, if the method would achieve an equivalent or better transfer efficiency than those in paragraphs (1)—(6); however, for ease of permitting and enforcement, the Board added airless, air-assisted airless and electrostatic coating methods to § 129.52c(f) in the final-form rulemaking.

CraftMaster estimated that for one surface coating operation the capital costs to install a regenerative thermal oxidizer (RTO) control device would be \$3.46 million, with annual costs of \$1.51 million. CraftMaster commented that the cost per ton of VOCs controlled is \$43,000, which they state is far greater than any known RACT cost-effectiveness criteria and that NOx emissions associated with operating the RTO are estimated at 4.7 tons per year. IRRC asked that the Board address in the preamble to the final-form rulemaking the fiscal impact concerns raised by CraftMaster. The Board appreciates the work CraftMaster staff undertook to determine the exact cost of installation of a control device. The 2006 flat wood paneling CTG does not address costs for RTOs or other add-on control devices, only costs for lower VOCcontent coatings. The estimated annual cost for the owners or operators of CraftMaster for changing the company's noncomplying interior flat wood paneling coating operations over to compliant material would be \$10,070 (5.3 tons VOC emissions reduced x \$1,900/ton), using the emission reductions provided by CraftMaster in its comment letter and costs provided by the EPA in the CTG. The final-form rulemaking allows, but does not require, the installation of an add-on control device to meet the emission limitations. It is a facility owner or operator's choice whether to use compliant coatings or add-on controls. Compliant coatings are available. The Board notes that if CraftMaster should average the VOC contents of all materials used within a single surface coating process line, the facility might not have any noncompliant surface coating lines and no additional emission reductions would be required at the facility.

CraftMaster commented that the requirement to fully enclose coatings, coating-related wastes and coating-related clean-up materials handling systems should not be applicable in all instances. CraftMaster asserts that it is not technically feasible or cost effective to enclose materials when coatings are water-based "complying coatings," the cleaning material is limited to water and wastes are treated onsite. IRRC commented that the Board should explain why it is necessary to fully enclose all coatings and coating-related waste materials. The Board is not requiring a facility owner or operator to fully enclose all coatings, coating-related wastes and coating-

related clean-up materials handling systems. Neither the proposed nor the final-form rulemaking requires this. The requirements are as follows: (1) store VOC-containing materials in closed containers; (2) minimize spills of VOC-containing materials and clean up spills immediately; (3) convey VOC-containing materials from one location to another in closed pipes or containers; (4) ensure that mixing and storage containers used for VOC-containing materials are kept closed at all times, except when depositing or removing these materials; and (5) minimize VOC emissions during cleaning of storage, mixing and conveying equipment. The work practice requirements for coating-related activities and for cleaning materials in the final-form rulemaking are taken from the 2006 CTG. The Board does not anticipate increased cost due to the implementation of work practice standards for cleaning materials. The implementation of the work practices for cleaning materials is expected to result in a net cost savings. The recommended work practices should reduce the amount of cleaning materials used by reducing the amount of cleaning materials lost to evaporation, spillage or waste. The EPA did not estimate any costs associated with work practice standards in the CTG. On page 7 of the CTG, the EPA states: "To provide structure and consistency to their work practices, facilities can develop and implement a work practice plan. The work practice plan is a proven and traditional approach for cleaning that is easily adopted and managed by various industries, including flat wood paneling coatings." (Emphasis added.)

Definitions

IRRC commented on the second sentences in the definitions of the terms "decorative interior panel," "exterior siding" and "exterior trim." IRRC stated that these sentences contained nonregulatory language and would be more appropriate in the preamble to the final-form rulemaking than in the definition. The Board respectfully disagrees. The sentences provide useful information that will help the regulated community, environmental community and Department staff be better able to identify the type of product they are dealing with. No changes were made to the final-form rulemaking as a result of this comment.

IRRC commented on the definitions of "MDF—medium density fiberboard," which contains the phrase "engineered wood panel product," and "tileboard," which contains the phrase "premium interior wall paneling product." IRRC recommended that the Board define these terms in the final-form rulemaking to improve clarity. The Board agrees and amended final-form § 121.1 to include definitions for these terms.

G. Benefits, Costs and Compliance

Benefits

Implementation of the final-form rulemaking will benefit the health and welfare of the approximately 12 million humans, animals, crops, vegetation and natural areas of this Commonwealth by reducing emissions of VOCs, which are precursors to ground-level ozone air pollution. Although the final-form rulemaking is designed primarily to address ozone air quality, the reformulation or substitution of coating products to meet the VOC content limits applicable to users may also result in reduction of HAP emissions, which are also a serious health threat.

The final-form rulemaking provides as one compliance option that inks, coatings and adhesives used on or applied to flat wood paneling products manufactured in this Commonwealth meet specified limits for VOC content, usually through substitution of low VOC-content solvents or water for the high VOC-content solvents. The reduced levels of high VOC-content solvents will also benefit water quality through reduced loading on water treatment plants and in reduced quantities of high VOC-content solvents leaching into the ground. Owners and operators of affected flat wood paneling surface coating process facilities may also reduce VOC emissions through the use of add-on controls, or a combination of complying coatings and add-on controls.

The EPA estimates that implementation of the recommended control options for noncomplying flat wood paneling surface coating processes will result in additional reductions of VOC emissions of approximately 20% for interior flat wood paneling coating processes and 80% for exterior siding processes.

In this Commonwealth, approximately ten flat wood paneling surface coating operations combined to emit an estimated total of 248 tons of VOCs in 2009. The highest emitting of these facilities indicated in its comments on the proposed rulemaking that it potentially has five flat wood paneling surface coating operations subject to the regulation that emitted 99.4 tons of VOC in 2008. This company also reported 78 tons of VOCs to the Department in 2009. The remaining nine facilities emitted a total of 26 tons of VOCs in 2009. This highest-emitting facility indicated that its anticipated reductions from possibly noncomplying surface coating operations would range from 5.3 to 9 tons per year. Should this company average the VOC contents within a single surface coating process line, the facility might not have any noncompliant surface coating process lines and no additional emission reductions would be required at the facility. Based upon that assumption, and assuming all emissions at the remaining nine facilities are from noncomplying flat wood paneling surface coating processes, the maximum anticipated additional annual VOC emission reductions as a result of this final-form rulemaking are approximately 5 tons (26 tons x 20%) if all subject processes are for interior paneling to 21 tons (26 tons × 80%) if all subject processes are for exterior siding.

Compliance Costs

The costs of complying with the new requirements in the final-form rulemaking include the cost of using alternative product formulations, including low VOC-content or water-based inks, coatings and adhesives, and low VOC-content or water-based cleanup solvent products, and the cost of using add-on controls. Based on information provided by the EPA in the CTG, the cost effectiveness of reducing VOC emissions from flat wood paneling surface coating processes is estimated to range from \$1,900 for interior paneling coating processes to \$2,600 for exterior siding coating processes per additional ton of VOC emissions reduced. This range is based on the use of low VOC-content coatings for control.

The total estimated anticipated annual costs to non-complying facilities ranges from \$9,500 (5 tons VOC emissions reduced \times \$1,900/ton reduced) to \$54,600 (21 tons VOC emissions reduced \times \$2,600/ton reduced). These costs are negligible compared to the improved public health and environmental benefits that will be gained from this measure.

The implementation of the work practice requirements for cleaning materials is expected to result in a net cost savings. The recommended work practices should reduce the amount of cleaning materials used by reducing the amount of cleaning materials lost to evaporation, spillage and waste.

Compliance Assistance Plan

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

Paperwork Requirements

The owners and operators of affected flat wood paneling surface coating processes will be required to keep daily operational records of information for coatings and cleaning solvents sufficient to demonstrate compliance, including identification of materials, VOC content and volumes used. The records shall be maintained for at least 2 years and, in some cases, 5 years and be submitted to the Department upon written request. Persons claiming the small quantity exemption or use of exempt coating are required to keep records demonstrating the validity of the exemption. Persons seeking to comply through the use of add-on controls are required to meet the applicable reporting requirements specified in Chapter 139.

H. Pollution Prevention

The Pollution Prevention Act of 1990 (42 U.S.C.A. §§ 13101—13109) established a National policy that promotes pollution prevention as the preferred means for achieving state environmental protection goals. The Department encourages pollution prevention, which is the reduction or elimination of pollution at its source, through the substitution of environmentally friendly materials, more efficient use of raw materials and the incorporation of energy efficiency strategies. Pollution prevention practices can provide greater environmental protection with greater efficiency because they can result in significant cost savings to the owners and operators of facilities that permanently achieve or move beyond compliance. This final-form rulemaking incorporates the following pollution prevention incentives:

The final-form rulemaking will assure that the citizens and the environment of this Commonwealth experience the benefits of reduced emissions of VOCs and HAPs from flat wood paneling surface coating processes. Although the final-form rulemaking is designed primarily to address ozone air quality, the reformulation or substitution of coating products to meet the VOC content limits applicable to users may also result in reduction of HAP emissions, which are also a serious health threat. The final-form rulemaking provides as one compliance option that coatings used on or applied to flat wood paneling products manufactured in this Commonwealth meet specified limits for VOC content, usually through substitution of low VOC-content solvents or water for the high VOC-content solvents. The reduced levels of high VOCcontent solvents will also benefit water quality through reduced loading on water treatment plants and in reduced quantities of high VOC-content solvents leaching into the ground. Owners and operators of affected flat wood paneling surface coating process facilities may also reduce VOC emissions through the use of add-on controls, or a combination of complying coatings and add-on controls.

I. Sunset Review

These 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.

J. Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), on October 6, 2009, the Department submitted a copy of the notice of proposed rulemaking, published at 39 Pa.B. 6061, to IRRC and the Chairpersons of the House and Senate Environmental Resources and Energy Committees for review and comment.

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

Under section 5.1(j.2) of the Regulatory Review Act (71 P. S. § 745.5a(j.2)), on November 3, 2010, the final-form rulemaking was deemed approved by the House and Senate Committees. Under section 5.1(e) of the Regulatory Review Act, IRRC met on November 4, 2010, and approved the final-form rulemaking.

K. Findings

The Board finds that:

- (1) Public notice of proposed rulemaking was given under sections 201 and 202 of the act of July 31, 1968 (P. L. 769, No. 240) (45 P. S. §§ 1201 and 1202) and regulations promulgated thereunder, 1 Pa. Code §§ 7.1 and 7.2.
- (2) At least a 60-day public comment period was provided as required by law and all comments were considered.
- (3) This final-form rulemaking does not enlarge the purpose of the proposed rulemaking published at 39 Pa.B. 6061.
- (4) These regulations are necessary and appropriate for administration and enforcement of the authorizing acts identified in Section C of this preamble.
- (5) These regulations are necessary to attain and maintain the ozone NAAQS and to satisfy related CAA requirements.

L. Order

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

(a) The regulations of the Department, 25 Pa. Code Chapters 121 and 129, are amended by amending §§ 121.1, 129.51 and 129.66, and adding § 129.52c to read as set forth in Annex A, with ellipses referring to the existing text of the regulations.

(*Editor's Note*: The amendment of § 129.66 was not included in the proposed rulemaking published at 39 Pa.B. 6061.)

- (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 House and Senate Committees as required by the Regulatory Review Act.
- (d) The Chairperson of the Board shall certify this order and Annex A and deposit them with the Legislative Reference Bureau as required by law.

- (e) This final-form rulemaking will be submitted to the EPA as an amendment to the Pennsylvania SIP.
- (f) This order shall take effect immediately upon publication in the *Pennsylvania Bulletin*.

JOHN HANGER, Chairperson

(*Editor's Note*: For the text of the order of the Independent Regulatory Review Commission relating to this document, see 40 Pa.B. 6752 (November 20, 2010).)

Fiscal Note: Fiscal Note 7-447 remains valid for the final adoption of the subject regulations.

Annex A

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

Subpart C. PROTECTION OF NATURAL RESOURCES

ARTICLE III. AIR RESOURCES CHAPTER 121. GENERAL PROVISIONS

§ 121.1. Definitions.

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

* * * * *

Class II hardboard paneling finish—A finish that meets the specifications of Voluntary Product Standard PS-59-73 as approved by the American National Standards Institute.

* * * * *

Decorative interior panel—Interior wall paneling that is usually grooved, frequently embossed and sometimes grain printed to resemble various wood species. Interior panels are typically manufactured at the same facilities as tileboard, although in much smaller quantities. The substrate can be hardboard, plywood, MDF or particle-board.

* * * * *

Engineered wood panel product—A derivative wood product that is manufactured by binding together the strands, particles, fibers or veneers of wood with adhesives, resins, other coatings or additives, or a combination of these, to form a composite material. The manufacturing process may also use heat or pressure, or both, to form the product. The product is manufactured to precise design specifications which are tested to meet National or international standards.

* * * *

Exterior siding—

- (i) Siding made of solid wood, hardboard or waferboard. Siding made of solid wood or hardboard is typically primed at the manufacturing facility and finished in the field, although some finishing may be performed during manufacturing.
 - (ii) The term includes exterior trim.

Exterior trim—Material made out of siding panels and used for edges and corners around the siding. Exterior trim is typically manufactured at the same facility as exterior siding and coated with the same coatings as siding.

* * * * *

Flat wood paneling coating—A protective, decorative or functional material applied to a flat wood paneling product, including a decorative interior panel, exterior siding or tileboard.

Flat wood paneling product—A wood paneling product used in construction including decorative interior panels, exterior siding and tileboard (Class I hardboard).

* * * * *

Hardboard—A panel manufactured primarily from interfelted lignocellulosic fibers that are consolidated under heat and pressure in a hot-press.

 $Hardwood\ plywood$ —Plywood on which the surface layer is a veneer of hardwood.

* * * * *

MDF—Medium density fiberboard—An engineered wood panel product manufactured from individual wood fibers combined with wax and resin and consolidated under extreme heat and pressure.

* * * * *

Natural-finish hardwood plywood panel—A panel on which the original grain pattern is enhanced by an essentially transparent finish frequently supplemented by filler and toner.

* * * * *

Particleboard—A manufactured board made of individual wood particles that have been coated with a binder and formed into flat sheets by pressure.

* * * * *

Premium interior wall paneling product—A product that has more stringent product performance requirements (namely, adhesion and hardness standards; and household stain, scrub and moisture resistance, while maintaining a relatively smooth appearance) compared to standard interior wall paneling.

* * * * *

Plywood—A structural material made of layers of laminated plies of veneers or layers of wood glued together, usually with the grains of adjoining layers at right angles to each other.

* * * * *

Printed interior panel—A panel on which the grain or natural surface is obscured by filler and basecoat upon which a simulated grain or decorative pattern is printed.

* * * * *

Thin particleboard—Particleboard that has a thickness of 1/4 inch or less.

* * * * *

Tileboard—A premium interior wall paneling product made of hardboard that is used in high moisture areas of the home, including kitchens and bathrooms, and which meets the specifications for Class I hardboard approved by the American National Standards Institute.

* * * * *

Waferboard—A structural material made from rectangular wood flakes of controlled length and thickness bonded together with waterproof phenolic resin under extreme heat and pressure. The layers of flakes are not oriented.

* * * * *

CHAPTER 129. STANDARDS FOR SOURCES SOURCES OF VOCs

§ 129.51. General.

- (a) Equivalency. Compliance with §§ 129.52, 129.52a, 129.52b, 129.52c and 129.54—129.73 may be achieved by alternative methods if the following exist:
- (1) The alternative method is approved by the Department in an applicable plan approval or operating permit, or both.
- (2) The resulting emissions are equal to or less than the emissions that would have been discharged by complying with the applicable emission limitation.
- (3) Compliance by a method other than the use of a low VOC coating or ink which meets the applicable emission limitation in §§ 129.52, 129.52a, 129.52b, 129.52c, 129.67 and 129.73 shall be determined on the basis of equal volumes of solids.
- (4) Capture efficiency testing and emissions testing are conducted in accordance with methods approved by the EPA.
- (5) Adequate records are maintained to ensure enforceability.
- (6) The alternative compliance method is incorporated into a plan approval or operating permit, or both, reviewed by the EPA, including the use of an air cleaning device to comply with \$ 129.52, \$ 129.52a, \$ 129.52b, \$ 129.52c, \$ 129.67, \$ 129.68(b)(2) and (c)(2) or \$ 129.73.
- (b) New source performance standards. Sources covered by new source performance standards which are more stringent than those contained in this chapter shall comply with those standards in lieu of the standards found in this chapter.
- (c) Demonstration of compliance. Test methods and procedures used to monitor compliance with the emission requirements of this section are those specified in Chapter 139 (relating to sampling and testing).
- (d) *Records*. The owner or operator of a facility or source subject to the VOC emission limitations and control requirements in this chapter shall keep records to demonstrate compliance with the applicable limitation or control requirement.
- (1) The records shall provide sufficient data and calculations to clearly demonstrate that the emission limitations or control requirements are met. Data or information required to determine compliance with an applicable limitation shall be recorded and maintained in a time frame consistent with the averaging period of the standard.
- (2) The records shall be retained at least 2 years and shall be made available to the Department on request.
- (3) An owner or operator claiming that a facility or source is exempt from the VOC control provisions of this chapter shall maintain records that clearly demonstrate to the Department that the facility or source is not subject to the VOC emission limitations or control requirements.

§ 129.52c. Control of VOC emissions from flat wood paneling surface coating processes.

(a) Applicability. Except as specified in paragraphs (1)—(3), this section applies to the owner and operator of a flat wood paneling surface coating process if the total actual VOC emissions from all flat wood paneling surface coating operations listed in Table I (relating to emission

limits of VOCs for flat wood paneling surface coatings), including related cleaning activities, at the facility are equal to or greater than 15 pounds (6.8 kilograms) per day, before consideration of controls. This section does not apply to the following:

- (1) A field-applied coating process. Field-applied coatings are regulated under Chapter 130, Subchapter C (relating to architectural and industrial maintenance coatings).
- (2) A coating process regulated under §§ 129.101—129.107 (relating to wood furniture manufacturing operations).
- (3) A coating process regulated under §§ 129.52(f) and 129.52, Table I, Category 11 (relating to surface coating processes; and wood furniture manufacturing operations).
- (b) Existing RACT permit. The requirements of this section supersede the requirements of a RACT permit issued to the owner or operator of a source subject to subsection (a) prior to January 1, 2012, under §§ 129.91—129.95 (relating to stationary sources of NOx and VOCs) to control, reduce or minimize VOCs from a flat wood paneling surface coating process, except to the extent the RACT permit contains more stringent requirements.
- (c) *Emission limits*. Beginning January 1, 2012, a person subject to this section may not cause or permit the emission into the outdoor atmosphere of VOCs from a flat wood paneling coating process unless one of the following limitations is met:
- (1) The VOC content of each as applied coating is equal to or less than the limit specified in Table I.
- (i) The VOC content of each as applied coating, expressed in units of weight of VOC per volume of coating solids, shall be calculated as follows:

$$VOC = (W_0)(D_c)/V_n$$

Where:

VOC = VOC content in lb VOC/gal of coating solids.

W_o = Weight percent of VOC (W_v-W_w-W_{ex}).

 $W_{\rm v}$ = Weight percent of total volatiles (100%-weight percent solids).

 $W_{\rm w}$ = Weight percent of water.

W_{ex} = Weight percent of exempt solvent(s).

 D_c = Density of coating, lb/gal, at 25° C.

V_n = Volume percent of solids of the as applied coating.

(ii) The VOC content limits in Table I may be met by calculating a weighted average of the VOC content of all coatings used on a single flat wood paneling surface coating process line each day. The daily weighted average shall be calculated using the following equation:

$$VOC_{w} = \frac{\sum_{i=1}^{n} C_{i} V_{i}}{V_{*}}$$

Where:

 ${
m VOC_w}$ = The daily weighted average VOC content, as applied, of all coatings used on a single flat wood paneling surface coating process line, in lb VOC/gal of coating solids.

n = The number of different coatings used each day on the single flat wood paneling surface coating process line.

 $V_{\rm i} =$ The volume solids for each coating, as applied, used each day on the single flat wood paneling surface coating process line, in gallons.

 $\mathrm{C_{i}}$ = The VOC content of each coating, as applied, used each day on the single flat wood paneling surface coating process line, in lb VOC/gal coating solids.

 $V_{\rm t}$ = The total volume of solids for all coatings combined, as applied, used each day on the single flat wood paneling surface coating process line, in gallons.

- (iii) Sampling and testing shall be done in accordance with the procedures and test methods specified in Chapter 139 (relating to sampling and testing).
- (2) The overall weight of VOCs emitted to the atmosphere is reduced through the use of oxidation or solvent recovery or another method that is acceptable under § 129.51(a) (relating to general). The overall efficiency of a control system, as determined by the test methods and procedures specified in Chapter 139, may be no less than 90% or may be no less than the equivalent efficiency as calculated by the following equation, whichever is less stringent:

$$O = (1 - E/V) \times 100$$

Where:

V = The VOC content of the as applied coating, in lb VOC/gal of coating solids.

E = The Table I limit in lb VOC/gal of coating solids.

- O = The overall required control efficiency.
- (d) Compliance monitoring procedures. The owner or operator of a facility subject to this section shall maintain records sufficient to demonstrate compliance with this section. The owner or operator shall maintain daily records of:
- (1) The following parameters for each coating, thinner, other component or cleaning solvent as supplied:
- (i) Name and identification number of the coating, thinner, other component or cleaning solvent.
 - (ii) Volume used.
 - (iii) Mix ratio.
 - (iv) Density or specific gravity.
- (v) Weight percent of total volatiles, water, solids and exempt solvents.
- (vi) Volume percent of solids for each coating used in the flat wood paneling coating process.
 - (vii) VOC content.
- (2) The VOC content of each as applied coating or cleaning solvent.
- (e) Recordkeeping and reporting requirements. The records required under subsection (d) shall be:
- (1) Maintained for 2 years, unless a longer period is required under § 127.511(b)(2) (relating to monitoring and related recordkeeping and reporting requirements).
- (2) Submitted to the Department upon receipt of a written request.
- (f) Coating application methods. A person subject to this section may not cause or permit the emission into the outdoor atmosphere of VOCs from a flat wood paneling surface coating process unless the coatings are applied using one or more of the following coating application methods:
 - (1) Offset rotogravure coating.
 - (2) Curtain coating.

- (3) Direct roll coating.
- (4) Reverse roll coating.
- (5) Hand brush or hand roller coating.
- (6) High volume-low pressure (HVLP) spray coating.
- (7) Airless spray coating.
- (8) Air-assisted airless spray coating.
- (9) Electrostatic coating.
- (10) Other coating application method, if approved in writing by the Department prior to use.
- (i) The coating application method must be capable of achieving a transfer efficiency equivalent to or better than that achieved by a method listed in paragraphs (1)—(9).
- (ii) The request for approval must be submitted in writing.
- (g) Exempt coatings. The VOC coating content standards in Table I do not apply to a coating used exclusively for determining product quality and commercial acceptance and other small quantity coatings, if the coating meets the following criteria:
- (1) The quantity of coating used does not exceed 50 gallons per year for a single coating and a total of 200 gallons per year for all coatings combined for the facility.
- (2) The owner or operator of the facility requests, in writing, and the Department approves, in writing, the exemption prior to use of the coating.
- (h) Work practice requirements for coating-related activities. The owner or operator of a flat wood paneling surface coating process subject to this section shall comply with the following work practices for coating-related activities:
- (1) Store all VOC-containing coatings, thinners and coating-related waste materials in closed containers.
- (2) Minimize spills of VOC-containing coatings, thinners and coating-related waste materials and clean up spills immediately.
- (3) Convey VOC-containing coatings, thinners and coating-related waste materials from one location to another in closed containers or pipes.
- (4) Ensure that mixing and storage containers used for VOC-containing coatings, thinners and coating-related waste materials are kept closed at all times, except when depositing or removing these materials.
- (i) Work practice requirements for cleaning materials. The owner or operator of a flat wood paneling surface coating process subject to this section shall comply with the following work practices for cleaning materials:
- (1) Store all VOC-containing cleaning materials, waste cleaning materials and used shop towels in closed containers.
- (2) Minimize spills of VOC-containing cleaning materials and waste cleaning materials and clean up spills immediately.
- (3) Convey VOC-containing cleaning materials and waste cleaning materials from one location to another in closed containers or pipes.
- (4) Ensure that mixing vessels and storage containers used for VOC-containing cleaning materials and waste cleaning materials are kept closed at all times, except when depositing or removing these materials.

(5) Minimize VOC emissions during cleaning of storage, mixing and conveying equipment.

Table I

Emission Limits of VOCs for Flat Wood Paneling Surface Coatings

Weight of VOC per Volume of Coating Solids, as Applied

Surface Coatings, Inks or Adhesives Applied to the Following Flat Wood Paneling Categories	lbs VOC per gallon coating solids	grams VOC per liter coating solids
Printed interior panels made of hardwood plywood or thin particleboard	2.9	350
Natural-finish hardwood plywood panels	2.9	350
Class II finishes on hardboard panels	2.9	350
Tileboard	2.9	350
Exterior siding	2.9	350

§ 129.66. Compliance schedules and final compliance dates.

The owner or operator of a source newly subject to the requirements of §§ 129.52—129.52c, §§ 129.59—129.61 or \\$\\$ 129.67—129.69 as a result of revised applicability requirements of this title relating to the control of VOC shall achieve compliance with the applicable emission limitations within 1 year of the date of publication of the notice of final adoption of this requirement in the Pennsylvania Bulletin. Newly subject sources or facilities are those which were not subject to the emission limitations because they emitted less than the cutoff levels or operated at de minimis production levels prior to the date of publication of the limitation in the Pennsylvania Bulletin, but are now subject to the standard because they meet or exceed the cutoff levels contained in $\S 129.52(a), \S 129.52a(a), \S 129.52b(a), \S 129.52c(a)$ or 129.69. The date of adoption of the applicable emission standard for these previously unregulated sources will be determined to be the date that the applicable cutoff levels contained in § 129.52, § 129.52a, § 129.52b, § 129.52c or § 129.69 are published in the *Pennsylvania Bulletin*.

[Pa.B. Doc. No. 10-2401. Filed for public inspection December 17, 2010, 9:00 a.m.]

Title 58—RECREATION

FISH AND BOAT COMMISSION
[58 PA. CODE CHS. 61 AND 69]
Fishing; Seasons, Sizes and Creel Limits

The Fish and Boat Commission (Commission) amends Chapters 61 and 69 (relating to seasons, sizes and creel limits; and fishing in Lake Erie and boundary lakes). The Commission is publishing this final-form rulemaking under the authority of 30 Pa.C.S. (relating to the Fish and Boat Code) (code).

A. Effective Date

The final-form rulemaking will go into effect on January 1, 2011.

B. Contact Person

For further information on the final-form rulemaking, contact Wayne Melnick, Esq., P. O. Box 67000, Harrisburg, PA 17106-7000, (717) 705-7810. This final-form rulemaking is available on the Commission's web site at www.fish.state.pa.us.

C. Statutory Authority

The amendments to §§ 61.1—61.3 and 69.12 are published under the statutory authority of section 2102 of the code (relating to rules and regulations).

D. Purpose and Background

The final-form rulemaking is designed to improve, enhance and update the Commission's fishing regulations. The specific purposes of the amendments are described in more detail under the summary of changes.

E. Summary of Changes

Because mussels, sometimes referred to as clams in slang, have declined greatly in their populations and their ranges both Nationally and within this Commonwealth, the conservation of mussels faces many challenges. Nearly 82% (54 species) of the native mussels in this Commonwealth are considered endangered, extirpated or of special concern (PABS, 2008). Nationally, mussels are declining; 70% of the 297 native species have an endangered, threatened, special concern or extinct status (Williams and Neves, 1995).

Under §§ 61.1(d), 61.2(d) and 69.12 (relating to Commonwealth inland waters; Delaware River, West Branch Delaware River and River Estuary; and seasons, sizes and creel limits—Lake Erie and Lake Erie tributaries), harvest of up to 50 fish bait is permitted per day with no seasons or size limits. Inland seasons, sizes and creel limits for fish bait apply to the Susquehanna River and Lehigh River under §§ 61.7 and 61.8 (relating to Susquehanna River and tributaries; and Lehigh River, Schuylkill River and tributaries). Under § 61.3(c) (relating to Pymatuning Reservoir), there are no season, size or creel restrictions on fish bait. Section 102 of the code (relating to definitions) defines "fish bait" as "Unless otherwise provided by commission regulation, crayfish or crabs, mussels, clams and the nymphs, larvae and pupae of all insects spending any part of their life cycle in the

Harvest of endangered and threatened mussels is prohibited under §§ 75.1 and 75.2 (relating to endangered species; and threatened species). Since mussels as a group are severely threatened, additional reduction of mussel populations by harvest as fish bait should be prohibited. Specifically, with the existing laws, the Commission is concerned that:

- (1) Rare species will be harvested because they are difficult to identify correctly. Unless mussels are prohibited from bait use, anglers or other collectors could inadvertently collect rare or protected species. Additionally, enforcement of laws prohibiting harvest of protected species will not be effective if the Commission's waterways conservation officers are not well trained in the identification of mussels.
- (2) Commercial pressure for mussel harvest for the pearl industry could decimate populations. Mussel shells are collected and pieces of nacre are used to seed pearl-producing oysters. At this time, a commercial harvester can legally take large quantities of mussels, removing many thousands of pounds of mussels a year. With a legal limit of 50 mussels per day and no season, 10

commercial collectors could legally take 500 mussels per day (182,500 mussels per year) as fishbait under existing Commission regulations. Commercial mussel poachers have been convicted for illegal harvest in West Virginia, Ohio, Illinois, Indiana, Michigan and in the southeastern United States. By prohibiting a legal possession limit of mussels as fishbait, the Commonwealth can better protect its mussel resource.

(3) The transportation of aquatic invasive mussels could result in the introduction to additional waterways. Discharged zebra mussel and quagga mussels used for bait present significant risk for invasive mussel infestation. Although it is unlawful to possess the exotic zebra mussel and the closely related quagga mussel, they may be inadvertently transported to otherwise uninfested waters as fishbait.

The Pennsylvania Biological Survey's Bivalve Subcommittee and the Mollusk Committee have requested that the current mussel harvest with a Pennsylvania fishing license be disallowed. Other states, such as West Virginia, Ohio, Maryland, New Jersey, New York, Indiana and Illinois, have laws making mussel harvest illegal.

For the previous reasons, the Commission proposed that the harvest of live mussels in this Commonwealth be prohibited by amending §§ 61.1—61.3. After the publication of the proposed rulemaking, however, the Commission discovered that § 69.12 was not among the sections proposed to be amended to prohibit the harvest of live mussels. This omission was inadvertent. Because the amendment of § 69.12 does not enlarge the original purpose of the proposed rulemaking (which is to protect declining populations of native mussels by prohibiting harvest on a Statewide basis), the Commission amends this section as set forth in Annex A. The Commission amends §§ 61.1—61.3 to read as set forth in the proposed rulemaking published at 40 Pa.B. 3669 (July 3, 2010).

F. Paperwork

The final-form rulemaking will not increase paperwork and will not create new paperwork requirements.

G. Fiscal Impact

The final-form rulemaking will have no adverse fiscal impact on the Commonwealth or its political subdivisions. The final-form rulemaking will not impose new costs on the private sector or the general public, except to the degree there is commercial harvest of mussels in this Commonwealth.

H. Public Involvement

Notice of proposed rulemaking was published at 40 Pa.B. 3669 (July 3, 2010). During the formal public comment period, the Commission received two comments supporting the proposed rulemaking. One of the commentators, however, noted that there are individuals who collect non-native species of Corbicula for consumption and who will be prohibited from doing so if the proposed amendments are adopted. Copies of all public comments were provided to the Commissioners.

Findings

The Commission finds that:

- (1) Public notice of intention to adopt the amendments adopted 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 promulgated thereunder, 1 Pa. Code §§ 7.1 and 7.2.
- (2) A public comment period was provided and all public comments received were considered.

(3) The adoption of the amendments of the Commission in the manner provided in this order is necessary and appropriate for administration and enforcement of the authorizing statutes.

Order

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

(a) The regulations of the Commission, 58 Pa. Code Chapters 61 and 69, are amended by amending §§ 61.1—61.3 to read as set forth at 40 Pa.B. 3669 and by amending § 69.12 to read as set forth in Annex A, with ellipses referring to the existing text of the regulations.

- (b) The Executive Director will submit this order, 40 Pa.B. 3669 and Annex A to the Office of Attorney General for approval as to legality and form as required by law.
- (c) The Executive Director shall certify this order, 40 Pa.B. 3669 and Annex A and deposit them with the Legislative Reference Bureau as required by law.
 - (d) This order shall take effect on January 1, 2011.

JOHN A. ARWAY, Executive Director

Fiscal Note: Fiscal Note 48A-219 remains valid for the final adoption of the subject regulations.

Annex A

TITLE 58. RECREATION

PART II. FISH AND BOAT COMMISSION

Subpart B. FISHING

CHAPTER 69. FISHING IN LAKE ERIE AND BOUNDARY LAKES

Subchapter B. SPORT FISHING AND ANGLING

§ 69.12. Seasons, sizes and creel limits—Lake Erie and Lake Erie tributaries.

* * * * *

(f) Subject to the provisions of subsections (d) and (e), the following seasons, sizes and creel limits apply to Lake Erie, Lake Erie tributaries and Presque Isle Bay, including peninsula waters:

SPECIES	SEASONS	MINIMUM SIZE	DAILY LIMIT
MUSKELLUNGE and MUSKELLUNGE HYBRIDS	Inland seasons apply. See § 61.1 (relating to Commonwealth inland waters).	40 inches	1
PIKE Northern	Inland seasons apply. See § 61.1 (relating to Commonwealth inland waters).	24 inches	2
WALLEYE	January 1 to midnight March 15 and 12:01 a.m. the first Saturday in May to December 31.	15 inches	6
BASS Largemouth Smallmouth	January 1 to first Saturday after April 11 and first Saturday after June 11 until December 31.	15 inches	4 (combined species)
	First Saturday after April 11 until first Saturday after June 11.*	20 inches	1
TROUT and SALMON	First Saturday after April 11 until midnight Labor Day.	9 inches	5 (combined species only 2 of which may be lake trout).
	12:01 a.m. the day after Labor Day until midnight on the Friday before the first Saturday after April 11.	15 inches	3 (combined species only 2 of which may be lake trout).
STURGEON	No open season	ENDANGERED SPECIES	
YELLOW PERCH	From December 1 through March 31	7 inches	30
	From April 1 through November 30	None	30
SUNFISH, CRAPPIES, CATFISH, ROCK BASS, SUCKERS, EELS, CARP, WHITE BASS	Open year-round	None	50 (combined species)
BURBOT (when taken by hook and line)	Open year-round	None	5
BURBOT (when taken by scuba divers by use of nonmechanical spears or gigs at a depth of at least 60 feet)	June 1 to September 30	None	5
SMELT (when taken by hook and line)	Open year-round	None	None

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RULES AND REGULATIONS

MINIMUM

None

50 (combined species)

SPECIES SEASONS SIZE DAILY LIMIT

BAIT FISH Open year-round FISH BAIT, except mussels/clams

MUSSELS/CLAMS Closed year-round 0

ALL OTHER SPECIES Inland Regulations apply. (See § 61.1.)

[Pa.B. Doc. No. 10-2402. Filed for public inspection December 17, 2010, 9:00 a.m.]

^{*} It is unlawful to conduct or participate in a fishing tournament (as defined in § 63.40 (relating to fishing tournaments and fishing derbies)) for bass on Lake Erie, Lake Erie tributaries or Presque Isle Bay during the period from the first Saturday after April 11 until the first Saturday after June 11.